

en	This safety data sheet file is issued for the following production lots: 1. Version 2.3 is valid for HIT-RE 500 V3 with a maximum expiration date of 12/2024 (see foil pack manifold) 2. Version 3.0 is valid for HIT-RE 500 V3 with a minimum expiration date of 01/2025 (see the foil pack manifold)
de	Diese Sicherheitsdatenblatt-Datei betrifft die folgenden Fertigungslose: 1. Version 2.3 ist gültig für HIT-RE 500 V3 mit einem Haltbarkeitsdatum bis 12/2024 (siehe Verbindungsteil) 2. Version 3.0 ist gültig für HIT-RE 500 V3 mit einem Haltbarkeitsdatum ab 01/2025 (siehe Verbindungsteil)
nl	Dit veiligheidsinformatiebladbestand wordt afgegeven voor de volgende productie-lots: 1. Versie 2.3 is geldig voor HIT-RE 500 V3 met een maximale houdbaarheidsdatum tot 12/2024 (zie foliepak verdeler) 2. Versie 3.0 is geldig voor HIT-RE 500 V3 met een minimale houdbaarheidsdatum tot 01/2025 (zie foliepak verdeler)
fr	Ce fichier de données de sécurité est délivré pour les lots de production suivants : 1. La version 2.3 est valide pour HIT-RE 500 V3 avec une date d'expiration maximale de 12/2024 (voir le raccord de cartouche souple) 2. La version 3.0 est valide pour HIT-RE 500 V3 avec une date d'expiration maximale de 01/2025 (voir le raccord de cartouche souple)
da	Denne sikkerhedsdatabladsfil er udgivet for følgende produktions lots: 1. Version 2.3 er gældende for HIT-RE 500 V3 med en maksimal udløbsdato d. 12/2024 (se foliepakkens manifold) 2. Version 3.0 er gældende for HIT-RE 500 V3 med en mindste udløbsdato d. 01/2025 (se foliepakkens manifold)
sv	Denna säkerhetsdatabladsfil har utfärdats för följande tillverkningspartier: 1. Version 2.3 är giltig för HIT-RE 500 V3 med ett sista giltighetsdatum den 12/2024 (se folieförpackningens grenrör) 2. Version 3.0 är giltig för HIT-RE 500 V3 med ett första giltighetsdatum den 01/2025 (se folieförpackningens grenrör)
fi	Tämä käyttöturvallisuustiedote koskee seuraavia tuotantoeriä: 1. Versio 2.3 koskee HIT-RE 500 V3 -tuotetta, jonka viimeinen käyttöpäivämäärä on 12/2024 tai sitä ennen (ks. foliopakkauksen taite) 2. Versio 3.0 koskee HIT-RE 500 V3 -tuotetta, jonka viimeinen käyttöpäivämäärä on 01/2025 tai sen jälkeen (ks. foliopakkauksen taite)
hu	Ezt a biztonsági adatlapot a következő gyártási tételekhez bocsátják ki: 1. Az 2.3 változat legfeljebb 2024/12 lejárati dátummal érvényes a HIT-RE 500 V3-re (lásd a fóliacsomag sokszorosított iratát) 2. Az 3.0 változat legalább 2025/01 lejárati dátummal érvényes a HIT-RE 500 V3-re (lásd a fóliacsomag sokszorosított iratát)
es	Este archivo de hoja de datos de seguridad se emite para los siguientes lotes de producción: 1. Versión 2.3 válida para HIT-RE 500 V3 con una fecha de caducidad máxima de 12/2024 (consulte el colector de láminas) 2. Versión 3.0 válida para HIT-RE 500 V3 con una fecha de caducidad mínima de 01/2025 (consulte el colector de láminas)
pt	Este ficheiro com ficha de dados de segurança é emitido para os seguintes lotes de produção: 1. A versão 2.3 é válida para a HIT-RE 500 V3 com um prazo máximo de validade até 12/2024 (ver as diversas embalagens) 2. A versão 3.0 é válida para a HIT-RE 500 V3 com um prazo mínimo de validade até 01/2025 (ver as diversas embalagens)
it	Questo file della scheda tecnica di sicurezza è rilasciato per i seguenti lotti di produzione: 1. La versione 2.3 è valida per HIT-RE 500 V3 con data di scadenza massima 12/2024 (vedere la giunzione della confezione) 2. La versione 3.0 è valida per HIT-RE 500 V3 con data di scadenza minima 01/2025 (vedere la giunzione della confezione)
pl	Ten plik arkusza danych bezpieczeństwa jest wydany dla następujących części produkcyjnych: 1. Wersja 2.3 obowiązuje w przypadku HIT-RE 500 V3 z maksymalnym dniem rozpoczęcia pracy 12/2024 (patrz opakowanie foliowe) 2. Wersja 3.0 obowiązuje w przypadku HIT-RE 500 V3 z minimalnym dniem rozpoczęcia pracy 01/2025 (patrz opakowanie foliowe)
ru	Этот файл сертификата безопасности предоставлен для следующих партий продукции: 1. Версия 2.3 действительна для HIT-RE 500 V3 с максимальным сроком годности до 12.2024 г. (см. присоединительную часть на капсуле) 2. Версия 3.0 действительна HIT-RE 500 V3 с минимальным сроком годности до 01.2025 г. (см. присоединительную часть на капсуле)
el	Το παρόν δελτίο δεδομένων ασφάλειας εκδίδεται για τις ακόλουθες παρτίδες παραγωγής: 1. Η έκδοση 2.3 ισχύει για το HIT-RE 500 V3 με μέγιστη ημερομηνία λήξης τον 12/2024 (βλέπε διανομέα συσκευασίας μεμβράνης) 2. Η έκδοση 3.0 ισχύει για το HIT-RE 500 V3 με ελάχιστη ημερομηνία λήξης τον 01/2025 (βλέπε τον διανομέα της συσκευασίας μεμβράνης)
cs	Tento soubor s bezpečnostním listem je vystaven pro tyto výrobní závody 1. Verze 2.3 je platná pro HIT-RE 500 V3 s maximálním datem expirace 12/2024 (viz fólie balení) 2. Verze 3.0 je platná pro HIT-RE 500 V3 s minimálním datem expirace 01/2025 (viz fólie balení)
bg	Този информационен лист за безопасност се публикува за следните производствени партиди: 1. Версия 2.3 е валидна за HIT-RE 500 V3 с максимален срок на валидност до 12.2024 г. (вж. фолийна опаковка за колектор) 2. Версия 3.0 е валидна за HIT-RE 500 V3 с минимален срок на изтичане 01.2025 г. (вж. фолийна опаковка за колектор)
lv	Šo drošības datu lapa ir izsniegta šādām ražojumu partijām: 1. Versija 2.3 ir derīga izstrādājumam HIT-RE 500 V3, kura maksimālais derīguma termiņš ir 2024. gada maijs (skatīt folija iepakojuma kolektoru) 2. Versija 3.0 ir derīga izstrādājumam HIT-RE 500 V3, kura minimālais derīguma termiņš ir 2025. gada jūnijs (skatīt folija iepakojuma kolektoru)
lt	Šis saugos duomenų lapo failas išduodamas šioms gamybos partijoms: 1. 2.3 versija galioja HIT-RE 500 V3, kurios maksimali galiojimo data – 2024-12 (žr. folinių pakuočių rinkinį) 2. 3.0 versija galioja HIT-RE 500 V3, kurios minimali galiojimo data – 2025-01 (žr. folinių pakuočių rinkinį)
sk	Tento súbor bezpečnostných údajov sa vydáva pre tieto výrobné šarže: 1. Verzia 2.3 je platná pre HIT-RE 500 V3 s maximálnym dátumom exspirácie 12/2024 (pozrite si údaj na fólii balenia) 2. Verzia 3.0 je platná pre HIT-RE 500 V3 s minimálnym dátumom exspirácie 01/2025 (pozrite si údaj na fólii balenia)
sl	Datoteka z varnostnim listom je izdana za naslednje proizvodne serije: 1. Različica 2.3 je veljavna za izdelek HIT-RE 500 V3 z maksimalnim datumom poteka veljavnosti: 12/2024 (glejte pakiranje) 2. Različica 3.0 je veljavna za izdelek HIT-RE 500 V3 z minimalnim datumom poteka veljavnosti: 01/2025 (glejte pakiranje)



	See ohutuskaardi fail on välja antud järgmistele tootepartiidele:
et	Versioon 2.3 kehtib tootele HIT-RE 500 V3 viimase säilimiskuupäevaga 12/2024 (vt fooliumpakendi hargnemiskohta) Versioon 3.0 kehtib tootele HIT-RE 500 V3 esimese säilimiskuupäevaga 01/2025 (vt fooliumpakendi hargnemiskohta)
ro	Acest fișier cu date tehnice de securitate este emis pentru următoarele locuri de producție: 1. Versiunea 2.3 este valabilă pentru HIT-RE 500 V3 cu data maximă de expirare 12/2024 (a se vedea racordul pentru cartușe din folie) 2. Versiunea 3.0 este valabilă pentru HIT-RE 500 V3 cu data minimă de expirare 01/2025 (a se vedea racordul pentru cartușe din folie)
hr	Ovaj sigurnosno-tehnički list izdaje se za sljedeće proizvodne serije: 1. Verzija 2.3 vrijedi za HIT-RE 500 V3 s maksimalnim rokom trajanja do 12/2024 (vidjeti razvodnik iz folije) 2. Verzija 3.0 vrijedi za HIT-RE 500 V3 s minimalnim rokom trajanja do 01/2025 (vidjeti razvodnik iz folije)
tr	Bu güvenlik bilgi formu dosyası aşağıdaki üretim partileri için hazırlanmıştır: 1. Versiyon 2.3, maksimum son kullanma tarihi 12/2024 olan HIT-RE 500 V3 için geçerlidir (bkz. folyo paketi manifoldu) 2. Versiyon 3.0, inimumm son kullanma tarihi 01/2025 olan HIT-RE 500 V3 için geçerlidir (bkz. folyo paketi manifoldu)
uk	Цей файл сертифіката безпеки надано для наступних партій продукції: 1. Версія 2.3 дійсна для HIT-RE 500 V3 з максимальним терміном придатності до 12.2024 р. (див. приєднувальну частину на капсулі) 2. Версія 3.0 дійсна для HIT-RE 500 V3 з мінімальним терміном придатності до 01.2025 р. (див. приєднувальну частину на капсулі)
	本安全数据表文件 针对以下生产批次发布:
zh	1. 版本 2.3 对 HIT-RE 500 V3 有效,最长失效日期为 2024 年 12 月(参见箔包装歧管)
	2. 版本 3.0 对 HIT-RE 500 V3 有效,最短失效日期为 2025 年 1 月(参见箔包装歧管)
ar	يتم إصدار ملف صحيفة بيانات السلامة لتشغيلات الإنتاج التالية: 1. الإصدار 2.3 صالح لـ HIT-RE 500 V3 بحد أقصى لتاريخ انتهاء الصلاحية هو 2024/12 (انظر العبوة المصنوعة من رقائق الألومنيوم) 2. الإصدار 3.0 صالح لـ HIT-RE 500 V3 على الأقل لتاريخ انتهاء الصلاحية هو 2025/1 (انظر العبوة المصنوعة من رقائق الألومنيوم)
ja	この安全性データシートファイルは、次の生産ロット用に発行されています: 1. バージョン 2.3 は、有効期限が最大 2024 年 12 月までの HIT-RE 500 V3 に対して有効です (フォイルパック連結部に表示) 2. バージョン 3.0 は、有効期限が 2025 年 1 月以降の HIT-RE 500 V3 に対して有効です (フォイルパック連結部に表示)
sr	Datoteka bezbednosnog lista se izdaje za sledeće proizvodne serije: 1. Verzija 2.3 je dostupna za HIT-RE 500 V3 sa maksimalnim datumom isteka 12/2024 (pogledajte ivicu pakovanja od folije) 2. Verzija 3.0 je dostupna za HIT-RE 500 V3 sa minimalnim datumom isteka 01/2025 (pogledajte ivicu pakovanja od folije)
ms	Fail helaian data keselamatan ini dikeluarkan untuk lot pengeluaran yang berikut: 1. Versi 2.3 adalah sah untuk HIT-RE 500 V3 dengan tarikh tamat tempoh maksimum pada 12/2024 (lihat manifold pek kerajang) 2. Versi 3.0 adalah sah untuk HIT-RE 500 V3 dengan tarikh tamat tempoh minimum pada 01/2025 (lihat manifold pek kerajang)
	본 안전보건자료는 다음 제품 로트에 대해 발급되었습니다.
ko	1. 버전 2.3(은)는 HIT-RE 500 V3에 대해 유효하며, 최대 만료 기한은 2024년 12월입니다(호일 팩 매니폴드 참조)
	2. 버전 3.0(은)는 HIT-RE 500 V3에 대해 유효하며, 최소 만료 기한은 2025년 1월입니다(호일 팩 매니폴드 참조)
id	File lembar data keselamatan ini diterbitkan untuk lot produksi berikut: 1. Versi 2.3 berlaku untuk HIT-RE 500 V3 dengan tanggal kedaluwarsa maksimum 12/2024 (lihat foil pack manifold) 2. Versi 3.0 berlaku untuk HIT-RE 500 V3 dengan tanggal kedaluwarsa minimum 01/2025 (lihat foil pack manifold)
he	קובץ גיליון נתוני בטיחות זה מונפק עבור מגרשי הייצור הבאים: 1. גרסה 2.3 תקפה ל-HIT-RE 500 V3 עם תאריך תפוגה מקסימלי של 12/2024 (ראה יריעת foil pack) 2. גרסה 3.0 תקפה ל-HIT-RE 500 V3 עם תאריך תפוגה מינימלי של 01/2025 (ראה יריעת foil pack)
th	แผ่นข้อมูลด้านความปลอดภัยนี้ที่ได้จัดทำสำหรับล็อตการผลิตดังต่อไปนี้: 1. เวอร์ชั่น 2.3 ใช้ได้กับ HIT-RE 500 V3 ที่มีวันหมดอายุไม่เกิน 12/2024 (โปรดดูแผ่นพับห่อฟอยล์) 2. เวอร์ชั่น 3.0 ใช้ได้กับ HIT-RE 500 V3 ที่มีวันหมดอายุขั้นต่ำ 01/2025 (โปรดดูแผ่นพับห่อฟอยล์)
vi	Tệp bảng dữ liệu an toàn này được phát hành cho các lô sản xuất sau: 1. Phiên bản 2.3 hợp lệ cho HIT-RE 500 V3 với ngày hết hạn tối đa là 12/2024 (xem ống keo cấy thép) 2. Phiên bản 3.0 hợp lệ cho HIT-RE 500 V3 với ngày hết hạn tối thiểu là 01/2025 (xem ống keo cấy thép)
zh	下列生產批次將獲核發本安全資料表檔案:
tw	1. 2.3 版適用於 HIT-RE 500 V3,最長到期日 12/2024 (請見鋁箔包打字紙) 2. 3.0 版適用於 HIT-RE 500 V3,最短到期日 01/2025 (請見鋁箔包打字紙)
kk	Бұл қауіпсіздік паспорты мына өндірістік партиялар үшін шығарылады: 1. 2.3 нұсқасы жарамдылық мерзімі көп уақытты (12/2024) қамтитын HIT-RE 500 V3 үшін жарамды (жұқалтыр қаптаманы қараңыз) 2. 3.0 нұсқасы жарамдылық мерзімі аз уақытты (01/2025) қамтитын HIT-RE 500 V3 үшін жарамды (жұқалтыр қаптаманы қараңыз)



Safety information for 2-Component-products

Issue date: 15/11/2022 Revision date: 15/11/2022 Supersedes: 13/05/2020 Version: 3.0

SECTION 1: Kit identification

1.1 Product identifier

Product name HIT-RE 500 V3



Product code BU Anchor

1.2 Details of the supplier of the Safety information for 2-Component-products

Hilti (Philippines) Inc.
2256 Pasong Tamo Extension
Edsa, Brgy. Magallanes
1224 Makati City - Philippinen
T +632 784 7100 - F +63 2 784 7100
customerservice.ph@hilti.com

SECTION 2: General information

Storage Storage temperature : 5 - 25 °C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3:

Classification of the Product

Classification according to the United Nations GHS

 Acute Tox. 5 (Oral)
 H303

 Skin Corr. 1B
 H314

 Skin Sens. 1
 H317

 STOT SE 3
 H335

 Aquatic Acute 2
 H401

 Aquatic Chronic 2
 H411

Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)

Signal word (GHS UN)







GHS05

Danger

Hazardous ingredients Epoxy resin, Amines

Hazard statements (GHS UN) H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H335 - May cause respiratory irritation. H411 - Toxic to aquatic life with long lasting effects.

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Safety information for 2-Component-products

Precautionary statements (GHS UN) P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P302+P352 - IF ON SKIN: Wash with plenty of water.

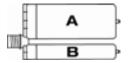
P337+P313 - If eye irritation persists: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

Additional information

2-component-foilpack, contains:

Component A: Epoxy resin, Reactive diluent, inorganic filler

Component B: Amine hardener, inorganic filler



Name	General description	Quantity	Unit	Classification according to the United Nations GHS
HIT-RE 500 V3, B		1	pcs (pieces)	Acute Tox. 5 (Oral), H303 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
HIT-RE 500 V3, A		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

SECTION 4: General advice

General advice For professional users only

SECTION 5: Safe handling advice

General measures Spilled material may present a slipping hazard Environmental precautions Prevent entry to sewers and public waters

Notify authorities if liquid enters sewers or public waters

Avoid release to the environment

Full or only partially emptied cartridges must be disposed of as special waste in accordance

with official regulations.

After curing, the product can be disposed of with household waste.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Technical measures Comply with applicable regulations

Precautions for safe handling Wear personal protective equipment
Avoid contact with skin and eyes

Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work

Avoid contact during pregnancy/while nursing

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation

Mechanically recover the product

On land, sweep or shovel into suitable containers

Store away from other materials.

For containment Collect spillage.

Incompatible materials Sources of ignition
Direct sunlight

Direct sunlight Strong bases

Incompatible products Strong bases Strong acids

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Safety information for 2-Component-products

SECTION 6: First aid measures

First-aid measures after eye contact Get immediate medical advice/attention.

Immediately rinse with water for a prolonged period while holding the eyelids wide open

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an eye specialist

First-aid measures after ingestion Do not induce vomiting

Rinse mouth

Immediately call a POISON CENTER/doctor.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/...

Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get immediate medical advice/attention.

First-aid measures general Never give anything by mouth to an unconscious person

If you feel unwell, seek medical advice (show the label where possible)

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after eye contact Causes serious eye damage.

Symptoms/effects after skin contact May cause an allergic skin reaction.

SECTION 7: Fire fighting measures

Exercise caution when fighting any chemical fire

Prevent fire fighting water from entering the environment

Protection during firefighting Self-contained breathing apparatus

Do not enter fire area without proper protective equipment, including respiratory protection

Hazardous decomposition products in case of

fire

Thermal decomposition generates:

Carbon dioxide Carbon monoxide

SECTION 8: Other information

No data available

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Safety Data Sheet

according to the United Nations GHS (Rev. 6, 2015)

Issue date: 15/11/2022 Revision date: 15/11/2022

Supersedes: 13/05/2020 Version: 3.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form Mixture

Product name HIT-RE 500 V3, A

UN-No. (ADR) 3077
Product code BU Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture Composite mortar component for fasteners in the construction industry

Recommended use For professional use only

1.4. Supplier's details

Supplier

Hilti (Philippines) Inc.

2256 Pasong Tamo Extension Edsa, Brgy. Magallanes

PH- 1224 Makati City

Philippinen

T +632 784 7100 - F +63 2 784 7100 customerservice.ph@hilti.com Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH

Hiltistraße 6

DE- 86916 Kaufering Deutschland

T +49 8191 906876

anchor.hse@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+632 784 7100

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Skin corrosion/irritation, Category 2

Serious eye damage/eye irritation, Category 1

H315

Calculation method
Skin sensitisation, Category 1

H317

Calculation method
H317

Calculation method
H317

Calculation method
Calculation method
H401

Calculation method
H401

Calculation method
Calculation method
Calculation method
H318

Calculation method
Calculation method

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Hazardous ingredients

Danger

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol, Trimethylol ethane triglycidyl ether Polymer, butanedioldiglycidyl ether, [3-(2,3-

epoxypropoxy)propyl]trimethoxysilane

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Safety Data Sheet

according to the United Nations GHS (Rev. 6, 2015)

Hazard statements (GHS UN) H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

P262 - Do not get in eyes, on skin, or on clothing.

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.

P337+P313 - If eye irritation persists: Get medical advice, medical attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

Precautionary statements (GHS UN)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	CAS-No.: 1675-54-3	25 – 40	Flammable liquids Not classified Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 2, H401 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS-No.: 9003-36-5	10 – 20	Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411
Trimethylol ethane triglycidyl ether Polymer	CAS-No.: 68460-21-9	5 – 10	Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412
butanedioldiglycidyl ether	CAS-No.: 2425-79-8	5 – 10	Flammable liquids Not classified Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 4, H312 Acute toxicity (inhal.), Category 4, H332 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412

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Name	Product identifier	%	Classification according to the United Nations GHS
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	CAS-No.: 2530-83-8	2.5 – 5	Flammable liquids Not classified Acute toxicity (oral) Not classified Acute toxicity (dermal), Category 5, H313 Serious eye damage/eye irritation, Category 1, H318 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If

skin irritation occurs: Get immediate medical advice/attention.

First-aid measures after eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency

medical attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact

Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact

Potential adverse human health effects and

Causes serious eye irritation.

No additional information available.

symptoms

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide. Dry powder. Foam. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

5.3. Special protective actions for fire-fighters

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective

equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

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6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Use personal protective equipment as required. Equip cleanup crew with proper protection. Protective equipment

Emergency procedures Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and materials for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up This material and its container must be disposed of in a safe way, and as per local

legislation. Mechanically recover the product. On land, sweep or shovel into suitable

containers. Store away from other materials.

Other information Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eves. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work.

Do not eat, drink or smoke when using this product. Always wash hands after handling the Hygiene measures

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Protect from sunlight. Incompatible products Strong bases. Strong acids. Incompatible materials Sources of ignition. Direct sunlight. Heat and ignition sources Keep away from heat and direct sunlight.

5 - 25 °C Storage temperature

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls No specific measures identified.

Environmental exposure controls No specific measures are required provided the product is handled in accordance with the

general rules of occupational hygiene and safety.

Consumer exposure controls Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Materials for protective clothing Long sleeved protective clothing

Wear protective gloves. The permeation time is not the maximum wearing time! Generally Hand protection

speaking, it must be reduced. Contact with either mixtures of substances or different

substances may shorten the protective function's effective duration.

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374
Eye protection Wear security glasses which protect from splashes					

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Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)







8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state Solid

Appearance Thixotropic paste Colour Light grey. Odour characteristic. Odour threshold Not available Melting point Not available Freezing point Not available Boiling point Not available Non flammable. Flammability Lower explosion limit Not applicable Upper explosion limit Not applicable Flash point Not applicable Auto-ignition temperature Not applicable Decomposition temperature Not available рΗ

pH solution Not available Viscosity, kinematic (calculated value) (40 °C) Not applicable Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure Not available Vapour pressure at 50°C Not available Density 1.45 g/cm³ Not available Relative density Relative vapour density at 20°C Not applicable Solubility insoluble in water. 45 - 59 Pa·s 23 °C Viscosity, dynamic

9.2. Data relevant with regard to physical hazard classes (supplemental)

Not available

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Particle size

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

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according to the United Nations GHS (Rev. 6, 2015)

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

44	4	luck = www. = 4! =	4		.:! - 66	
11.	.1.	Informatio	n on to	XICOIOC	iicai ett	ects

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
LD50 oral rat	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)	
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)		
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)	
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)	

ED30 definal fat	> 2000 mg/kg bodyweight (Kat, LoriA)
butanedioldiglycidyl ether (2425-79-8)	
LD50 oral rat	2980 mg/kg (Rat)
LD50 oral	1163 mg/kg (Rat; Exp. Key study ECHA)
LD50 dermal rabbit	1130 mg/kg (Rabbit)

н			
ш	[3-(2,3-epoxypropoxy	\	:I /OEOO OO O\
ш	1.5-(/ .5-PDOXVDFODOXV	Inconviltrimethox	VSIIANE (753U-83-8)

LD50 oral rat	8025 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	4250 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402)

Skin corrosion/irritation Causes skin irritation.

pH: 6.6

Serious eye damage/irritation Causes serious eye damage.

pH: 6.6

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

STOT-single exposure

STOT-repeated exposure

Aspiration hazard

Not classified

Not classified

Not classified

Not classified

Potential adverse human health effects and No additional information available.

symptoms

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water Toxic to aquatic life with long lasting effects.

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Hazardous to the aquatic environment, short–term

(acute)

Classification procedure (Hazardous to the aquatic environment, short–term (acute))

Hazardous to the aquatic environment, long-term (chronic)

Classification procedure (Hazardous to the aquatic environment, long-term (chronic))

Toxic to aquatic life.

Calculation method

Toxic to aquatic life with long lasting effects.

Calculation method

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
1.2 mg/l (96 h; Oncorhynchus mykiss; Lethal)			
2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)			
2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)			
9.4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)			
> 11 mg/l (72 h; Scenedesmus sp.)			
4.2 mg/l (72 h; Scenedesmus sp.)			
24 mg/l (96 h; Pisces) ECHA			
> 160 mg/l			
40 mg/l			
88930 mg/l (96 h; Algae)			
xysilane (2530-83-8)			
55 mg/l (96 h; Cyprinus carpio; Young)			
237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)			
473 – 710 mg/l (48 h; Daphnia magna)			
119 mg/l (7 days; Anabaena flosaquae)			
250 mg/l (72 h; Selenastrum capricornutum)			

12.2. Persistence and degradability

HIT-RE 500 V3, A				
Persistence and degradability May cause long-term adverse effects in the environment.				
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)				
Not rapidly degradable				
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)				
Not rapidly degradable				
butanedioldiglycidyl ether (2425-79-8)				
Biochemical oxygen demand (BOD)	0.01982 g O₂/g substance			

12.3. Bioaccumulative potential

HIT-RE 500 V3, A			
Bioaccumulative potential	Not established.		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Partition coefficient n-octanol/water (Log Kow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		

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according to the United Nations GHS (Rev. 6, 2015)

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Bioaccumulative potential Low bioaccumulation potential (BCF < 500).			
butanedioldiglycidyl ether (2425-79-8)			
Partition coefficient n-octanol/water (Log Kow) -0.15			
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
Partition coefficient n-octanol/water (Log Kow)	-0.92 (Estimated value)		

12.4. Mobility in soil

HIT-RE 500 V3, A		
Mobility in soil	No additional information available	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
Surface tension	59 mN/m (20 °C, 0.09 g/l)	
Ecology - soil	No (test)data on mobility of the substance available.	

12.5. Other adverse effects

Ozone Not classified

Other adverse effects

No additional information available
Other information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) Disposal must be done according to official regulations.

Product/Packaging disposal recommendations After curing, the product can be disposed of with household waste. . Full or only partially

emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375

These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

14.1. UN number or ID number

UN 3077	UN 3077	UN 3077	UN 3077
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14.2. UN proper shipping name

ENVIRONMENTALLY
HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (2,2'-[(1methylethylidene)bis(4,1phenyleneoxymethylene)]bisoxiran
e; Formaldehyde, oligomeric
reaction products with 1-chloro-2,3epoxypropane and phenol)

ENVIRONMENTALLY
HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (2,2'-[(1methylethylidene)bis(4,1phenyleneoxymethylene)]bisoxiran
e; Formaldehyde, oligomeric
reaction products with 1-chloro2,3-epoxypropane and phenol)

Environmentally hazardous substance, solid, n.o.s. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)

ENVIRONMENTALLY
HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (2,2'-[(1methylethylidene)bis(4,1phenyleneoxymethylene)]bisoxiran
e; Formaldehyde, oligomeric
reaction products with 1-chloro2,3-epoxypropane and phenol)

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according to the United Nations GHS (Rev. 6, 2015)

ADR	IMDG	IATA	RID		
Transport document description	Transport document description				
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol), 9,	UN 3077 Environmentally hazardous substance, solid, n.o.s. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol), 9,	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxiran e; Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol), 9,		
14.3. Transport hazard class(e	es)				
9	9	9	9		

14.4. Packing group					
III	III	III	III		
14.5. Environmental hazards	14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes		
	Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg). The environmentally hazardous substance mark is therefore not required, as stated in the ADR regulation, section 5.2.1.8.1.				
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7					

14.6. Special precautions for user

Overland transport

Classification code (ADR) M7
Special provisions (ADR) 274, 335, 375, 601

Limited quantities (ADR)

Packing instructions (ADR) P002, IBC08, LP02, R001

Mixed packing provisions (ADR) MP10

Transport category (ADR) 3

3077

Tunnel restriction code (ADR)

Transport by sea

Orange plates

Special provisions (IMDG) 274, 335, 966, 967, 969

Limited quantities (IMDG)5 kgPacking instructions (IMDG)LP02, P002EmS-No. (Fire)F-A

EmS-No. (Spillage)S-FStowage category (IMDG)AStowage and handling (IMDG)SW23MFAG-No171

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Air transport

PCA packing instructions (IATA) 956
PCA max net quantity (IATA) 400kg
CAO packing instructions (IATA) 956

Special provisions (IATA) A97, A158, A179, A197, A215

Rail transport

Special provisions (RID) 274, 335, 375, 601

Limited quantities (RID) 5kg

Packing instructions (RID) P002, IBC08, LP02, R001

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

 SDS Major/Minor
 None

 Issue date
 15/11/2022

 Revision date
 15/11/2022

 Supersedes
 13/05/2020

Section	Changed item	Change	Comments
2.1	Classification (GHS UN)	Modified	
2.2	Hazard pictograms (GHS UN)	Modified	
2.2	Hazard statements (GHS UN)	Modified	
3	Composition/information on ingredients	Modified	
14	Transport information	Modified	

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level DNEL - Derived-No Effect Level

IATA - International Air Transport Association

EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration PBT - Persistent Bioaccumulative Toxic

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PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

None.

Other information

Full text of H-statements:		
H302	Harmful if swallowed	
H312	Harmful in contact with skin	
H313	May be harmful in contact with skin	
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	
H318	Causes serious eye damage	
H319	Causes serious eye irritation	
H332	Harmful if inhaled	
H401	Toxic to aquatic life	
H402	Harmful to aquatic life	
H411	Toxic to aquatic life with long lasting effects	
H412	Harmful to aquatic life with long lasting effects	

SDS_UN_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 15/11/2022 Revision date: 15/11/2022

Version: 1.7

SECTION 1: Identification

1.1. GHS Product identifier

Product form Mixture

Product name HIT-RE 500 V3, B

UN-No. (ADR) 3259
Product code BU Anchor

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture Composite mortar component for fasteners in the construction industry

Supersedes: 13/05/2020

Recommended use For professional use only

1.4. Supplier's details

Supplier

Hilti (Philippines) Inc.

2256 Pasong Tamo Extension Edsa, Brgy. Magallanes

PH- 1224 Makati City

Philippinen

T +632 784 7100 - F +63 2 784 7100 customerservice.ph@hilti.com

Department issuing data specification sheet

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T +49 8191 906876

anchor.hse@hilti.com

1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+632 784 7100

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (oral), Category 5 H303 Calculation method Skin corrosion/irritation, Category 1B H314 Expert judgment Skin sensitisation, Category 1 H317 Calculation method Specific target organ toxicity – Single exposure, Category 3, H335 Calculation method

Respiratory tract irritation

Hazardous to the aquatic environment – Acute Hazard, Category 2 H401 Calculation method Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412 Calculation method

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Danger



Signal word (GHS UN)

Hazardous ingredients 2-methyl-1,5-pentanediamine, Phenol, styrenated, m-Xylylenediamine, 2,4,6-tris(dimethylaminomethyl)phenol, 3-Aminopropyltriethoxysilan

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Hazard statements (GHS UN) H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction H335 - May cause respiratory irritation

H401 - Toxic to aquatic life

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS UN) P262 - Do not get in eyes, on skin, or on clothing.

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.
P337+P313 - If eye irritation persists: Get medical advice, medical attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
2-methyl-1,5-pentanediamine	CAS-No.: 15520-10-2	25 – 35	Flammable liquids, Category 4, H227 Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 4, H312 Acute toxicity (inhalation:dust,mist) Category 4, H332 Skin corrosion/irritation, Category 1A, H314 Serious eye damage/eye irritation, Category 1, H318 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation, H335
Phenol, styrenated	CAS-No.: 61788-44-1	5 – 10	Flammable liquids Not classified Acute toxicity (inhalation:dust,mist) Not classified Skin corrosion/irritation, Category 2, H315 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 1, H400 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411
m-Xylylenediamine	CAS-No.: 1477-55-0	5 – <8	Acute toxicity (oral), Category 4, H302 Acute toxicity (inhalation:dust,mist) Category 4, H332 Skin corrosion/irritation, Category 1B, H314 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, category 1B, H317 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412
2,4,6-tris(dimethylaminomethyl)phenol	CAS-No.: 90-72-2	1 – 2.5	Flammable liquids Not classified Acute toxicity (oral), Category 4, H302 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402

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Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Name	Product identifier	%	Classification according to the United Nations GHS
3-Aminopropyltriethoxysilan	CAS-No.: 919-30-2	1 – 2.5	Flammable liquids, Category 4, H227 Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 5, H313 Skin corrosion/irritation, Category 1B, H314 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard Not classified

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

Wash with plenty of water/.... Take off immediately all contaminated clothing. Wash

contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical

advice/attention.

First-aid measures after eye contact Get immediate medical advice/attention. Immediately rinse with water for a prolonged period

while holding the eyelids wide open. Remove contact lenses, if present and easy to do.

Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after skin contact

Symptoms/effects after eye contact

Potential adverse human health effects and

May cause an allergic skin reaction.

Causes serious eye damage.

No additional information available.

symptoms

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

5.3. Special protective actions for fire-fighters

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective

equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

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Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and materials for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local

legislation. Mechanically recover the product. On land, sweep or shovel into suitable

containers. Store away from other materials.

Other information Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and

other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work. Avoid contact during pregnancy/while nursing.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Comply with applicable regulations.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Incompatible products

Incompatible materials

Strong bases. Strong acids.

Sources of ignition. Direct sunlight.

Keep away from heat and direct sunlight.

Storage temperature 5 – 25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Consumer exposure controls

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

Environmental exposure controls No specific measures are required provided the product is handled in accordance with the

general rules of occupational hygiene and safety. Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Materials for protective clothing

Long sleeved protective clothing

Hand protection Wear protective gloves. The permeation time is not the maximum wearing time! Generally

speaking, it must be reduced. Contact with either mixtures of substances or different

substances may shorten the protective function's effective duration.

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN ISO 374

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Eye protection	Wear security glasses which protect from splashes		
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)







8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state Solid

Appearance Thixotropic paste

Colour red. Odour Amine-like. Odour threshold Not available Melting point Not available Freezing point Not available Not available Boiling point Non flammable. Flammability Lower explosion limit Not applicable Upper explosion limit Not applicable Flash point Not applicable Auto-ignition temperature Not applicable Decomposition temperature Not available 11.5

pH solution

Not available Viscosity, kinematic (calculated value) (40 °C) Not applicable Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure Not available Vapour pressure at 50°C Not available Density 1.31 g/cm³ Relative density Not available Relative vapour density at 20°C Not applicable insoluble in water. Solubility 50 - 70 Pa·s HN-0333 Viscosity, dynamic

Not available Particle size

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

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according to the United Nations GHS (Rev. 9, 2021)

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: fume. Carbon monoxide. Carbon dioxide. Corrosive vapours.

SECTION 11: Toxicological information		
11.1. Information on toxicological effe	cts	
Acute toxicity (oral)	May be harmful if swallowed.	
Acute toxicity (dermal) Acute toxicity (inhalation)	Not classified Not classified	
HIT-RE 500 V3, B	Not diassilled	
ATE UN (oral)	2842.757 mg/kg bodyweight	
2-methyl-1,5-pentanediamine (15520-		
LD50 oral rat	1690 mg/kg (Rat)	
LD50 dermal rat	1870 mg/kg	
LC50 Inhalation - Rat	4.9 mg/l	
Phenol, styrenated (61788-44-1)		
LD50 oral rat	> 2500 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 Inhalation - Rat	158.31 mg/l/4h	
m-Xylylenediamine (1477-55-0)		
LD50 oral rat	1090 mg/kg	
LD50 dermal rat	> 3100 mg/kg	
LD50 dermal	> 3100 mg/kg	
LC50 Inhalation - Rat (Dust/Mist)	1.34 mg/l/4h	
2,4,6-tris(dimethylaminomethyl)phend	ol (90-72-2)	
LD50 oral rat	2169 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 2169 mg/kg bodyweight; Rat; Experimental value)	
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; Other; >1 ml/kg; Rat; Experimental value)	
3-Aminopropyltriethoxysilan (919-30-	2)	
LD50 oral rat	1.57 – 2.83 ml/kg (EPA OTS 798.1175, Rat, Male / female, Experimental value, Oral)	
LD50 dermal rabbit	4.29 ml/kg (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal)	
LC50 Inhalation - Rat [ppm]	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Experimental value, Inhalation (vapours))	
Skin corrosion/irritation	Causes severe skin burns. pH: 11.5	
Serious eye damage/irritation	Assumed to cause serious eye damage pH: 11.5	
Descinatore, an abic securities ties	May cause an allergic skin reaction.	
Respiratory or skin sensitisation		
Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	Not classified	



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Reproductive toxicity Not classified

STOT-single exposure May cause respiratory irritation.

2-methyl-1,5-pentanediamine (15520-10-2)

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure Not classified
Aspiration hazard Not classified

Potential adverse human health effects and No additional information available.

symptoms

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term

Toxic to aquatic life.

(acute)

Calculation method

Classification procedure (Hazardous to the aquatic

environment, short-term (acute))

Hazardous to the aquatic environment, long-term

(chronic)

Harmful to aquatic life with long lasting effects.

Classification procedure (Hazardous to the aquatic

environment, long-term (chronic))

Calculation method

environment, long-term (chronic))		
2-methyl-1,5-pentanediamine (15520-10-2)		

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2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)				
ErC50 algae	84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)			
NOEC (chronic)	2 mg/l (28 d; activated sludge, domestic; respiration rate; ECHA)			
Threshold limit - Algae [1]	10 - 100,Algae			
Threshold limit - Algae [2]	84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)			
3-Aminopropyltriethoxysilan (919-30-2)				
LC50 - Fish [1]	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)			
EC50 - Crustacea [1]	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)			
ErC50 algae	> 1000 mg/l (EU Method C.3, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, GLP)			
12.2. Persistence and degradability				
HIT-RE 500 V3, B				
Persistence and degradability	May cause long-term adverse effects in the environment.			
Phenol, styrenated (61788-44-1)				
Biochemical oxygen demand (BOD)	0.000231 g O ₂ /g substance			
Chemical oxygen demand (COD)	0.004827 g O ₂ /g substance			
m-Xylylenediamine (1477-55-0)				
Not rapidly degradable				
3-Aminopropyltriethoxysilan (919-30-2)				
Persistence and degradability	Not readily biodegradable in water.			
12.3. Bioaccumulative potential				
HIT-RE 500 V3, B				
Bioaccumulative potential Not established.				
2-methyl-1,5-pentanediamine (15520-10-2)				
Partition coefficient n-octanol/water (Log Kow)	0.27 (Estimated value)			
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).			
Phenol, styrenated (61788-44-1)				
BCF - Fish [1]	3246 l/kg (BCFBAF v3.01, Pisces, Fresh water, Weight of evidence, Fresh weight)			
BCF - Fish [2]	3246 mg/l			
Partition coefficient n-octanol/water (Log Kow)	6.24 – 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)			
Bioaccumulative potential	Bioaccumulative potential.			
2,4,6-tris(dimethylaminomethyl)phenol (90-72	2-2)			
Partition coefficient n-octanol/water (Log Kow)	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)			
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).			
3-Aminopropyltriethoxysilan (919-30-2)	3-Aminopropyltriethoxysilan (919-30-2)			
BCF - Fish [1]	3.4 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)			

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3-Aminopropyltriethoxysilan (919-30-2)	
Partition coefficient n-octanol/water (Log Kow)	1.7 (QSAR, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

2.4. Mobility III 3011		
HIT-RE 500 V3, B		
Mobility in soil	No additional information available	
Phenol, styrenated (61788-44-1)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.145 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)	
Ecology - soil	Low potential for mobility in soil.	
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.32 (log Koc, Calculated value)	
Ecology - soil	Highly mobile in soil.	
3-Aminopropyltriethoxysilan (919-30-2)		
Ecology - soil	No (test)data on mobility of the substance available.	

12.5. Other adverse effects

Ozone Not classified

Other adverse effects

No additional information available
Other information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste)

Disposal must be done according to official regulations.

Product/Packaging disposal recommendations

After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product: Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number			
UN 3259	UN 3259	UN 3259	UN 3259
14.2. UN proper shipping nam	e		
AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	Amines, solid, corrosive, n.o.s. (2- methyl-1,5-pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)

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Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

ADR	IMDG	IATA	RID
Transport document description			
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (2-methyl-1,5- pentanediamine, m- Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II
14.3. Transport hazard class(e	s)		
8	8	8	8
8	s s		s s
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

Overland	tranci	nort
Overianu	uans	ροιι

Classification code (ADR)

Special provisions (ADR)

Limited quantities (ADR)

Packing instructions (ADR)

Mixed packing provisions (ADR)

Transport exteant (ADR)

28

Transport category (ADR)

Orange plates 80 3259

Е

Tunnel restriction code (ADR)

Transport by sea

Special provisions (IMDG) 274
Limited quantities (IMDG) 1 kg
Packing instructions (IMDG) P002
EmS-No. (Fire) F-A
EmS-No. (Spillage) S-B
Stowage category (IMDG) A
MFAG-No 154

Air transport

PCA packing instructions (IATA) 859
PCA max net quantity (IATA) 15kg
CAO packing instructions (IATA) 863
Special provisions (IATA) A3

Rail transport

Special provisions (RID) 274 Limited quantities (RID) 1kg

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Packing instructions (RID) P002, IBC08

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

 SDS Major/Minor
 None

 Issue date
 15/11/2022

 Revision date
 15/11/2022

 Supersedes
 13/05/2020

Section	Changed item	Change	Comments
2.1	Classification (GHS UN)	Modified	

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

IATA - International Air Transport Association

EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

Other information None.

Full text of H-statements:	
H227	Combustible liquid
H302	Harmful if swallowed
H303	May be harmful if swallowed
H312	Harmful in contact with skin

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Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Full text of H-statements:				
H313	May be harmful in contact with skin			
H314	Causes severe skin burns and eye damage			
H315	Causes skin irritation			
H317	May cause an allergic skin reaction			
H318	Causes serious eye damage			
H319	Causes serious eye irritation			
H332	Harmful if inhaled			
H335	May cause respiratory irritation			
H400	Very toxic to aquatic life			
H401	Toxic to aquatic life			
H402	Harmful to aquatic life			
H411	Toxic to aquatic life with long lasting effects			
H412	Harmful to aquatic life with long lasting effects			

SDS_UN_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Safety information for 2-Component-products

Issue date: 13/05/2020 Revision date: 13/05/2020 Supersedes: 26/02/2019 Version: 2.3

SECTION 1: Kit identification

1.1 Product identifier

Product name HIT-RE 500 V3



Product code BU Anchor

1.2 Details of the supplier of the Safety information for 2-Component-products

Hilti (Philippines) Inc.
2256 Pasong Tamo Extension
Edsa, Brgy. Magallanes
1224 Makati City - Philippinen
T +632 784 7100 - F +63 2 784 7100
customerservice.ph@hilti.com

SECTION 2: General information

Storage Storage temperature: 5 - 25 °C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3:

Classification of the Product

Classification according to the United Nations GHS (Rev. 4, 2011)

Acute Tox. 5 (Oral)	H303
Skin Corr. 1B	H314
Skin Sens. 1	H317
Muta. 2	H341
Repr. 1B	H360
STOT SE 3	H335
Aquatic Chronic 2	H411

Label elements

Signal word (GHS UN)

Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS UN)







GHS09

GHS05 Danger

Hazardous ingredients Epoxy resin, Amines

Hazard statements (GHS UN) H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H335 - May cause respiratory irritation.

H341 - Suspected of causing genetic defects.

H360 - May damage fertility or the unborn child.

GHS07

19/06/2020

PH - en

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Safety information for 2-Component-products

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS UN) P280 - Wear eye protection, protective clothing, protective gloves.

P262 - Do not get in eyes, on skin, or on clothing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

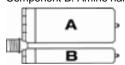
P302+P352 - IF ON SKIN: Wash with plenty of water.

Additional information

2-component-foilpack, contains:

Component A: Epoxy resin, Reactive diluent, inorganic filler

Component B. Amine hardener, inorganic filler



Name	General description	Quantity	Unit	Classification according to the United Nations GHS
HIT-RE 500 V3, B		1	pcs	Acute Tox. 5 (Oral), H303 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
HIT-RE 500 V3, A		1	pcs	Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

SECTION 4: General advice

General advice For professional users only

SECTION 5: Safe handling advice

General measures Spilled material may present a slipping hazard Environmental precautions Prevent entry to sewers and public waters

Notify authorities if liquid enters sewers or public waters

Avoid release to the environment

Full or only partially emptied cartridges must be disposed of as special waste in accordance

with official regulations.

After curing, the product can be disposed of with household waste.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Technical measures Comply with applicable regulations

Precautions for safe handling Wear personal protective equipment

Avoid contact with skin and eyes

Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work

Avoid contact during pregnancy/while nursing

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation

Mechanically recover the product

On land, sweep or shovel into suitable containers

Store away from other materials.

For containment Collect spillage.

Incompatible materials Sources of ignition Direct sunlight

Incompatible products Strong bases

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Safety information for 2-Component-products

Strong acids

SECTION 6: First aid measures

First-aid measures after eye contact Get immediate medical advice/attention.

Immediately rinse with water for a prolonged period while holding the eyelids wide open

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an eye specialist

First-aid measures after ingestion Do not induce vomiting

Rinse mouth

Immediately call a POISON CENTER/doctor.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/...

Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get immediate medical advice/attention.

First-aid measures general Never give anything by mouth to an unconscious person

If you feel unwell, seek medical advice (show the label where possible)

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after eye contact Causes serious eye damage.

Symptoms/effects after inhalation May cause an allergic skin reaction.

SECTION 7: Fire fighting measures

Exercise caution when fighting any chemical fire

Prevent fire fighting water from entering the environment

Protection during firefighting Self-contained breathing apparatus

Do not enter fire area without proper protective equipment, including respiratory protection

Hazardous decomposition products in case of

fire

Thermal decomposition generates :

Carbon dioxide Carbon monoxide

SECTION 8: Other information

No data available

19/06/2020 PH - en 3/25



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Issue date: 13/05/2020

Version: 1.6

Revision date: 13/05/2020 Supersedes: 25/02/2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Mixture

Product name HIT-RE 500 V3, B

UN-No. (ADR) 3259
Product code BU Anchor

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture Composite mortar component for fasteners in the construction industry

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti (Philippines) Inc. 2256 Pasong Tamo Extension Edsa, Brgy. Magallanes 1224 Makati City - Philippinen T +632 784 7100 - F +63 2 784 7100

customerservice.ph@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH

Hiltistraße 6

86916 Kaufering - Deutschland

T +49 8191 906876 anchor.hse@hilti.com

1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+632 784 7100

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS (Rev. 4, 2011)

 Acute Tox. 5 (Oral)
 H303

 Skin Corr. 1B
 H314

 Skin Sens. 1
 H317

 STOT SE 3
 H335

 Aquatic Acute 3
 H402

 Aquatic Chronic 3
 H412

Full text of H statements : see section 16

2.2. Label elements

Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS UN)

Precautionary statements (GHS UN)





GHS05

GHS07

Signal word (GHS UN) Danger

Hazardous ingredients 2-methyl-1,5-pentanediamine; Phenol, styrenated; m-Xylylenediamine; 3-

Aminopropyltriethoxysilan; 2,4,6-tris(dimethylaminomethyl)phenol

Hazard statements (GHS UN) H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation.

H412 - Harmful to aquatic life with long lasting effects. P262 - Do not get in eyes, on skin, or on clothing.

P280 - Wear eye protection, protective clothing, protective gloves.

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according to the United Nations GHS (Rev. 4, 2011)

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.

P337+P313 - If eye irritation persists: Get medical advice, medical attention.

P302+P352 - IF ÓN SKIN: Wash with plenty of water.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
2-methyl-1,5-pentanediamine	(CAS-No.) 15520-10-2	25 - 35	Flammable liquids, Category 4, H227 Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 4, H312 Acute toxicity (inhalation:dust,mist) Category 4, H332 Skin corrosion/irritation, Category 1A, H314 Serious eye damage/eye irritation, Category 1, H318 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation, H335
Phenol, styrenated	(CAS-No.) 61788-44-1	5 - 10	Skin corrosion/irritation, Category 2, H315 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Acute Hazard, Category 2, H401 Hazardous to the aquatic environment — Chronic Hazard, Category 2, H411
m-Xylylenediamine	(CAS-No.) 1477-55-0	5 - <8	Acute toxicity (oral), Category 4, H302 Acute toxicity (inhalation:dust,mist) Category 4, H332 Skin corrosion/irritation, Category 1B, H314 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, category 1B, H317 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412
2,4,6-tris(dimethylaminomethyl)phenol	(CAS-No.) 90-72-2	1 - 2,5	Acute toxicity (oral), Category 4, H302 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319
3-Aminopropyltriethoxysilan	(CAS-No.) 919-30-2	1 - 2,5	Acute toxicity (oral), Category 4, H302 Skin corrosion/irritation, Category 1B, H314

Full text of H-statements: see section 16

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according to the United Nations GHS (Rev. 4, 2011)

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Wash with plenty of water/.... Take off immediately all contaminated clothing. Wash

contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical

advice/attention.

First-aid measures after eye contact Get immediate medical advice/attention. Immediately rinse with water for a prolonged period

while holding the eyelids wide open. Remove contact lenses, if present and easy to do.

Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects Causes severe skin burns and eye damage.

Symptoms/effects after inhalation May cause an allergic skin reaction.

Symptoms/effects after eye contact Causes serious eye damage.

Potential adverse human health effects and No additional information available.

symptoms

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective equipment,

including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1.For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2.For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

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according to the United Nations GHS (Rev. 4, 2011)

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and material for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation.

Mechanically recover the product. On land, sweep or shovel into suitable containers. Store

away from other materials.

Other information Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other

exposed areas with mild soap and water before eating, drinking or smoking and when leaving

work. Avoid contact during pregnancy/while nursing.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Comply with applicable regulations.

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Incompatible products

Incompatible materials

Strong bases. Strong acids.

Sources of ignition. Direct sunlight.

Keep away from heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant

for this product.

8.2. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

Environmental exposure controls No specific measures are required provided the product is handled in accordance with the

general rules of occupational hygiene and safety.

Consumer exposure controls Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use.

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8.3. Individual protection measures, such as personal protective equipment (PPE)

Materials for protective

clothing

Long sleeved protective clothing

Hand protection Wear protective gloves. The permeation time

is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective

function's effective duration.

Туре	Material	Permeation	Thickness (mm)	Penetrati on	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN 374

Eye protection Wear security glasses which protect from

splashes

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Skin and body protection

Wear suitable protective clothing







8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid

Appearance Thixotropic paste.

Colour red.

Odour Amine-like.
Odour threshold No data available

pH 11.5

Relative evaporation rate (butylacetate=1) No data available No data available Melting point No data available Freezing point No data available Boiling point Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available Non flammable. Flammability (solid, gas) No data available Vapour pressure Relative vapour density at 20 °C No data available Relative density No data available Density 1.31 g/cm³ Solubility insoluble in water.

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according to the United Nations GHS (Rev. 4, 2011)

Log PowNo data availableViscosity, kinematicNo data availableViscosity, dynamic50 - 70 Pa·s HN-0333Explosive propertiesNo data availableOxidising propertiesNo data availableExplosive limitsNo data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: fume. Carbon monoxide. Carbon dioxide. Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) May be harmful if swallowed.

Acute toxicity (dermal) Not classified
Acute toxicity (inhalation) Not classified

2-methyl-1,5-pentanediamine (15520-10-2)			
LD50 oral rat	1690 mg/kg (Rat)		
LD50 dermal rat	1870 mg/kg		
LC50 inhalation rat (mg/l)	4.9 mg/l		
Phenol, styrenated (61788-44-1)			
LD50 oral rat	> 2500 mg/kg		
LD50 dermal rat	> 2000 mg/kg		
LC50 inhalation rat (mg/l)	158.31 mg/l/4h		
m-Xylylenediamine (1477-55-0)			
LD50 oral rat	1090 mg/kg		
LD50 oral	660 mg/kg		
LD50 dermal rat	> 3100 mg/kg		
LD50 dermal	> 3100 mg/kg		
LC50 inhalation rat (Dust/Mist - mg/l/4h)	1.34 mg/l/4h		

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according to the United Nations GHS (Rev. 4, 2011)

3-Aminopropyltriethoxysilan (919-30-2)					
LD50 oral rat	1.57 ml/kg				
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)					
LD50 oral rat	2169 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 2169 mg/kg bodyweight; Rat; Experimental value)				
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; Other; >1 ml/kg; Rat; Experimental value)				
Skin corrosion/irritation	Causes severe skin burns and eye damage.				
	pH: 11.5				
Serious eye damage/irritation	Serious eye damage, category 1, implicit				
	pH: 11.5				
Respiratory or skin sensitisation	May cause an allergic skin reaction.				
Germ cell mutagenicity	Not classified				
Carcinogenicity	Not classified				
Reproductive toxicity	Not classified				
STOT-single exposure	May cause respiratory irritation.				
STOT-repeated exposure	Not classified				
Aspiration hazard	Not classified				
Potential adverse human health effects and symptoms	No additional information available.				

SECTION 12: Ecological information

1	2.	1	Т	n	Y	i	c	it۱	v

Ecology - water

Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-

term (acute)

Harmful to aquatic life.

Classification procedure (Hazardous to the

Calculation method

aquatic environment, short-term (acute))

Hazardous to the aquatic environment, long-

term (chronic)

Harmful to aquatic life with long lasting effects.

Classification procedure (Hazardous to the

Calculation method

aquatic environment, long-term (chronic))	
0 modified A.F. montage discrete (AFF00 40 0)	
2-methyl-1,5-pentanediamine (15520-10-2)	
LC50 fish 1 130 mg/l (LC50; 48 h)	
LOEC (acute) 1800 mg/l	
NOEC (acute) 1000 mg/l	
Phenol, styrenated (61788-44-1)	
LC50 fish 1 5.6 mg/l	
LC50 other aquatic organisms 1 9.7 mg/l	
EC50 Daphnia 1 1.44 mg/l	
NOEC (acute) 3.2 mg/l	
Threshold limit algae 1 0.326 mg/l (72 h; Algae)	
Threshold limit algae 2 0.14 mg/l (72 h; Algae)	
m-Xylylenediamine (1477-55-0)	
LC50 fish 1 75 mg/l	
LC50 other aquatic organisms 1 20.3 ppb	
EC50 Daphnia 1 15 mg/l	
LOEC (chronic) 15 mg/l	
NOEC (acute) 10.5 mg/kg	
NOEC (chronic) 4.7 mg/l	
NOEC chronic crustacea 4.7 mg/l	
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 fish 1 > 100 mg/l (96 h; Pisces; Nominal concentration)	
EC50 Daphnia 1 10 - 100 mg/l (Invertebrata; Estimated value)	
EC50 other aquatic organisms 1 84 mg/l (72 h; Desmodesmus subspicatus; growth rate; ECHA)	

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LC50 fish 2	70.9 mg/l (96 h; Pisces)
ErC50 (algae)	84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static
	system, Fresh water, Experimental value, GLP)
NOEC (chronic)	2 mg/l (28 d; activated sludge, domestic; respiration rate; ECHA)
Threshold limit algae 1	10 - 100,Algae
Threshold limit algae 2	84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)

12.2. Persistence and degradability

HIT-RE 500 V3, B	
Persistence and degradability	May cause long-term adverse effects in the environment.
Phenol, styrenated (61788-44-1)	
Biochemical oxygen demand (BOD)	0.000231 g O ₂ /g substance
Chemical oxygen demand (COD)	0.004827 g O ₂ /g substance

12.3. Bioaccumulative potential

HIT-RE 500 V3, B			
Bioaccumulative potential	Not established.		
2-methyl-1,5-pentanediamine (15520-10-	2)		
Log Pow	0.27 (Estimated value)		
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).		
Phenol, styrenated (61788-44-1)			
BCF fish 2	3246 mg/l		
Log Pow	6.24 - 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-		
	Stirring Method)		
Bioaccumulative potential	Bioaccumulative potential.		
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)			
Log Pow	0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)		
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).		

12.4. Mobility in soil

2-methyl-1,5-pentanediamine (15520-10-2)					
Log Pow	See section 12.1 on ecotoxicology				
Phenol, styrenated (61788-44-1)	Phenol, styrenated (61788-44-1)				
Log Pow	See section 12.1 on ecotoxicology				
Ecology - soil	No (test)data on mobility of the substance available.				
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)					
Log Pow	See section 12.1 on ecotoxicology				
Log Koc	See section 12.1 on ecotoxicology				
Ecology - soil	Highly mobile in soil.				

12.5. Other adverse effects

Ozone Not classified

Other adverse effects

No additional information available
Other information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) Disposal must be done according to official regulations.

emptied cartridges must be disposed of as special waste in accordance with official regulations.

Packaging contaminated by the product : Dispose in a safe manner in accordance with

local/national regulations.

Ecology - waste materials Avoid release to the environment.

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID			
14.1. UN number						
3259	3259	3259	3259			
14.2. UN proper shipping r	name					
AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)	Amines, solid, corrosive, n.o.s. (2- methyl-1,5-pentanediamine, m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5- pentanediamine, m- Xylylenediamine)			
Transport document descript	ion					
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (2-methyl-1,5- pentanediamine, m- Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl- 1,5-pentanediamine, m- Xylylenediamine), 8, II			
14.3. Transport hazard cla	ss(es)					
8	8	8	8			

14.4. Packing group						
	II	II	II			
14.5. Environmental hazards						
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No			
No supplementary information available						

14.6. Special precautions for user

- Overland transport

Classification code (ADR)

Special provisions (ADR)

Limited quantities (ADR)

Packing instructions (ADR)

Mixed packing provisions (ADR)

Transport category (ADR)

C8

274

1kg

P002, IBC08

MP10

Transport category (ADR)

2

Transport category (ADR)
Orange plates

80 3259

Tunnel restriction code (ADR)

- Transport by sea

Special provisions (IMDG) 274
Limited quantities (IMDG) 1 kg
Packing instructions (IMDG) P002

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EmS-No. (Fire) F-A
EmS-No. (Spillage) S-B
Stowage category (IMDG) A

Stowage and segregation (IMDG) Separated from acids.

MFAG-No 154

- Air transport

PCA packing instructions (IATA) 859
PCA max net quantity (IATA) 15kg
CAO packing instructions (IATA) 863
Special provisions (IATA) A3

- Rail transport

Special provisions (RID) 274
Limited quantities (RID) 1kg
Packing instructions (RID) P002, IBC08

Carriage prohibited (RID) No

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

SECTION 16: Other information

 SDS Major/Minor
 None

 Issue date
 13/05/2020

 Revision date
 13/05/2020

 Supersedes
 25/02/2019

Indication of changes:

Section	Changed item	Change	Comments
2.1	Classification (GHS UN)	Modified	

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Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

IATA - International Air Transport Association

EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

None.

Other information

Full text of H-statements:

skt of 11 otatomorito.				
Combustible liquid				
Harmful if swallowed.				
May be harmful if swallowed				
Harmful in contact with skin.				
Causes severe skin burns and eye damage.				
Causes skin irritation.				
May cause an allergic skin reaction.				
Causes serious eye damage.				
Causes serious eye irritation.				
Harmful if inhaled.				
May cause respiratory irritation.				
Toxic to aquatic life				
Harmful to aquatic life				
Toxic to aquatic life with long lasting effects.				
Harmful to aquatic life with long lasting effects.				

SDS_UN_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Issue date: 13/05/2020

Version: 2.3

Revision date: 13/05/2020 Supersedes: 25/02/2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Mixture

Product name HIT-RE 500 V3, A

UN-No. (ADR) 1759
Product code BU Anchor

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture Composite mortar component for fasteners in the construction industry

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti (Philippines) Inc.
2256 Pasong Tamo Extension
Edsa, Brgy. Magallanes
1224 Makati City - Philippinen
T +632 784 7100 - F +63 2 784 7100
customerservice.ph@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH

Hiltistraße 6

86916 Kaufering - Deutschland

T +49 8191 906876 anchor.hse@hilti.com

1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+632 784 7100

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS (Rev. 4, 2011)

 Skin Corr. 1C
 H314

 Skin Sens. 1
 H317

 Muta. 2
 H341

 Repr. 1B
 H360

 Aquatic Acute 2
 H401

 Aquatic Chronic 2
 H411

Full text of H statements : see section 16

2.2. Label elements

Signal word (GHS UN)

Hazardous ingredients

Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS UN)







GHS09

GHS05 GHS07

Danger

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol;

butanedioldiglycidyl ether; 2,2'-[(1-methylethylidene)bis(4,1-

phenyleneoxymethylene)]bisoxirane; trimethylolpropane triglycidylether

Hazard statements (GHS UN) H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction. H341 - Suspected of causing genetic defects. H360 - May damage fertility or the unborn child. H411 - Toxic to aquatic life with long lasting effects.

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according to the United Nations GHS (Rev. 4, 2011)

Precautionary statements (GHS UN)

P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.

P337+P313 - If eye irritation persists: Get medical advice, medical attention.

P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	(CAS-No.) 1675-54-3	25 - 40	United Nations GHS Flammable liquids Not classified Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Acute Hazard, Category 2, H401 Hazardous to the aquatic environment — Chronic Hazard, Category 2, H411
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	(CAS-No.) 9003-36-5	10-20	Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Chronic Hazard, Category 2, H411
butanedioldiglycidyl ether	(CAS-No.) 2425-79-8	5 - 10	Acute toxicity (oral), Category 4, H302 Acute toxicity (dermal), Category 4, H312 Acute toxicity (inhal.), Category 4, H332 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412
trimethylolpropane triglycidylether	(CAS-No.) 30499-70-8	5 - 10	Skin corrosion/irritation, Category 1C, H314 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, category 1B, H317 Germ cell mutagenicity, Category 2, H341 Reproductive toxicity, Category 1B, H360 Hazardous to the aquatic environment — Chronic Hazard, Category 2, H411
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	(CAS-No.) 2530-83-8	2.5 - 5	Acute toxicity (dermal), Category 5, H313 Serious eye damage/eye irritation, Category 1, H318 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402

Full text of H-statements: see section 16

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Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin

irritation occurs: Get immediate medical advice/attention.

First-aid measures after eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical

attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation May cause an allergic skin reaction.

Symptoms/effects after skin contact Causes skin irritation.

Symptoms/effects after eye contact

Potential adverse human health effects and

No additional information available.

symptoms

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide. Dry powder. Foam. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Do not enter fire area without proper protective equipment,

including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1.For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2.For emergency responders

Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

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6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and material for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation.

Mechanically recover the product. On land, sweep or shovel into suitable containers. Store

away from other materials.

Other information Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other

exposed areas with mild soap and water before eating, drinking or smoking and when leaving

work.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Protect from sunlight.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Heat and ignition sources Keep away from heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant

for this product.

8.2. Appropriate engineering controls

Environmental exposure controls

No specific measures are required provided the product is handled in accordance with the

general rules of occupational hygiene and safety.

Consumer exposure controls Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use.

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8.3. Individual protection measures, such as personal protective equipment (PPE)

Materials for protective

clothing

Long sleeved protective clothing

Hand protection Wear protective gloves. The permeation time

is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective

function's effective duration.

Туре	Material	Permeation	Thickness (mm)	Penetrati on	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN 374

Eye protection Wear security glasses which protect from

splashes

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Solid

Skin and body protection

Wear suitable protective clothing



Physical state





8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Thixotropic paste.

Colour Light grey.

Odour characteristic.

Odour characteristic.
Odour threshold No data available

pH 6.6

Relative evaporation rate (butylacetate=1) No data available No data available Melting point No data available Freezing point No data available Boiling point Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available Non flammable. Flammability (solid, gas) No data available Vapour pressure Relative vapour density at 20 °C No data available Relative density No data available Density 1.45 g/cm³ Solubility insoluble in water.

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Log PowNo data availableViscosity, kinematicNo data availableViscosity, dynamic45 - 59 Pa·s 23 °CExplosive propertiesNo data availableOxidising propertiesNo data availableExplosive limitsNo data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)		
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)	
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)	
butanedioldiglycidyl ether (2425-79-8)		
LD50 oral rat	2980 mg/kg (Rat)	
LD50 oral	1163 mg/kg (Rat; Exp. Key study ECHA)	
LD50 dermal rabbit	1130 mg/kg (Rabbit)	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilan	e (2530-83-8)	
LD50 oral rat	8025 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)	
LD50 dermal rabbit	4250 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402)	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)	

Skin corrosion/irritation Causes severe skin burns and eye damage.

pH: 6.6

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Serious eye damage/irritation Serious eye damage, category 1, implicit

pH: 6.6

Respiratory or skin sensitisation May cause an allergic skin reaction. Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity Not classified

Reproductive toxicity May damage fertility or the unborn child.

STOT-single exposure Not classified STOT-repeated exposure Not classified Aspiration hazard Not classified

Potential adverse human health effects and

symptoms

No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects. Ecology - water

Hazardous to the aquatic environment, short-

term (acute)

Toxic to aquatic life. Calculation method

Classification procedure (Hazardous to the aquatic environment, short-term (acute))

Hazardous to the aquatic environment, long-

term (chronic)

Toxic to aquatic life with long lasting effects.

Classification procedure (Hazardous to the aquatic environment, long-term (chronic))

Calculation method

butanedioldiglycidyl ether (2425-79-8)		
LC50 fish 1	24 mg/l (96 h; Pisces) ECHA	
LC50 other aquatic organisms 1	> 160 mg/l	
NOEC (acute)	40 mg/l	
Threshold limit algae 1	88930 mg/l (96 h; Algae)	
[3-(2,3-epoxypropoxy)propyl]trimethoxy	vsilane (2530-83-8)	
LC50 fish 1	55 mg/l (96 h; Cyprinus carpio; Young)	
EC50 Daphnia 1	473 - 710 mg/l (48 h; Daphnia magna)	
LC50 fish 2	237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)	
Threshold limit algae 1	119 mg/l (7 days; Anabaena flosaquae)	
Threshold limit algae 2	250 mg/l (72 h; Selenastrum capricornutum)	
2,2'-[(1-methylethylidene)bis(4,1-phenyl	eneoxymethylene)]bisoxirane (1675-54-3)	
LC50 fish 1	2.3 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Nominal concentration)	
EC50 Daphnia 1	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)	
LC50 fish 2	2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)	
Threshold limit algae 1	> 11 mg/l (72 h; Scenedesmus sp.)	
Threshold limit algae 2	4.2 mg/l (72 h; Scenedesmus sp.)	

12.2. Persistence and degradability

HIT-RE 500 V3, A		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Quartz (SiO2)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	
butanedioldiglycidyl ether (2425-79-8)		
Biochemical oxygen demand (BOD)	0.01982 g O ₂ /g substance	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
Persistence and degradability	Not readily biodegradable in water.	

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12.3. Bioaccumulative potential

HIT-RE 500 V3, A		
Bioaccumulative potential	Not established.	
Quartz (SiO2)		
Bioaccumulative potential	No bioaccumulation data available.	
butanedioldiglycidyl ether (2425-79-8)		
Log Pow	-0.15	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)		
Log Pow	-0.92 (Estimated value)	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
BCF other aquatic organisms 1	31 (Estimated value, Fresh weight)	
Log Pow	3 (Estimated value, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	

12.4. Mobility in soil

Quartz (SiO2)			
Ecology - soil	Low potential for mobility in soil.		
butanedioldiglycidyl ether (242	butanedioldiglycidyl ether (2425-79-8)		
Log Pow	See section 12.1 on ecotoxicology		
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)			
Log Pow	See section 12.1 on ecotoxicology		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Surface tension	59 mN/m (20 °C, 0.09 g/l)		
Log Pow	See section 12.1 on ecotoxicology		
Log Koc	See section 12.1 on ecotoxicology		
Ecology - soil	Low potential for adsorption in soil.		

12.5. Other adverse effects

Ozone Not classified

Other adverse effects No additional information available Other information Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) Disposal must be done according to official regulations.

After curing, the product can be disposed of with household waste. . Full or only partially Product/Packaging disposal recommendations emptied cartridges must be disposed of as special waste in accordance with official regulations.

Packaging contaminated by the product : Dispose in a safe manner in accordance with

local/national regulations.

Avoid release to the environment. Ecology - waste materials

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
1759	1759	1759	1759
14.2. UN proper shipping	ı name		
CORROSIVE SOLID, N.O.S.	CORROSIVE SOLID, N.O.S.	Corrosive solid, n.o.s.	CORROSIVE SOLID, N.O.S.
(trimethylolpropane	(trimethylolpropane	(trimethylolpropane	(trimethylolpropane

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ADR	IMDG	IATA	RID
triglycidylether)	triglycidylether)	triglycidylether)	triglycidylether)
Transport document description	on		
UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, MARINE POLLUTANT/ENVIRONMENTALL Y HAZARDOUS	UN 1759 Corrosive solid, n.o.s. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class	ss(es)		
8	8	8	8
14.4. Packing group	14.4. Packing group		
III	III	III	III
14.5. Environmental hazard	ds		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available			

14.6. Special precautions for user

- Overland transport

Classification code (ADR) C10 274 Special provisions (ADR) 5kg Limited quantities (ADR)

Packing instructions (ADR) P002, IBC08, LP02, R001

Mixed packing provisions (ADR) MP10 Transport category (ADR) 3

Orange plates

80 1759

Tunnel restriction code (ADR) Ε

- Transport by sea

223, 274 Special provisions (IMDG) P002, LP02 Packing instructions (IMDG)

EmS-No. (Fire) F-A EmS-No. (Spillage) S-B Stowage category (IMDG) Α

- Air transport

PCA packing instructions (IATA) 860 PCA max net quantity (IATA) 25kg CAO packing instructions (IATA) 864 Special provisions (IATA) A3, A803

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- Rail transport

Special provisions (RID) 274

Packing instructions (RID) P002, IBC08, LP02, R001

Carriage prohibited (RID)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

SECTION 16: Other information

 SDS Major/Minor
 None

 Issue date
 13/05/2020

 Revision date
 13/05/2020

 Supersedes
 25/02/2019

Indication of changes:

Section	Changed item	Change	Comments
9	pH	Added	
14	Transport information	Modified	
16	Additional information	Added	

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE - Acute Toxicity Estimate BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level DNEL - Derived-No Effect Level

IATA - International Air Transport Association

EC50 - Median effective concentration

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level
NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC)

No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

vPvB - Very Persistent and Very Bioaccumulative

Other information None.

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Full text of H-statements:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SDS_UN_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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