



Revision Date 31-May-2021

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Version 6

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

1.1. Product identifier

Product Code 85420
Product Name PERMA SHIELD GASKET DRESSING & FLANGE SEALANT 2 FL.OZ
Unique Formula Identifier (UFI) Code R7WH-A0AF-R00H-V77M
Contains DIPHENYLMETHANEDIISOCYANATE, ACETONE

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

Recommended Use Sealant
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

For further information, please contact

1.4. Emergency telephone number

24-hour emergency phone number - §45 - (EC)1272/2008

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|---|--------------------------|
| Serious eye damage/eye irritation | Category 2 - (H319) |
| Skin sensitization | Category 1 - (H317) |
| Carcinogenicity | Category 2 - (H351) |
| Specific target organ toxicity (single exposure) | Category 3 - (H335,H336) |
| Category 3 Respiratory irritation, Narcotic effects | |
| Flammable liquids | Category 2 - (H225) |

2.2. Label elements

Contains DIPHENYLMETHANEDIISOCYANATE, ACETONE



Signal word
Danger

Hazard statements

H317 - May cause an allergic skin reaction
 H319 - Causes serious eye irritation
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H351 - Suspected of causing cancer
 H225 - Highly flammable liquid and vapor Contains ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~, ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~ May produce an allergic reaction.
 EUH208 - Contains (. ?). May produce an allergic reaction

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear eye protection/ face protection
 P321 - Specific treatment (see .? on this label)
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P370 + P378 - In case of fire: Use .? to extinguish

2.3. Other hazards

Causes mild skin irritation.

SECTION 3: Composition/information on ingredients

3.1 Substances

| Chemical name | Weight-% | REACH registration No. | EC No | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--|----------|--|-----------|---|---|----------|----------------------|
| ACETONE 67-64-1 | 30 - 60 | Registration no: 01-2119471330-49-XXXX | 200-662-2 | Eye Irrit. 2 (H319) (EUH066) STOT SE 3 (H336) Flam. Liq. 2 (H225) | - | - | - |
| SILICA, AMORPHOUS 112926-00-8 | 1 - 5 | | - | No data available | - | - | - |
| DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] 9016-87-9 | 1 - 5 | | - | No data available | - | - | - |
| DIPHENYLMETHANE EDIISOCYANATE 101-68-8 | 1 - 5 | See CAS 39310-05-9 | 202-966-0 | Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) | Eye Irrit. 2 :: Resp. Sens. 1 :: :: Skin Irrit. 2 :: STOT SE 3 :: | - | - |

| | | | | | | | |
|---|---------|--|-----------|--|--|---|---|
| | | | | STOT RE 2 (H373) | | | |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANATE ~ 5873-54-1 | 0.1 - 1 | | 227-534-9 | Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373) | Eye Irrit. 2 :: Resp. Sens. 1 :: Skin Irrit. 2 :: STOT SE 3 :: | - | - |
| ETHANOL 64-17-5 | 0.1 - 1 | | 200-578-6 | Flam. Liq. 2 (H225) | - | - | - |
| STANNE,DIBUTYLBIS(1-OXODODECYL) OXY 77-58-7 | 0.1 - 1 | | 201-039-8 | Muta. 2 (H341) Repr. 1B (H360FD) STOT RE 1 (H372) | - | - | - |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethyl- ethyl)-4-hydroxy-, octadecyl ester 2082-79-3 | 0.1 - 1 | | 218-216-0 | No data available | - | - | - |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANATE ~ 2536-05-2 | 0.1 - 1 | | 219-799-4 | Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373) | Eye Irrit. 2 :: Resp. Sens. 1 :: Skin Irrit. 2 :: STOT SE 3 :: | - | - |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove to fresh air.

| | |
|---------------------|--|
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion | Rinse mouth. |

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

Symptoms No information available.

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

Note to physicians Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s)
Automotive Sealant.

Identified uses

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|---|---|--|--|--|---|
| ACETONE 67-64-1 | TWA 500 ppm TWA 1210 mg/m ³ | TWA: 500 ppm TWA: 1200 mg/m ³ STEL 2000 ppm STEL 4800 mg/m ³ | - | STEL: 1400 mg/m ³ TWA: 600 mg/m ³ | TWA: 500 ppm TWA: 1210 mg/m ³ |
| SILICA, AMORPHOUS 112926-00-8 | - | TWA: 4 mg/m ³ | - | TWA: 10.0 mg/m ³ | - |
| DIPHENYLMETHANEDII SOCYANATE 101-68-8 | - | TWA: 0.005 ppm TWA: 0.05 mg/m ³ STEL 0.01 ppm STEL 0.1 mg/m ³ | - | - | TWA: 0.02 mg/m ³ STEL: 0.07 mg/m ³ |
| ~DIPHENYLMETHANE-4 ,4 -DI-ISOCYANANTE ~ 5873-54-1 | - | TWA: 0.005 ppm TWA: 0.05 mg/m ³ STEL 0.01 ppm STEL 0.1 mg/m ³ | - | - | - |
| ETHANOL 64-17-5 | - | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL 2000 ppm STEL 3800 mg/m ³ | - | TWA: 1000 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ |
| STANNE,DIBUTYLBIS(1- OXODODECYL)OXY 77-58-7 | - | TWA: 0.1 mg/m ³ STEL 0.2 mg/m ³ H* | - | TWA: 0.1 mg/m ³ | TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ |
| ~DIPHENYLMETHANE-4 ,4 -DI-ISOCYANANTE ~ 2536-05-2 | - | TWA: 0.005 ppm TWA: 0.05 mg/m ³ STEL 0.01 ppm STEL 0.1 mg/m ³ | - | - | - |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| ACETONE 67-64-1 | - | - | TWA: 250 ppm TWA: 600 mg/m ³ | TWA: 500 ppm TWA: 1210 mg/m ³ | TWA: 500 ppm TWA: 1200 mg/m ³ |

| | | | | | |
|--|--|---|--|--|--|
| | | | | | STEL: 630 ppm STEL: 1500 mg/m ³ TWA: 5 mg/m ³ |
| SILICA, AMORPHOUS 112926-00-8 | - | - | - | - | |
| DIPHENYLMETHANEDII SOCYANATE 101-68-8 | - | - | TWA: 0.005 ppm TWA: 0.05 mg/m ³ | TWA: 0.005 ppm TWA: 0.05 mg/m ³ STEL: 0.01 ppm STEL: 0.1 mg/m ³ | STEL: 0.035 mg/m ³ |
| ETHANOL 64-17-5 | - | - | TWA: 1000 ppm TWA: 1900 mg/m ³ | TWA: 500 ppm TWA: 1000 mg/m ³ STEL: 1000 ppm STEL: 1900 mg/m ³ | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 1300 ppm STEL: 2500 mg/m ³ |
| STANNE,DIBUTYLBIS(1- OXODODECYL)OXY 77-58-7 | - | - | TWA: 0.1 mg/m ³ H* | TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ A* | TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³ iho* |
| Chemical name | France | Germany | Germany MAK | Greece | Hungary |
| ACETONE 67-64-1 | TWA: 500 ppm TWA: 1210 mg/m ³ STEL: 1000 ppm STEL: 2420 mg/m ³ | TWA: 500 ppm TWA: 1200 mg/m ³ | TWA: 500 ppm TWA: 1200 mg/m ³ Ceiling / Peak: 1000 ppm Ceiling / Peak: 2400 mg/m ³ | - | TWA: 1210 mg/m ³ |
| DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] 9016-87-9 | - | TWA: 0.05 mg/m ³ H* | TWA: 0.05 mg/m ³ Ceiling / Peak: 0.05 mg/m ³ Skin | - | - |
| DIPHENYLMETHANEDII SOCYANATE 101-68-8 | TWA: 0.01 ppm TWA: 0.1 mg/m ³ STEL: 0.02 ppm STEL: 0.2 mg/m ³ | TWA: 0.05 mg/m ³ H* | TWA: 0.05 mg/m ³ Ceiling / Peak: 0.05 mg/m ³ Skin | - | TWA: 0.05 mg/m ³ STEL: 0.05 mg/m ³ |
| ~DIPHENYLMETHANE-4 ,4 -DI-ISOCYANANTE ~ 5873-54-1 | - | TWA: 0.05 mg/m ³ | - | - | - |
| ETHANOL 64-17-5 | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³ | TWA: 200 ppm TWA: 380 mg/m ³ | TWA: 200 ppm TWA: 380 mg/m ³ Ceiling / Peak: 800 ppm Ceiling / Peak: 1520 mg/m ³ | - | TWA: 1900 mg/m ³ STEL: 3800 mg/m ³ |
| STANNE,DIBUTYLBIS(1- OXODODECYL)OXY 77-58-7 | TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ | TWA: 0.0018 ppm TWA: 0.009 mg/m ³ | TWA: 0.004 ppm TWA: 0.02 mg/m ³ Ceiling / Peak: 0.004 ppm Ceiling / Peak: 0.02 mg/m ³ | - | TWA: 0.05 mg/m ³ TWA: 0.002 mg/m ³ STEL: 0.4 mg/m ³ b* |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl) -4-hydroxy-, octadecyl ester 2082-79-3 | - | TWA: 20 mg/m ³ | TWA: 20 mg/m ³ Ceiling / Peak: 40 mg/m ³ | - | - |
| ~DIPHENYLMETHANE-4 ,4 -DI-ISOCYANANTE ~ 2536-05-2 | - | TWA: 0.05 mg/m ³ | - | - | - |
| Chemical name | Ireland | Italy | Italy REL | Latvia | Lithuania |
| ACETONE 67-64-1 | TWA: 500 ppm TWA: 1210 mg/m ³ STEL: 1500 ppm STEL: 3630 mg/m ³ | TWA: 500 ppm TWA: 1210 mg/m ³ | - | TWA: 500 ppm TWA: 1210 mg/m ³ | - |
| DIPHENYLMETHANEDII SOCYANATE 101-68-8 | TWA: 0.005 ppm TWA: 0.02 mg/m ³ STEL: 0.015 ppm | - | - | - | - |

| | | | | | |
|---|--|--|--|--|---|
| | STEL: 0.07 mg/m ³ | | | | |
| ETHANOL 64-17-5 | STEL: 1000 ppm | - | - | TWA: 1000 mg/m ³ | - |
| STANNE,DIBUTYLBI(1- OXODODECYL)OXY 77-58-7 | TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ | - | - | - | - |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| ACETONE 67-64-1 | - | - | TWA: 1210 mg/m ³ STEL: 2420 mg/m ³ | TWA: 125 ppm TWA: 295 mg/m ³ STEL: 156.25 ppm STEL: 368.75 mg/m ³ | STEL: 1800 mg/m ³ TWA: 600 mg/m ³ |
| SILICA, AMORPHOUS 112926-00-8 | - | - | - | - | TWA: 10 mg/m ³ TWA: 2 mg/m ³ |
| DIPHENYLMETHANEDII SOCYANATE 101-68-8 | - | - | - | TWA: 0.005 ppm TWA: 0.05 mg/m ³ STEL: 0.01 ppm | STEL: 0.09 mg/m ³ TWA: 0.03 mg/m ³ |
| ~DIPHENYLMETHANE-4 ,4 -DI-ISOCYANANTE ~ 5873-54-1 | - | - | - | TWA: 0.005 ppm STEL: 0.01 ppm | STEL: 0.09 mg/m ³ TWA: 0.03 mg/m ³ |
| ETHANOL 64-17-5 | - | - | TWA: 260 mg/m ³ STEL: 1900 mg/m ³ H* | TWA: 500 ppm TWA: 950 mg/m ³ STEL: 625 ppm STEL: 1187.5 mg/m ³ | TWA: 1900 mg/m ³ |
| STANNE,DIBUTYLBI(1- OXODODECYL)OXY 77-58-7 | - | - | - | TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³ H* | - |
| ~DIPHENYLMETHANE-4 ,4 -DI-ISOCYANANTE ~ 2536-05-2 | - | - | - | TWA: 0.005 ppm STEL: 0.01 ppm | STEL: 0.09 mg/m ³ TWA: 0.03 mg/m ³ |
| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
| ACETONE 67-64-1 | TWA: 500 ppm TWA: 1210 mg/m ³ STEL: 750 ppm | TWA: 500 ppm TWA: 1210 mg/m ³ | TWA: 500 ppm TWA: 1210 mg/m ³ | TWA: 500 ppm TWA: 1210 mg/m ³ 2420: STEL mg/m ³ 1000: STEL ppm | TWA: 500 ppm TWA: 1210 mg/m ³ |
| DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] 9016-87-9 | - | - | - | TWA: 0.05 mg/m ³ 0.05: STEL mg/m ³ K* | - |
| DIPHENYLMETHANEDII SOCYANATE 101-68-8 | TWA: 0.005 ppm | STEL: 0.15 mg/m ³ | TWA: 0.002 mg/m ³ TWA: 0.03 mg/m ³ | TWA: 0.05 mg/m ³ TWA: 0.005 ppm 0.05: STEL mg/m ³ 0.005: STEL ppm K* | TWA: 0.005 ppm TWA: 0.052 mg/m ³ |
| ~DIPHENYLMETHANE-4 ,4 -DI-ISOCYANANTE ~ 5873-54-1 | - | - | - | TWA: 0.05 mg/m ³ 0.05: STEL mg/m ³ | - |
| ETHANOL 64-17-5 | TWA: 1000 ppm | TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³ | TWA: 500 ppm TWA: 960 mg/m ³ | TWA: 960 mg/m ³ TWA: 500 ppm 1000: STEL ppm 1920: STEL mg/m ³ | STEL: 1000 ppm STEL: 1910 mg/m ³ |
| STANNE,DIBUTYLBI(1- OXODODECYL)OXY 77-58-7 | TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ | TWA: 0.05 mg/m ³ STEL: 0.15 mg/m ³ | TWA: 0.1 mg/m ³ K* | TWA: 0.009 mg/m ³ TWA: 0.0018 ppm 0.0018: STEL ppm 0.009: STEL mg/m ³ K* | TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³ vía dérmica* |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl) -4-hydroxy-, octadecyl ester | - | - | - | TWA: 20 mg/m ³ 40: STEL mg/m ³ | - |

| 2082-79-3 | | | | | |
|--|--------|--|--|---|---|
| ~DIPHENYLMETHANE-4,4-DI-ISOCYANATE ~ 2536-05-2 | - | - | - | TWA: 0.05 mg/m ³ 0.05: STEL mg/m ³ | - |
| Chemical name | Sweden | Switzerland | United Kingdom | | |
| ACETONE 67-64-1 | - | TWA: 500 ppm TWA: 1200 mg/m ³ STEL: 1000 ppm STEL: 2400 mg/m ³ | TWA: 500 ppm TWA: 1210 mg/m ³ STEL: 1500 ppm STEL: 3620 mg/m ³ | | |
| DIPHENYLMETHANEDIISOCYANATE 101-68-8 | - | TWA: 0.02 mg/m ³ STEL: 0.02 mg/m ³ H* | TWA: 0.02 mg/m ³ | | |
| ETHANOL 64-17-5 | - | TWA: 500 ppm TWA: 960 mg/m ³ STEL: 1000 ppm STEL: 1920 mg/m ³ | TWA: 1000 ppm TWA: 1920 mg/m ³ STEL: 3000 ppm STEL: 5760 mg/m ³ | | |
| STANNE,DIBUTYLBIS(1-OXODODECYL)OXY 77-58-7 | - | TWA: 0.1 mg/m ³ ppm TWA: 0.02 mg/m ³ STEL: 0.2 mg/m ³ ppm STEL: 0.02 mg/m ³ H* | TWA: 0.1 mg/m ³ ppm Sk* | | |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

| Chemical name | Denmark | Finland | France | Germany | Germany MAK |
|---|----------|---------|-------------|----------------|-------------|
| ACETONE 67-64-1 | - | - | - | - | 80 mg/L |
| Chemical name | Slovenia | Spain | Switzerland | United Kingdom | |
| ACETONE 67-64-1 | - | 50 | 80 | - | |
| DIPHENYLMETHANEDIISOCYANATE 101-68-8 | - | - | 10 | - | |

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------------|---------------------------|
| Physical state | Liquid |
| Color | No information available |
| Odor | No information available. |
| Odor threshold | No information available |

| Property | Values | Remarks • Method |
|---------------------------------------|--------------------------|--------------------------|
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | 54 °C | |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability limit: | 12.8% | |
| Lower flammability limit: | 2.6% | |
| Flash point | -18 °C | |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| pH | No data available | None known |
| pH (as aqueous solution) | No data available | No information available |
| Kinematic viscosity | | None known |
| Dynamic viscosity | No data available | None known |
| Water solubility | No data available | Partially soluble |
| Solubility(ies) | No Data Available | None known |
| Partition coefficient | No Data Available | None known |
| Vapor pressure | No Data Available | |
| Relative density | 1.04 | |
| Bulk density | No data available | |
| Density | No data available | |
| Vapor density | >1 | Air = 1 |
| Particle characteristics | | |
| Particle Size | No information available | |
| Particle Size Distribution | No information available | |

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available < 1 Butyl acetate = 1

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.
 Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products Carbon oxides. Nitrogen oxides (NOx). Isocyanates.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.
Eye contact Specific test data for the substance or mixture is not available.
Skin contact Specific test data for the substance or mixture is not available.
Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

No information available

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 10,840.60 mg/kg
ATEmix (dermal) 29,729.30 mg/kg
ATEmix (inhalation-dust/mist) 49.90 mg/l

13.729 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
 19.909 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
 61.309 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
 61.309 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
 60.109 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|-----------------------|--------------------------|---------------------------------------|
| ACETONE | = 5800 mg/kg (Rat) | > 15700 mg/kg (Rabbit) | = 50100 mg/m ³ (Rat) 8 h |
| DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] | = 49 g/kg (Rat) | > 9.4 g/kg (Rabbit) | = 490 mg/m ³ (Rat) 4 h |
| DIPHENYLMETHANEDIISOCY ANATE | = 31600 mg/kg (Rat) | - | = 369 mg/m ³ (Rat) 4 h |
| ETHANOL | = 7060 mg/kg (Rat) | - | = 124.7 mg/L (Rat) 4 h |
| STANNE,DIBUTYLBIS(1-OXOD ODECYL)OXY | = 45 mg/kg (Rat) | = 630 mg/kg (Rabbit) | - |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hyd roxy-, octadecyl ester | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 1811 mg/m ³ (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

| Chemical name | European Union |
|--|----------------|
| DIPHENYLMETHANEDIISOCYANATE | Carc. 2 |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~ | Carc. 2 |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~ | Carc. 2 |

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity Contains 0.049 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---------------|----------------------|---|----------------------------|--|
| ACETONE | - | 4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50 | - | 10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50 |

| | | | | |
|---|---|--|---|---|
| ETHANOL | - | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static | - | 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, octadecyl ester | 30: 72 h Desmodemus subspicatus mg/L EC50 | 100: 96 h Lepomis macrochirus mg/L LC50 100: 96 h Lepomis macrochirus mg/L LC50 static | - | - |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

| Chemical name | Partition coefficient |
|---|-----------------------|
| ACETONE | -0.24 |
| ETHANOL | -0.32 |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, octadecyl ester | 6 |

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

| Chemical name | PBT and vPvB assessment |
|---|-------------------------|
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, octadecyl ester | Not applicable |

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | ID 8000 |
| 14.2 | |
| 14.3 Transport hazard class(es) | 9 |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

IMDG

| | |
|--|--------------------------|
| 14.1 UN number or ID number | 1133 |
| 14.2 | |
| 14.3 Transport hazard class(es) | 3 |
| 14.4 Packing Group | II |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

RID

| | |
|-----------------------------------|----------------|
| 14.1 UN/ID No | 1133 |
| 14.2 | |
| 14.3 Transport hazard class(es) | 3 |
| 14.4 Packing Group | II |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |

ADR

| | |
|-----------------------------------|----------------|
| 14.1 UN number or ID number | 1133 |
| 14.2 | |
| 14.3 Transport hazard class(es) | 3 |
| 14.4 Packing Group | II |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special precautions for user | |
| Special Provisions | None |
| Classification code | F1 |

SECTION 15: Regulatory information

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

| Chemical name | Title | French RG number |
|--|-------|------------------|
| ACETONE 67-64-1 | - | RG 84 |
| DIPHENYLMETHANEDIISOCYANATE 101-68-8 | - | RG 62 |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~ 5873-54-1 | - | RG 62 |
| ETHANOL 64-17-5 | - | RG 84 |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~ 2536-05-2 | - | RG 62 |

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorization per REACH Annex XIV |
|--|---|--|
| DIPHENYLMETHANEDIISOCYANATE - 101-68-8 | 56[a]. | - |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~ - 5873-54-1 | 56[b]. | - |
| STANNE,DIBUTYLBIS(1-OXODODECYL)OXY - 77-58-7 | 30. | - |
| ~DIPHENYLMETHANE-4,4 -DI-ISOCYANANTE ~ - 2536-05-2 | 56[c]. | - |

Persistent Organic Pollutants

Not applicable

| Chemical name | European Export/Import Restrictions per (EC) 689/2008 - Annex Number |
|--|--|
| STANNE,DIBUTYLBIS(1-OXODODECYL)OXY - 77-58-7 | I.1 |

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

| | |
|----------------------|-----------------|
| TSCA | Does not comply |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Does not comply |
| ENCS | Does not comply |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

EUH066 - Repeated exposure may cause skin dryness or cracking
H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H341 - Suspected of causing genetic defects
H351 - Suspected of causing cancer
H360FD - May damage fertility. May damage the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H373 - May cause damage to organs through prolonged or repeated exposure

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapor | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitization | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision Date

31-May-2021

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet