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

1.1 Product identifier
   Trade name : Sika® Unitherm® Platinum-120 Part B

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Product use : Fire protection system

1.3 Details of the supplier of the safety data sheet
   Company name of supplier : Sika Deutschland GmbH
                            Kornwestheimer Str. 103-107
                            D-70439 Stuttgart
   Telephone : +49 711 8009 0
   E-mail address of person responsible for the SDS : EHS@de.sika.com

1.4 Emergency telephone number
   Emergency CONTACT (24-Hour-Number):
   GBK GmbH Global Regulatory Compliance +49(0)6132-84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Type of product : Mixture

   Classification (REGULATION (EC) No 1272/2008)
   Acute toxicity, Category 4  H302: Harmful if swallowed.
   Skin corrosion, Category 1  H314: Causes severe skin burns and eye damage.
   Serious eye damage, Category 1  H318: Causes serious eye damage.
   Skin sensitisation, Category 1  H317: May cause an allergic skin reaction.
   Long-term (chronic) aquatic hazard, Category 3  H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   Hazard pictograms : 
   Signal word : Danger
Hazard statements :  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements :  
Prevention:  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  

Response:  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:  
- 219-941-5 1,3-Cyclohexanedimethanamine  
- 202-013-9 2,4,6-tris(dimethylaminomethyl)phenol

2.3 Other hazards  
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration [%]</th>
</tr>
</thead>
</table>
| 1,3-Cyclohexanedimethanamine  
2579-20-6  
219-941-5  
01-2119543741-41-XXXX  
219-941-5  
01-2119543741-41-XXXX  | Acute Tox.4; H302  
Acute Tox.4; H312  
Skin Corr.1A; H314  
Eye Dam.1; H318  
Aquatic Chronic3; H412 | >= 40 - < 60 |
| Polyoxypropylenediamine  
9046-10-0  
618-561-0  | Skin Corr.1C; H314  
Eye Dam.1; H318  
Aquatic Chronic3; | >= 20 - < 25 |
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006
Sika® Unitherm® Platinum-120 Part B

Revision Date 21.08.2018 Version 5.0 Print Date 21.08.2018

<table>
<thead>
<tr>
<th>01-2119557899-12-XXXX</th>
<th>H412</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,5-Pentanediame, 2-methyl-, reaction products with 2-ethyl-1,4-butanediamine and glycidyl tolyl ether 90480-76-5 291-813-1</td>
<td>Acute Tox.4; H302 Acute Tox.4; H332 Acute Tox.4; H312 Skin Corr.1A; H314 Eye Dam.1; H318 STOT SE3; H335 &gt;= 10 - &lt; 20</td>
</tr>
</tbody>
</table>


For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air. Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing.

If swallowed : Do not induce vomiting without medical advice. Rinse mouth with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Gastrointestinal discomfort Allergic reactions Dermatitis See Section 11 for more detailed information on health effects
Risks: Health injuries may be delayed. Corrosive effects. Sensitising effects. Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed
Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media: In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction.

5.2 Special hazards arising from the substance or mixture
Hazardous combustion products: No hazardous combustion products are known.

5.3 Advice for firefighters
Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.
Further information: Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions: Use personal protective equipment. Deny access to unprotected persons.

6.2 Environmental precautions
Environmental precautions: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up
Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: Do not breathe vapours or spray mist. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with local regulations.

Storage class (TRGS 510): 8A, Combustible, corrosive hazardous materials

Other data: No decomposition if stored and applied as directed.

7.3 Specific end use(s)
Specific use(s): Consult most current local Product Data Sheet prior to any use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure controls
**Personal protective equipment**

**Eye protection**
- Safety glasses with side-shields conforming to EN166
- Eye wash bottle with pure water
- Wear eye/face protection.

**Hand protection**
- Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
  - Suitable for short time use or protection against splashes: Butyl rubber/nitrile rubber gloves (0.4 mm), Contaminated gloves should be removed.
  - Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.

**Skin and body protection**
- Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.

**Respiratory protection**
- Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
  - organic vapor (Type A) and particulate filter
  - A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm
  - P1: Inert material; P2, P3: hazardous substances
- Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

**Environmental exposure controls**

**General advice**
- Do not flush into surface water or sanitary sewer system.
- If the product contaminates rivers and lakes or drains inform respective authorities.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Appearance**
- liquid

**Colour**
- yellow
Odour : amine-like
Odour Threshold : No data available
Flash point : ca. 113 °C
Autoignition temperature : No data available
Decomposition temperature : No data available
Lower explosion limit (Vol-%) : No data available
Upper explosion limit (Vol-%) : No data available
Flammability : No data available
Explosive properties : No data available
Oxidizing properties : No data available
pH : ca. 12.5 at 20 °C
Melting point/range / Freezing point : No data available
Boiling point/boiling range : No data available
Vapour pressure : 0.34 hPa
Density : ca. 0.98 g/cm³ at 20 °C
Water solubility : No data available
Partition coefficient: n-octanol/water : No data available
Solubility in other solvents : insoluble
Viscosity, dynamic : ca. 25 mPa.s at 20 °C
Viscosity, kinematic : < 20.5 mm²/s at 40 °C
Relative vapour density : No data available
Evaporation rate : No data available

9.2 Other information
No data available
SECTION 10: Stability and reactivity

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
The product is chemically stable.

10.3 Possibility of hazardous reactions
Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid
Conditions to avoid : No data available

10.5 Incompatible materials
Materials to avoid : No data available

10.6 Hazardous decomposition products
No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Harmful if swallowed.

Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Acute oral toxicity</th>
<th>Acute dermal toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-Cyclohexanedimethanamine</td>
<td>LD50 Oral (Rat): 700 mg/kg</td>
<td>LD50 Dermal (Rat): 1.700 mg/kg</td>
</tr>
<tr>
<td>2,4,6-tris(dimethylaminomethyl)phenol</td>
<td>LD50 Oral (Rat): 2.169 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Causes severe burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitisation
Skin sensitisation: May cause an allergic skin reaction.
Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.
Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

Components:
Polyoxymethyleneamine:
Toxicity to algae : EC50: 15 mg/l, 72 h, Pseudokirchneriella subcapitata (algae)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): EC50: 80 mg/l, 48 h, Daphnia magna (Water flea)
2,4,6-tris(dimethylaminomethyl)phenol:
Toxicity to algae : EC50: > 10 - 100 mg/l, 72 h, Scenedesmus capricornutum (fresh water algae)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
Product: Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
Product: Additional ecological infor : An environmental hazard cannot be excluded in the event of
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: In accordance with the EWC Waste Regulation the classification of waste is to be assigned to the jurisdiction of the origin of waste. Therefore, it is not possible to assign a particular waste identification number. Completely emptied packagings may be given for recycling. Empty packaging may still contain hazardous residues. Empty packaging should be removed by a licensed waste contractor. Sika has agreed disposal contracts for all packaging which is brought into circulation in Germany. For further details see www.sika.de

SECTION 14: Transport information

ADR
14.1 UN number: 2735
14.2 UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (1,3-Cyclohexanediethanamine)
14.3 Transport hazard class(es): 8
14.4 Packing group: II
14.5 Environmental hazards: no

IATA
14.1 UN number: 2735
14.2 UN proper shipping name: Amines, liquid, corrosive, n.o.s. (1,3-Cyclohexanediethanamine)
14.3 Transport hazard class(es): 8
14.4 Packing group: II
14.5 Environmental hazards: no

IMDG
14.1 UN number: 2735
14.2 UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (1,3-Cyclohexanediethanamine)
14.3 Class: 8
14.4 Packing group: II
Labels: 8
EmS Number 1: F-A
EmS Number 2: S-B

14.5 Marine pollutant: no

14.6 Special precautions for user
No data available

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

Prohibition/Restriction

International Chemical Weapons Convention (CWC): Not applicable
Schedules of Toxic Chemicals and Precursors: Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): None of the components are listed (=> 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV): Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Conditions of restriction for the following entries should be considered:

REACH Information: All substances contained in our Products are
- registered by our upstream suppliers, and/or
- registered by us, and/or
- excluded from the regulation, and/or
- exempted from the registration.

Not applicable

Water contaminating class (Germany): WGK 2 obviously hazardous to water AwSV

VOC-CH (VOCV): no VOC duties

VOC-EU (solvent): 0.15 %

15.2 Chemical safety assessment
No Chemical Safety Assessment has been carried out for this mixture by the supplier.
SECTION 16: Other information

Full text of H-Statements

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. Acute toxicity
Aquatic Chronic Long-term (chronic) aquatic hazard
Eye Dam. Serious eye damage
Skin Corr. Skin corrosion
Skin Sens. Skin sensitisation
STOT SE Specific target organ toxicity - single exposure
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS Chemical Abstracts Service
DNEL Derived no-effect level
EC50 Half maximal effective concentration
GHS Globally Harmonized System
IATA International Air Transport Association
IMDG International Maritime Code for Dangerous Goods
LD50 Median lethal dose (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50 Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL Occupational Exposure Limit
PBT Persistent, bioaccumulative and toxic
PNEC Predicted no effect concentration
SVHC Substances of Very High Concern
vPvB Very persistent and very bioaccumulative

Classification of the mixture: Classification procedure:

| Acute Tox. 4 | H302 | Calculation method |
| Skin Corr. 1 | H314 | Based on product data or assessment |
| Eye Dam. 1   | H318 | Based on product data or assessment |
| Skin Sens. 1 | H317 | Calculation method |
| Aquatic Chronic 3 | H412 | Calculation method |
The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version!