

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830



Article No.: 651-236-1000 HPC ANTI SCRATCH TOPCOAT GLOSS: 10%
Print date: 08.10.2020 Revision date: 27.07.2020 EN
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. **product identifiers**

Article No. (manufacturer/supplier) 651-236-1000
Identification of the substance or mixture HPC ANTI SCRATCH TOPCOAT GLOSS: 10%

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

1.3. **Details of the supplier of the safety data sheet**

Supplier (manufacturer/importer/downstream user/distributor):

Teknos (M) Sdn. Bhd.
PLO 577, Jalan Keluli 8 Telephone: +60 7 251 5115
Kawasan Perindustrian Pasir Gudang Telefax: +60 7 251 3115
81700 Pasir Gudang, Johor, Malaysia

Dept. responsible for information:

Laboratory
E-mail: prod-safe@teknos.com

1.4. **Emergency telephone number**

Emergency telephone: +60 7 251 5115
Only available during office hours.

SECTION 2: Hazards identification

2.1. **Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. **Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Danger

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P264 Wash hands thoroughly after handling.
P280 Wear protective gloves and eye/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container to industrial incineration plant.

contains:

N-(3-(trimethoxysilyl)propyl)ethylenediamine
Polyamine amide salt
2,2-bis(acryloyloxymethyl)butyl acrylate
Photoinitiator
DPGDA

Supplemental Hazard information (EU)

not applicable

2.3. **Other hazards**

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SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description UV liquid

Hazardous ingredients

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No. INDEX No.	REACH No. Chemical name classification: // Remark	Wt %
204-337-6 119-61-9	BENZOPHENON STOT RE 2 H373 / Aquatic Chronic 2 H411	1 - 2.5
	N-(3-(trimethoxysilyl)propyl)ethylenediamine Acute Tox. 4 H332 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Chronic 2 H411	0.5 - 1
231-272-0 7473-98-5	2-hydroxy-2-methyl-1-phenyl propanone Acute Tox. 4 H302	2.5 - 5
213-426-9 947-19-3	Photoinitiator Acute Tox. 5 H303 / Aquatic Acute 3 H402	1 - 2.5
	Polyamine amide salt Flam. Liq. 3 H226 / Skin Sens. 1 H317 / STOT SE 3 H336 / Aquatic Chronic 3 H412	< 0.5
239-701-3 15625-89-5 607-111-00-9	2,2-bis(acryloyloxymethyl)butyl acrylate Eye Irrit. 2 H319 / Skin Irrit. 2 H315 / Skin Sens. 1 H317	12.5 - 20
	Photoinitiator Skin Irrit. 2 H315 / Eye Irrit. 2A H319 / Skin Sens. 1B H317 / Aquatic Acute 3 H402 / Aquatic Chronic 3 H412	0.5 - 1
260-754-3 57472-68-1	DPGDA Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Skin Sens. 1 H317	25 - 50

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners. Conditions to avoid: UV-radiation/sunlight
Causes mild skin irritation.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm.

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Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours. See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

Persons with a history of skin sensitisation problems should not be employed in any process in which this product is used.

7.1. Precautions for safe handling

Advices on safe handling

Use only in well-ventilated areas. Keep away from heat sources, sparks and open flames. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 35 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Keep only in the original container.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

not applicable

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used:

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state:	Liquid
Colour:	refer to label
Odour:	characteristic
Odour threshold:	not determined
pH at 25 °C::	not determined
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	> 70 °C Method: DIN 53213
Evaporation rate:	not determined
Flammability (solid, gas):	
Burning time (s):	not determined
Upper/lower flammability or explosive limits:	
Lower explosion limit:	not determined
Upper explosion limit:	not determined
Vapour pressure at 25 °C::	not determined
Vapour density:	not determined
Relative density:	
Density at 25 °C::	1.21 g/cm³
Solubility(ies):	
Water solubility (g/L) at 20 °C::	insoluble

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Partition coefficient: n-octanol/water: see section 12
Auto-ignition temperature: not determined
Decomposition temperature: not determined
Viscosity at 25 °C:: > 55 s 6 mm
Method: DIN 53211
Explosive properties: not applicable
Oxidising properties: not applicable

9.2. **Other information**

Solid content (%): 99.00 Wt %
solvent content:
Organic solvents: 1.00 Wt %
Water: 0.00 Wt %
Solvent separation test (%): < 3 Wt % (ADR/RID)

SECTION 10: Stability and reactivity

10.1. **Reactivity**

10.2. **Chemical stability**

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**

This preparation contains material instable under the following conditions: Heat, strong ultraviolet radiation. An exotherm polymerization of the product may thereby be caused. Avoid unintended contact with it. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**

10.6. **Hazardous decomposition products**

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
No data on preparation itself available.

11.1. **Information on toxicological effects**

Acute toxicity

N-(3-(trimethoxysilyl)propyl)ethylenediamine
inhalative (vapours), LC50, Rat (4 h)

DPGDA
oral, LD50, Rat

skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye damage.

N-(3-(trimethoxysilyl)propyl)ethylenediamine
eyes

Photoinitiator
Skin (4 h)
eyes

Respiratory or skin sensitisation

May cause an allergic skin reaction.

N-(3-(trimethoxysilyl)propyl)ethylenediamine
Skin:

Photoinitiator

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Skin:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Toxicological data are not available.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

The fractions of acrylic resin in the preparation have an irritant effect. Prolonged or repeated contact with the preparation can lead to irritations of mucous membranes and of skin such as redness, formation of blebs, dermatitis, etc.. Cases of allergic skin reactions have been observed. Liquid splashes can lead to irritations of the eyes. Inhaling of droplets in the air or aerosols may lead to irritations of the respiratory tract. Ingestion may cause nausea, weakness and affect the central nervous system.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

overall evaluation

Classification according to Regulation (EC) No 1272/2008 [CLP]

There is no information available on the preparation itself.

Do not allow to enter into surface water or drains.

12.1. Toxicity

Photoinitiator

Fish toxicity, LC50 (96 h)

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Fish toxicity, LC50 (96 h)

Photoinitiator

Fish toxicity, LC50 (96 h)

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

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No dangerous good in sense of this transport regulation.

- 14.1. **UN number** not applicable
- 14.2. **UN proper shipping name**
- 14.3. **Transport hazard class(es)** not applicable
- 14.4. **Packing group** not applicable
- 14.5. **Environmental hazards**
Land transport (ADR/RID) not applicable
Marine pollutant not applicable
- 14.6. **Special precautions for user**
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8
- Further information**
- Land transport (ADR/RID)**
tunnel restriction code -
- Sea transport (IMDG)**
EmS-No. not applicable
- Air transport (ICAO-TI / IATA-DGR)**
- 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**
- EU legislation**
- Directive 2010/75/EU on industrial emissions**
VOC-value (in g/L): 44.168
- National regulations**
- Restrictions of occupation**
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
- 15.2. **Chemical Safety Assessment**
Chemical safety assessments for substances in this preparation were not carried out.

SECTION 16: Other information

Full text of classification in section 3:

STOT RE 2 / H373	Specific target organ toxicity (repeated exposure)	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Acute Tox. 5 / H303	Acute toxicity (oral)	May be harmful if swallowed.
Aquatic Acute 3 / H402	Hazardous to the aquatic environment	Harmful to aquatic organisms.
Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.

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	exposure)	
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2A / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1B / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.