

HIT-MM PLUS

en	This safety data sheet file is issued for the following production lots: 1. Version 8.X is valid for HIT-MM PLUS with a maximum expiration date of 12/2022 (see foil pack manifold) 2. Version 9.0 is valid for HIT-MM PLUS with a minimum expiration date of 01/2023 (see the foil pack manifold)
de	Diese Sicherheitsdatenblatt-Datei betrifft die folgenden Fertigungslose: 1. Version 8.X ist gültig für HIT-MM PLUS mit einem Haltbarkeitsdatum bis 12/2022 (siehe Verbindungsteil) 2. Version 9.0 ist gültig für HIT-MM PLUS mit einem Haltbarkeitsdatum ab 01/2023 (siehe Verbindungsteil)
nl	Dit veiligheidsinformatiebladbestand wordt afgegeven voor de volgende productie-lots: 1. Versie 8.X is geldig voor HIT-MM PLUS met een maximale houdbaarheidsdatum tot 12/2022 (zie foliepak verdeler) 2. Versie 9.0 is geldig voor HIT-MM PLUS met een minimale houdbaarheidsdatum tot 01/2023 (zie foliepak verdeler)
fr	Ce fichier de données de sécurité est délivré pour les lots de production suivants : 1. La version 8.X est valide pour HIT-MM PLUS avec une date d'expiration maximale de 12/2022 (voir le raccord de cartouche souple) 2. La version 9.0 est valide pour HIT-MM PLUS avec une date d'expiration maximale de 01/2023 (voir le raccord de cartouche souple)
da	Denne sikkerhedsdatabladsfil er udgivet for følgende produktions lots: 1. Version 8.X er gældende for HIT-MM PLUS med en maksimal udløbsdato d. 12/2022 (se foliepakkens manifold) 2. Version 9.0 er gældende for HIT-MM PLUS med en mindste udløbsdato d. 01/2023 (se foliepakkens manifold)
sv	Denna säkerhetsdatabladsfil har utfärdats för följande tillverkningspartier: 1. Version 8.X är giltig för HIT-MM PLUS med ett sista giltighetsdatum den 12/2022 (se folieförpackningens grenrör) 2. Version 9.0 är giltig för HIT-MM PLUS med ett första giltighetsdatum den 01/2023 (se folieförpackningens grenrör)
fi	Tämä käyttöturvallisuustiedote koskee seuraavia tuotantoeriä: 1. Versio 8.X koskee HIT-MM PLUS -tuotetta, jonka viimeinen käyttöpäivämäärä on 12/2022 tai sitä ennen (ks. foliopakkauksen taite) 2. Versio 9.0 koskee HIT-MM PLUS -tuotetta, jonka viimeinen käyttöpäivämäärä on 01/2023 tai sen jälkeen (ks. foliopakkauksen taite)
hu	Ezt a biztonsági adatlapot a következő gyártási tételekhez bocsátják ki: 1. Az 8.X változat legfeljebb 2022/12 lejáratú dátummal érvényes a HIT-MM PLUS-re (lásd a fóliacsomag sokszorosított iratát) 2. Az 9.0 változat legalább 2023/01 lejáratú dátummal érvényes a HIT-MM PLUS-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 8.X válida para HIT-MM PLUS con una fecha de caducidad máxima de 12/2022 (consulte el colector de láminas) 2. Versión 9.0 válida para HIT-MM PLUS con una fecha de caducidad mínima de 01/2023 (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 8.X é válida para a HIT-MM PLUS com um prazo máximo de validade até 12/2022 (ver as diversas embalagens) 2. A versão 9.0 é válida para a HIT-MM PLUS com um prazo mínimo de validade até 01/2023 (ver as diversas embalagens)
it	Questo file della scheda tecnica di sicurezza è rilasciato per i seguenti lotti di produzione: 1. La versione 8.X è valida per HIT-MM PLUS con data di scadenza massima 12/2022 (vedere la giunzione della confezione) 2. La versione 9.0 è valida per HIT-MM PLUS con data di scadenza minima 01/2023 (vedere la giunzione della confezione)
pl	Ten plik arkusza danych bezpieczeństwa jest wydany dla następujących części produkcyjnych: 1. Wersja 8.X obowiązuje w przypadku HIT-MM PLUS z maksymalnym dniem rozpoczęcia pracy 12/2022 (patrz opakowanie foliowe) 2. Wersja 9.0 obowiązuje w przypadku HIT-MM PLUS z minimalnym dniem rozpoczęcia pracy 01/2023 (patrz opakowanie foliowe)
ru	Этот файл сертификата безопасности предоставлен для следующих партий продукции: 1. Версия 8.X действительна для HIT-MM PLUS с максимальным сроком годности до 12.2022 г. (см. присоединительную часть на капсуле) 2. Версия 9.0 действительна для HIT-MM PLUS с минимальным сроком годности до 01.2023 г. (см. присоединительную часть на капсуле)
el	Το παρόν δελτίο δεδομένων ασφαλείας εκδίδεται για τις ακόλουθες παρτίδες παραγωγής: 1. Η έκδοση 8.X ισχύει για το HIT-MM PLUS με μέγιστη ημερομηνία λήξης τον 12/2022 (βλέπε διανομέα συσκευασίας μεμβράνης) 2. Η έκδοση 9.0 ισχύει για το HIT-MM PLUS με ελάχιστη ημερομηνία λήξης τον 01/2023 (βλέπε τον διανομέα της συσκευασίας μεμβράνης)
cs	Tento soubor s bezpečnostním listem je vystaven pro tyto výrobní závody 1. Verze 8.X je platná pro HIT-MM PLUS s maximálním datem expirace 12/2022 (viz fólie balení) 2. Verze 9.0 je platná pro HIT-MM PLUS s minimálním datem expirace 01/2023 (viz fólie balení)
bg	Този информационен лист за безопасност се публикува за следните производствени партии: 1. Версия 8.X е валидна за HIT-MM PLUS с максимален срок на валидност до 12.2022 г. (вж. фолийна опаковка за колектор) 2. Версия 9.0 е валидна за HIT-MM PLUS с минимален срок на изтичане 01.2023 г. (вж. фолийна опаковка за колектор)
lv	Šo drošības datu lapa ir izsniegta šādām ražojumu partijām: 1. Versija 8.X ir derīga izstrādājumiem HIT-MM PLUS, kura maksimālais derīguma termiņš ir 2022. gada maijs (skatīt folija iepakojuma kolektoru) 2. Versija 9.0 ir derīga izstrādājumiem HIT-MM PLUS, kura minimālais derīguma termiņš ir 2023. gada jūnijs (skatīt folija iepakojuma kolektoru)
lt	Šis saugos duomenų lapo failas išduodamas šioms gamybos partijoms: 1. 8.X versija galioja HIT-MM PLUS, kurios maksimali galiojimo data – 2022-12 (žr. folinių pakuočių rinkinį) 2. 9.0 versija galioja HIT-MM PLUS, kurios minimali galiojimo data – 2023-01 (žr. folinių pakuočių rinkinį)
sk	Tento súbor bezpečnostných údajov sa vydáva pre tieto výrobné šarže: 1. Verzia 8.X je platná pre HIT-MM PLUS s maximálnym dátumom expirácie 12/2022 (pozrite si údaj na fólii balenia) 2. Verzia 9.0 je platná pre HIT-MM PLUS s minimálnym dátumom expirácie 01/2023 (pozrite si údaj na fólii balenia)
sl	Datoteka z varnostnim listom je izdana za naslednje proizvodne serije: 1. Različica 8.X je veljavna za izdelek HIT-MM PLUS z maksimalnim datumom poteka veljavnosti: 12/2022 (glejte pakiranje) 2. Različica 9.0 je veljavna za izdelek HIT-MM PLUS z minimalnim datumom poteka veljavnosti: 01/2023 (glejte pakiranje)

HIT-MM PLUS

et	See ohutuskaardi fail on välja antud järgmistele tootepartiidele: 1. Versioon 8.X kehtib tootele HIT-MM PLUS viimase säilimiskuupäevaga 12/2022 (vt fooliumpakendi hargnemiskohta) 2. Versioon 9.0 kehtib tootele HIT-MM PLUS esimese säilimiskuupäevaga 01/2023 (vt fooliumpakendi hargnemiskohta)
ro	Acest fișier cu date tehnice de securitate este emis pentru următoarele locuri de producție: 1. Versiunea 8.X este valabilă pentru HIT-MM PLUS cu data maximă de expirare 12/2022 (a se vedea racordul pentru cartușe din folie) 2. Versiunea 9.0 este valabilă pentru HIT-MM PLUS cu data minimă de expirare 01/2023 (a se vedea racordul pentru cartușe din folie)
hr	Ovaj sigurnosno-tehnički list izdaje se za sljedeće proizvodne serije: 1. Verzija 8.X vrijedi za HIT-MM PLUS s maksimalnim rokom trajanja do 12/2022 (vidjeti razvodnik iz folije) 2. Verzija 9.0 vrijedi za HIT-MM PLUS s minimalnim rokom trajanja do 01/2023 (vidjeti razvodnik iz folije)
tr	Bu güvenlik bilgi formu dosyası aşağıdaki üretim partileri için hazırlanmıştır: 1. Versiyon 8.X, maksimum son kullanma tarihi 12/2022 olan HIT-MM PLUS için geçerlidir (bkz. folyo paketi manifoldu) 2. Versiyon 9.0, inimum son kullanma tarihi 01/2023 olan HIT-MM PLUS için geçerlidir (bkz. folyo paketi manifoldu)
uk	Цей файл сертифіката безпеки надано для наступних партій продукції: 1. Версія 8.X дійсна для HIT-MM PLUS з максимальним терміном придатності до 12.2022 р. (див. приєднувальну частину на капсулі) 2. Версія 9.0 дійсна для HIT-MM PLUS з мінімальним терміном придатності до 01.2023 р. (див. приєднувальну частину на капсулі)
zh	本安全数据表文件针对以下生产批次发布： 1. 版本 8.X 对 HIT-MM PLUS 有效，最长失效日期为 2022 年 12 月（参见箔包装歧管） 2. 版本 9.0 对 HIT-MM PLUS 有效，最短失效日期为 2023 年 1 月（参见箔包装歧管）
ar	يتم إصدار ملف صحيفة بيانات السلامة لتشغيلات الإنتاج التالية: 1. الإصدار 8.X صالح لـ HIT-MM PLUS بحد أقصى لتاريخ انتهاء الصلاحية هو 2022/12 (انظر العبوة المصنوعة من رقائق الألومنيوم) 2. الإصدار 9.0 صالح لـ HIT-MM PLUS على الأقل لتاريخ انتهاء الصلاحية هو 2023/1 (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 8.X は、有効期限が最大 2022 年 12 月までの HIT-MM PLUS に対して有効です（ファイルパック連結部に表示） 2. バージョン 9.0 は、有効期限が 2023 年 1 月以降の HIT-MM PLUS に対して有効です（ファイルパック連結部に表示）
sr	Datoteka bezbednosnog lista se izdaje za sledeće proizvodne serije: 1. Verzija 8.X je dostupna za HIT-MM PLUS sa maksimalnim datumom isteka 12/2022 (pogledajte ivicu pakovanja od folije) 2. Verzija 9.0 je dostupna za HIT-MM PLUS sa minimalnim datumom isteka 01/2023 (pogledajte ivicu pakovanja od folije)
ms	Fail helaian data keselamatan ini dikeluarkan untuk lot pengeluaran yang berikut: 1. Versi 8.X adalah sah untuk HIT-MM PLUS dengan tarikh tamat tempoh maksimum pada 12/2022 (lihat manifold pek kerajang) 2. Versi 9.0 adalah sah untuk HIT-MM PLUS dengan tarikh tamat tempoh minimum pada 01/2023 (lihat manifold pek kerajang)
ko	본 안전보건자료는 다음 제품 로트에 대해 발급되었습니다. 1. 버전 8.X(은)는 HIT-MM PLUS에 대해 유효하며, 최대 만료 기한은 2022년 12월입니다(호일 팩 매니폴드 참조) 2. 버전 9.0(은)는 HIT-MM PLUS에 대해 유효하며, 최소 만료 기한은 2023년 1월입니다(호일 팩 매니폴드 참조)
id	File lembar data keselamatan ini diterbitkan untuk lot produksi berikut: 1. Versi 8.X berlaku untuk HIT-MM PLUS dengan tanggal kedaluwarsa maksimum 12/2022 (lihat foil pack manifold) 2. Versi 9.0 berlaku untuk HIT-MM PLUS dengan tanggal kedaluwarsa minimum 01/2023 (lihat foil pack manifold)
he	קובץ גיליון נתוני בטיחות זה מונפק עבור מגרשי הייצור הבאים: 1. גרסה 8.X תקפה ל-HIT-MM PLUS עם תאריך תפוגה מקסימלי של 12/2022 (ראה יריעת פולק) (foil pack manifold) 2. גרסה 9.0 תקפה ל-HIT-MM PLUS עם תאריך תפוגה מינימלי של 01/2023 (ראה יריעת פולק) (foil pack manifold)
th	แผนข้อมูลด้านความปลอดภัยนี้จัดทำสำหรับล็อตการผลิตดังต่อไปนี้: 1. เวอร์ชัน 8.X ใช้ได้กับ HIT-MM PLUS ที่มีวันหมดอายุไม่เกิน 12/2022 (โปรดดูแผ่นพับห่อพอยส์) 2. เวอร์ชัน 9.0 ใช้ได้กับ HIT-MM PLUS ที่มีวันหมดอายุขั้นต่ำ 01/2023 (โปรดดูแผ่นพับห่อพอยส์)
vi	Tệp bảng dữ liệu an toàn này được phát hành cho các lô sản xuất sau: 1. Phiên bản 8.X hợp lệ cho HIT-MM PLUS với ngày hết hạn tối đa là 12/2022 (xem ống keo cây thép) 2. Phiên bản 9.0 hợp lệ cho HIT-MM PLUS với ngày hết hạn tối thiểu là 01/2023 (xem ống keo cây thép)
zh tw	下列生產批次將獲核發本安全資料表檔案： 1. 8.X 版適用於 HIT-MM PLUS，最長到期日 12/2022（請見鋁箔包打字紙） 2. 9.0 版適用於 HIT-MM PLUS，最短到期日 01/2023（請見鋁箔包打字紙）
kk	Бұл қауіпсіздік паспорты мына өндірістік партиялар үшін шығарылады: 1. 8.X нұсқасы жарамдылық мерзімі көп уақытты (12/2022) қамтитын HIT-MM PLUS үшін жарамды (жұқалтыр қаптаманы қараңыз) 2. 9.0 нұсқасы жарамдылық мерзімі аз уақытты (01/2023) қамтитын HIT-MM PLUS үшін жарамды (жұқалтыр қаптаманы қараңыз)

HIT-MM PLUS

Safety information for 2-Component-products

Issue date: 24/09/2021

Revision date: 24/09/2021

Supersedes: 03/04/2020

Version: 9.0

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-MM PLUS



Product code

BU Anchor

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

Hilti Saudi Arabia for Construction Tools LLC
King Fahd Street
P.O. Box 15930
21454 Jeddah - Saudi Arabia
T +966 2 213 8400 - F +966 2 697 4696
sa.customerservice@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)

Eye Irrit. 2	H319
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Label elements

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

Hazard pictograms (GHS UN)



GHS07

GHS09

Signal word (GHS UN)

Warning

Hazardous ingredients

methacrylates, dibenzoyl peroxide

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H410 - Very 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

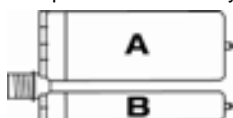
HIT-MM PLUS

Safety information for 2-Component-products

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: Urethane methacrylate resin, inorganic filler
 Component B: Dibenzoyl peroxide, phlegmatized



Name	General description	Quantity	Unit	Classification according to the United Nations GHS
HIT-MM PLUS, B		1	pcs	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
HIT-MM PLUS, A		1	pcs	Eye Irrit. 2, H319 Skin Sens. 1, H317

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
Storage conditions	Keep cool. Protect from sunlight.
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 Provide good ventilation in process area to prevent formation of vapour
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 Store away from other materials.
For containment	Collect spillage.
Incompatible materials	Sources of ignition Direct sunlight
Incompatible products	Strong bases Strong acids

SECTION 6: First aid measures

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
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

HIT-MM PLUS

Safety information for 2-Component-products

First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of water/... If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person If you feel unwell, seek medical advice (show the label where possible)
Symptoms/effects after eye contact	May cause severe irritation
Symptoms/effects after skin contact	May cause an allergic skin reaction.

SECTION 7: Fire fighting measures

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

SECTION 8: Other information

No data available

HIT-MM PLUS, A

Safety Data Sheet

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

Issue date: 24/09/2021 Revision date: 24/09/2021

Supersedes: 03/04/2020

Version: 9.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form	Mixture
Product name	HIT-MM PLUS, A
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 Saudi Arabia for Construction Tools LLC
King Fahd Street
P.O. Box 15930
21454 Jeddah - Saudi Arabia
T +966 2 213 8400 - F +966 2 697 4696

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876

1.5. Emergency phone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +966 2 213 8400
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SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Serious eye damage/eye irritation, Category 2	H319	Calculation method
Skin sensitisation, Category 1	H317	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)

GHS07

Warning

Hazardous ingredients

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester; 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation

HIT-MM PLUS, A

Safety Data Sheet

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

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, 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-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	(CAS-No.) 27813-02-1	10 - 25	Flammable liquids Not classified Acute toxicity (oral) Not classified Serious eye damage/eye irritation, Category 2A, H319 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
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	(CAS-No.) 2082-81-7	2,5 - 5	Acute toxicity (oral) Not classified Skin sensitisation, category 1B, H317
1,1'-(p-tolylimino)dipropan-2-ol	(CAS-No.) 38668-48-3	0,1 - 1	Acute toxicity (oral), Category 2, H300 Serious eye damage/eye irritation, Category 2A, H319 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	Take off immediately all contaminated clothing. 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	Wash contaminated clothing before reuse. Wash with plenty of water/... If skin irritation or rash occurs: Get 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	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.

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

Potential adverse human health effects and symptoms

No additional information available.

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

No additional information available

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

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.

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.

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. 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. Provide good ventilation in process area to prevent formation of vapour.

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

Keep cool. Protect from sunlight.

Incompatible products

Strong bases. Strong acids.

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Safety Data Sheet

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

Incompatible materials	Sources of ignition. Direct sunlight.
Heat and ignition sources	Keep away from heat and direct sunlight.
Storage temperature	5 – 25 °C

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 adequate ventilation.
Environmental exposure controls	Avoid release to the environment.
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)

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.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN ISO 374

Eye protection Wear security glasses which protect from splashes

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

Skin and body protection Wear suitable protective clothing

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 determined
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability (solid, gas)	Non flammable.

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

Explosive limits	Not applicable
Lower explosive limit (LEL)	Not applicable
Upper explosive limit (UEL)	Not applicable
Flash point	> 109 °C DIN EN ISO 1523
Auto-ignition temperature	Not self-igniting
Decomposition temperature	Not available
pH	Not available
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	60606.061 mm ² /s
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1.65 g/ml AW 4.3.23
Relative density	Not available
Relative vapour density at 20 °C	Not applicable
Solubility	Water: Not miscible
Viscosity, dynamic	100 Pa·s HN-0333
Explosive properties	Product is not explosive
Particle size	Not available
Particle size distribution	Not available
Particle shape	Not available
Particle aspect ratio	Not available
Particle specific surface area	Not available

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

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

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

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >=2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	≥ 5000 mg/kg bodyweight (Rabbit; Experimental value)
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
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	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

HIT-MM PLUS, A	
Viscosity, kinematic	60606.061 mm ² /s
Potential adverse human health effects and symptoms	No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
LC50 - Fish [1]	493 mg/l (48 h; Leuciscus idus; GLP)
EC50 - Crustacea [1]	> 143 mg/l (48 h; Daphnia magna; GLP)
ErC50 algae	97.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
Threshold limit - Algae [1]	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
Threshold limit - Algae [2]	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LC50 - Other aquatic organisms [1]	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 mg/l
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LC50 - Fish [1]	≈ 17 mg/l
LC50 - Other aquatic organisms [1]	245 mg/l
EC50 - Crustacea [1]	28.8 mg/l
NOEC (acute)	57.8 mg/l

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

12.2. Persistence and degradability

HIT-MM PLUS, A	
Persistence and degradability	Not established.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Not rapidly degradable	
Biodegradation	84 %

12.3. Bioaccumulative potential

HIT-MM PLUS, A	
Bioaccumulative potential	Not established.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
BCF - Fish [1]	≤ 100
BCF - Fish [2]	3.2 Quantitative structure-activity relationship (QSAR)
Partition coefficient n-octanol/water (Log Kow)	0.97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Partition coefficient n-octanol/water (Log Kow)	3.1
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Partition coefficient n-octanol/water (Log Pow)	2.1

12.4. Mobility in soil

HIT-MM PLUS, A	
Mobility in soil	No additional information available
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Partition coefficient n-octanol/water (Log Koc)	1.9 (log Koc, Calculated value)
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. 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



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

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Rail transport

Not applicable

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	24/09/2021
Revision date	24/09/2021
Supersedes	03/04/2020

Section	Changed item	Change	Comments
2.1	Classification (GHS UN)	Modified	
2.2	Hazard pictograms (GHS UN)	Removed	



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Safety Data Sheet

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

2.2	Hazard statements (GHS UN)	Removed	
3	Composition/information on ingredients	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

EC50 - Median effective concentration

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

LD50 - Median lethal dose

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

OECD - Organisation for Economic Co-operation and Development

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:	
H300	Fatal if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H402	Harmful to aquatic life
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.

HIT-MM PLUS, B

Safety Data Sheet

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

Issue date: 24/09/2021 Revision date: 24/09/2021

Supersedes: 03/04/2020

Version: 7.6

SECTION 1: Identification

1.1. GHS Product identifier

Product form	Mixture
Product name	HIT-MM PLUS, B
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 Saudi Arabia for Construction Tools LLC
King Fahd Street
P.O. Box 15930
21454 Jeddah - Saudi Arabia
T +966 2 213 8400 - F +966 2 697 4696

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876

1.5. Emergency phone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +966 2 213 8400
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SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Skin sensitisation, Category 1	H317	Calculation method
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400	Calculation method
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410	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)



GHS07

GHS09

Signal word (GHS UN)

Warning

Hazardous ingredients

dibenzoyl peroxide

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction

H410 - Very toxic to aquatic life with long lasting effects

HIT-MM PLUS, B

Safety Data Sheet

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

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, 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
dibenzoyl peroxide	(CAS-No.) 94-36-0	5 - <10	Organic Peroxides, Type B, H241 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Acute Hazard, Category 1, H400 (M=10) Hazardous to the aquatic environment — Chronic Hazard, Category 1, H410 (M=10)

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	Take off immediately all contaminated clothing. 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	Wash contaminated clothing before reuse. Wash with plenty of water/... If skin irritation or rash occurs: Get 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	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.
Potential adverse human health effects and symptoms	No additional information available.

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

No additional information available

HIT-MM PLUS, B

Safety Data Sheet

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

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

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.

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.

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. 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. Provide good ventilation in process area to prevent formation of vapour.
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 Keep cool. 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.
Storage temperature 5 – 25 °C

HIT-MM PLUS, B

Safety Data Sheet

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

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 adequate ventilation.
 Environmental exposure controls Avoid release to the environment.
 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)

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.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN ISO 374

Eye protection Wear security glasses which protect from splashes

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

Skin and body protection Wear suitable protective clothing

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 white.
 Odour characteristic.
 Odour threshold Not determined
 Melting point Not available
 Freezing point Not available
 Boiling point Not available
 Flammability (solid, gas) Non flammable.
 Explosive limits Not applicable
 Lower explosive limit (LEL) Not applicable
 Upper explosive limit (UEL) Not applicable

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

Flash point	Not applicable
Auto-ignition temperature	Not self-igniting
Decomposition temperature	Not available
pH	≈ 6
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	52941.176 mm ² /s
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1.7 g/cm ³ DIN 51757
Relative density	Not available
Relative vapour density at 20 °C	Not applicable
Solubility	Water: Not miscible
Viscosity, dynamic	90 Pa·s HN-0333
Explosive properties	Product is not explosive
Particle size	Not available
Particle size distribution	Not available
Particle shape	Not available
Particle aspect ratio	Not available
Particle specific surface area	Not available

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

SADT	65 °C
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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

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

HIT-MM PLUS, B

Safety Data Sheet

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

Skin corrosion/irritation	Not classified pH: ≈ 6
Serious eye damage/irritation	Not classified pH: ≈ 6
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	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

HIT-MM PLUS, B	
Viscosity, kinematic	52941.176 mm ² /s

Potential adverse human health effects and symptoms No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Very toxic to aquatic life.
Classification procedure (Hazardous to the aquatic environment, short-term (acute))	Calculation method
Hazardous to the aquatic environment, long-term (chronic)	Very toxic to aquatic life with long lasting effects.
Classification procedure (Hazardous to the aquatic environment, long-term (chronic))	Calculation method

dibenzoyl peroxide (94-36-0)	
LC50 - Fish [2]	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
EC50 - Crustacea [1]	0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	0.0711 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC chronic fish	0.001 mg/l

12.2. Persistence and degradability

HIT-MM PLUS, B	
Persistence and degradability	Not established.

dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

HIT-MM PLUS, B	
Bioaccumulative potential	Not established.

dibenzoyl peroxide (94-36-0)	
Partition coefficient n-octanol/water (Log Kow)	3.71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

HIT-MM PLUS, B

Safety Data Sheet

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

12.4. Mobility in soil

HIT-MM PLUS, B	
Mobility in soil	No additional information available
dibenzoyl peroxide (94-36-0)	
Surface tension	No data available (test not performed)
Partition coefficient n-octanol/water (Log Koc)	3.8 (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.

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 or ID number			
UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)
Transport document description			
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), 9, III
14.3. Transport hazard class(es)			
9	9	9	9
14.4. Packing group			
III	III	III	III

HIT-MM PLUS, B

Safety Data Sheet

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

ADR	IMDG	IATA	RID
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
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)	5kg
Packing instructions (ADR)	P002, IBC08, LP02, R001
Mixed packing provisions (ADR)	MP10
Transport category (ADR)	3
Orange plates	<div style="border: 2px solid black; padding: 5px; display: inline-block; text-align: center;"> <p style="margin: 0;">90</p> <hr style="border: 0; border-top: 1px solid black; margin: 2px 0;"/> <p style="margin: 0;">3077</p> </div>

Tunnel restriction code (ADR) -

Transport by sea

Special provisions (IMDG)	274, 335, 966, 967, 969
Limited quantities (IMDG)	5 kg
Packing instructions (IMDG)	LP02, P002
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-F
Stowage category (IMDG)	A
Stowage and handling (IMDG)	SW23

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

HIT-MM PLUS, B

Safety Data Sheet

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

SECTION 16: Other information

SDS Major/Minor	None
Issue date	24/09/2021
Revision date	24/09/2021
Supersedes	03/04/2020

Section	Changed item	Change	Comments
14	Transport 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
 EC50 - Median effective concentration
 IARC - International Agency for Research on Cancer
 IATA - International Air Transport Association
 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
 OECD - Organisation for Economic Co-operation and Development
 PNEC - Predicted No-Effect Concentration
 PBT - Persistent Bioaccumulative Toxic
 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:	
H241	Heating may cause a fire or explosion
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H410	Very toxic 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.

HIT-MM PLUS

Safety information for 2-Component-products

Issue date: 03/04/2020

Revision date: 03/04/2020

Supersedes: 29/01/2019

Version: 8.0

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-MM PLUS



Product code

BU Anchor

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

Hilti Saudi Arabia for Construction Tools LLC
King Fahd Street
P.O. Box 15930
21454 Jeddah - Saudi Arabia
T +966 2 213 8400 - F +966 2 697 4696
sa.customerservice@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)

Eye Irrit. 2A	H319
Skin Sens. 1	H317
Carc. 1B	H350
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Label elements

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

Hazard pictograms (GHS UN)



GHS07



GHS08



GHS09

Signal word (GHS UN)

Danger

Hazardous ingredients

methacrylates, dibenzoyl peroxide, 1,2-dihydroxybenzene

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H350 - May cause cancer.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS UN)

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

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

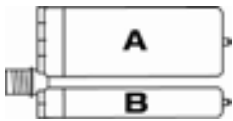
HIT-MM PLUS

Safety information for 2-Component-products

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: Urethane methacrylate resin, inorganic filler
 Component B: Dibenzoyl peroxide, phlegmatized



Name	General description	Quantity	Unit	Classification according to the United Nations GHS
HIT-MM PLUS, A		1	pcs	Eye Irrit. 2A, H319 Skin Sens. 1, H317 Carc. 1B, H350
HIT-MM PLUS, B		1	pcs	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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
Storage conditions	Keep cool. Protect from sunlight.
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 Provide good ventilation in process area to prevent formation of vapour
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 Store away from other materials.
For containment	Collect spillage.
Incompatible materials	Sources of ignition Direct sunlight
Incompatible products	Strong bases Strong acids

SECTION 6: First aid measures

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

HIT-MM PLUS

Safety information for 2-Component-products

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	Wash contaminated clothing before reuse. Wash with plenty of water/... If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person If you feel unwell, seek medical advice (show the label where possible)
Symptoms/effects after eye contact	May cause severe irritation
Symptoms/effects after skin contact	May cause an allergic skin reaction.

SECTION 7: Fire fighting measures

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

SECTION 8: Other information

No data available

HIT-MM PLUS, B

Safety Data Sheet

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

Issue date: 03/04/2020

Version: 7.5

Revision date: 03/04/2020

Supersedes: 28/01/2019

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

1.1. Product identifier

Product form	Mixture
Product name	HIT-MM PLUS, B
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
	For professional use only

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti Saudi Arabia for Construction Tools LLC
King Fahd Street
P.O. Box 15930
21454 Jeddah - Saudi Arabia
T +966 2 213 8400 - F +966 2 697 4696
sa.customerservice@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) +966 2 213 8400
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

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)



GHS07

GHS09

Signal word (GHS UN)

Warning

Hazardous ingredients

dibenzoyl peroxide

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction.
H410 - Very 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, medical attention.
P337+P313 - If eye irritation persists: Get medical advice, medical attention.
P302+P352 - IF ON SKIN: Wash with plenty of water.

HIT-MM PLUS, B

Safety Data Sheet

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

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
dibenzoyl peroxide	(CAS-No.) 94-36-0	5 - <10	Organic Peroxides, Type B, H241 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment — Acute Hazard, Category 1, H400 (M=10) Hazardous to the aquatic environment — Chronic Hazard, Category 1, H410 (M=10)

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	Take off immediately all contaminated clothing. 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	Wash contaminated clothing before reuse. Wash with plenty of water/.... If skin irritation or rash occurs: Get 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 skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.
Potential adverse human health effects and symptoms	No additional information available.

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.
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HIT-MM PLUS, B

Safety Data Sheet

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

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

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.

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.

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. 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. Provide good ventilation in process area to prevent formation of vapour.

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

Keep cool. Protect from sunlight.

Incompatible products

Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

Storage temperature

5 - 25 °C

Heat and ignition sources

Keep away from heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

HIT-MM PLUS, B

Safety Data Sheet

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

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	Avoid release to the environment.
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)

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.
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Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN 374

Eye protection Wear security glasses which protect from splashes

Type	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	white.
Odour	characteristic.
Odour threshold	Not determined
pH	≈ 6
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available

HIT-MM PLUS, B

Safety Data Sheet

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

Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.7 g/cm ³ DIN 51757
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	90 Pa·s HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

SADT	65 °C
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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

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Not classified
	pH: ≈ 6
Serious eye damage/irritation	Not classified
	pH: ≈ 6
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

HIT-MM PLUS, B

Safety Data Sheet

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

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

HIT-MM PLUS, B	
Viscosity, kinematic	52941.176 mm ² /s

Potential adverse human health effects and symptoms No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Very toxic to aquatic life.
Classification procedure (Hazardous to the aquatic environment, short-term (acute))	Calculation method
Hazardous to the aquatic environment, long-term (chronic)	Very toxic to aquatic life with long lasting effects.
Classification procedure (Hazardous to the aquatic environment, long-term (chronic))	Calculation method

dibenzoyl peroxide (94-36-0)	
EC50 Daphnia 1	0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
LC50 fish 2	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
ErC50 (algae)	0.0711 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC chronic fish	< 0.001

12.2. Persistence and degradability

HIT-MM PLUS, B	
Persistence and degradability	Not established.
dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

HIT-MM PLUS, B	
Bioaccumulative potential	Not established.
dibenzoyl peroxide (94-36-0)	
Log Pow	3.71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

dibenzoyl peroxide (94-36-0)	
Surface tension	No data available (test not performed)
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available
Other information	Avoid release to the environment.

HIT-MM PLUS, B

Safety Data Sheet

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

SECTION 13: Disposal considerations

13.1. Waste treatment 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 / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)			
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

Special provisions (ADR) 375

- Transport by sea

No data available

- Air transport

Special provisions (IATA) A197

- Rail transport

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

HIT-MM PLUS, B

Safety Data Sheet

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

SECTION 16: Other information

SDS Major/Minor	None
Issue date	03/04/2020
Revision date	03/04/2020
Supersedes	28/01/2019

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
EC50 - Median effective concentration
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
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
OECD - Organisation for Economic Co-operation and Development
PNEC - Predicted No-Effect Concentration
PBT - Persistent Bioaccumulative Toxic
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:

H241	Heating may cause a fire or explosion.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic 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.

HIT-MM PLUS, A

Safety Data Sheet

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

Issue date: 03/04/2020

Version: 8.0

Revision date: 03/04/2020

Supersedes: 25/01/2019

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

1.1. Product identifier

Product form	Mixture
Product name	HIT-MM PLUS, A
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
	For professional use only

1.3. Details of the supplier of the safety data sheet

Supplier	Department issuing data specification sheet
Hilti Saudi Arabia for Construction Tools LLC King Fahd Street P.O. Box 15930 21454 Jeddah - Saudi Arabia T +966 2 213 8400 - F +966 2 697 4696 sa.customerservice@hilti.com	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) +966 2 213 8400
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Eye Irrit. 2A	H319
Skin Sens. 1	H317
Carc. 1B	H350

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)



GHS07

GHS08

Signal word (GHS UN)

Danger

Hazardous ingredients

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester; 1,2-dihydroxybenzene; 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol

Hazard statements (GHS UN)

H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H350 - May cause cancer.

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, medical attention.

HIT-MM PLUS, A

Safety Data Sheet

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

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 United Nations GHS
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	(CAS-No.) 27813-02-1	10 - 25	Flammable liquids Not classified Acute toxicity (oral) Not classified Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment - Acute Hazard Not classified
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	(CAS-No.) 2082-81-7	2,5 - 5	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
1,1'-(p-tolylimino)dipropan-2-ol	(CAS-No.) 38668-48-3	0,1 - 1	Acute toxicity (oral), Category 2, H300 Serious eye damage/eye irritation, Category 2A, H319 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412
1,2-dihydroxybenzene	(CAS-No.) 120-80-9	0,1 - <1	Acute toxicity (oral), Category 3, H301 Acute toxicity (dermal), Category 3, H311 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, Category 1, H317 Germ cell mutagenicity, Category 2, H341 Carcinogenicity, Category 1B, H350 Hazardous to the aquatic environment — Acute Hazard, Category 2, H401

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	Take off immediately all contaminated clothing. 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	Wash contaminated clothing before reuse. Wash with plenty of water/... If skin irritation or rash occurs: Get 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.

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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 skin contact

May cause an allergic skin reaction.

Symptoms/effects after eye contact

May cause severe irritation.

Potential adverse human health effects and symptoms

No additional information available.

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

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.

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.

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. Store away from other materials.

Other information

Dispose of materials or solid residues at an authorized site.

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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. Provide good ventilation in process area to prevent formation of vapour.

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

Keep cool. Protect from sunlight.

Incompatible products

Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

Storage temperature

5 - 25 °C

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

Appropriate engineering controls

Ensure good ventilation of the work station.

Environmental exposure controls

Avoid release to the environment.

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)

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.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12		EN 374

Eye protection

Wear security glasses which protect from splashes

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

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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	Light grey.
Odour	characteristic.
Odour threshold	Not determined
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	> 109 °C DIN EN ISO 1523
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.65 g/ml AW 4.3.23
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	100 Pa·s HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No 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.

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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

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >=2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	>= 5000 mg/kg bodyweight (Rabbit; Experimental value)

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg

1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg

1,2-dihydroxybenzene (120-80-9)	
LD50 oral rat	300 mg/kg
LD50 dermal rat	600 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	>= 2.8 mg/l/4h

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	May cause cancer.
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

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Viscosity, kinematic	60606.061 mm ² /s

Potential adverse human health effects and symptoms	No additional information available.
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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
LC50 fish 1	493 mg/l (48 h; Leuciscus idus; GLP)
EC50 Daphnia 1	> 143 mg/l (48 h; Daphnia magna; GLP)
ErC50 (algae)	> 97.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
Threshold limit algae 1	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
Threshold limit algae 2	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
LC50 other aquatic organisms 1	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 mg/l
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
LC50 fish 1	≈ 17 mg/l
LC50 other aquatic organisms 1	245 mg/l
EC50 Daphnia 1	28.8 mg/l
NOEC (acute)	57.8 mg/l
1,2-dihydroxybenzene (120-80-9)	
LC50 fish 1	9.22 mg/l
LC50 other aquatic organisms 1	22 mg/l

12.2. Persistence and degradability

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Persistence and degradability	Not established.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Persistence and degradability	Readily biodegradable in water.
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Biodegradation	84 %

12.3. Bioaccumulative potential

HIT-MM PLUS, A	
Bioaccumulative potential	Not established.
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
BCF fish 1	≤ 100
BCF fish 2	3.2 Quantitative structure-activity relationship (QSAR)
Log Pow	0.97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Log Pow	3.1
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
BCF fish 1	≈
Log Kow	2.1

12.4. Mobility in soil

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)	
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	Highly mobile in soil.
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)	
Log Pow	See section 12.1 on ecotoxicology
1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)	
Log Kow	See section 12.1 on ecotoxicology

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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.
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 / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

- Overland transport

- Transport by sea

No data available

- Air transport

No data available

- Rail transport

Carriage prohibited (RID) No

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

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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	03/04/2020
Revision date	03/04/2020
Supersedes	25/01/2019

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
 EC50 - Median effective concentration
 IARC - International Agency for Research on Cancer
 IATA - International Air Transport Association
 IMDG - International Maritime Dangerous Goods
 LC50 - Median lethal concentration
 LOAEL - Lowest Observed Adverse Effect Level
 NOAEC - No-Observed Adverse Effect Concentration
 LD50 - Median lethal dose
 NOAEL - No-Observed Adverse Effect Level
 NOEC - No-Observed Effect Concentration
 OECD - Organisation for Economic Co-operation and Development
 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:

H300	Fatal if swallowed.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects.



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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.