

Safety Data Sheet

High Clear V1 Resin

Safety data sheet according to Regulation (EU) 2020/878 as amended from time to time

Date / First version: 24.04.2024

Version: 1.0

Date previous version: 24.04.2024

Version: 1.0

Date / version: 09.09.2024

Version: 1.1

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

1.1. Product identifier

Product Form	Mixture
Product Name	Raise3D High Clear V1 Resin
UFI Nummer	4HMG-G99V-RTKR-0VYA

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

1.2.1. Relevant identified uses

Use of the substance/mixture	Raise3D DF series 3D printers
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1.2.2. Uses advised against

Restrictions on use	No information available
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1.3. Details of the supplier of the safety data sheet

Supplier	Importer
Raise 3D Technologies, Inc. 43 Tesla, Irvine, CA 92618 92618	Raise3D B.V. Stationsplein 45 Unit A4.004 3013AK Rotterdam, the Netherlands 3013AK
T +1 888 963 9028 sds@raise3d.com	T +31 10 808 0682 enquiry@raise3d.eu

1.4. Emergency number

Emergency number	+49 761 19240
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SECTION 2. Hazards Identification

2.1. Hazardous substances and mixtures

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

Skin corrosion/irritation	Category 2
Skin sensitization	Category 1
Hazardous to the aquatic environment – Chronic Hazard	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity – Single exposure	Category 3, Respiratory tract irritation
Reproductive toxicity (fertility)	Category 2

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

Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

Warning

Hazard statements (CLP)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye damage.
H335	May cause respiratory irritation.

H361 Suspected of damaging fertility or the unborn child.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

P203 Obtain, read and follow all safety instructions before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P263 Avoid contact during pregnancy and while nursing.

P264 Wash hand thoroughly after handling.

P265 Do not touch eyes.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection or face protection.

P264 + P265 Wash hands thoroughly after handling. Do not touch eyes.

P318 If exposed or concerned, get medical advice.

P391 Collect spillage.

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

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333 + P317 If skin irritation or rash occurs: Get medical help.

P362 + P364 Take off contaminated clothing and wash if before reuse.

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

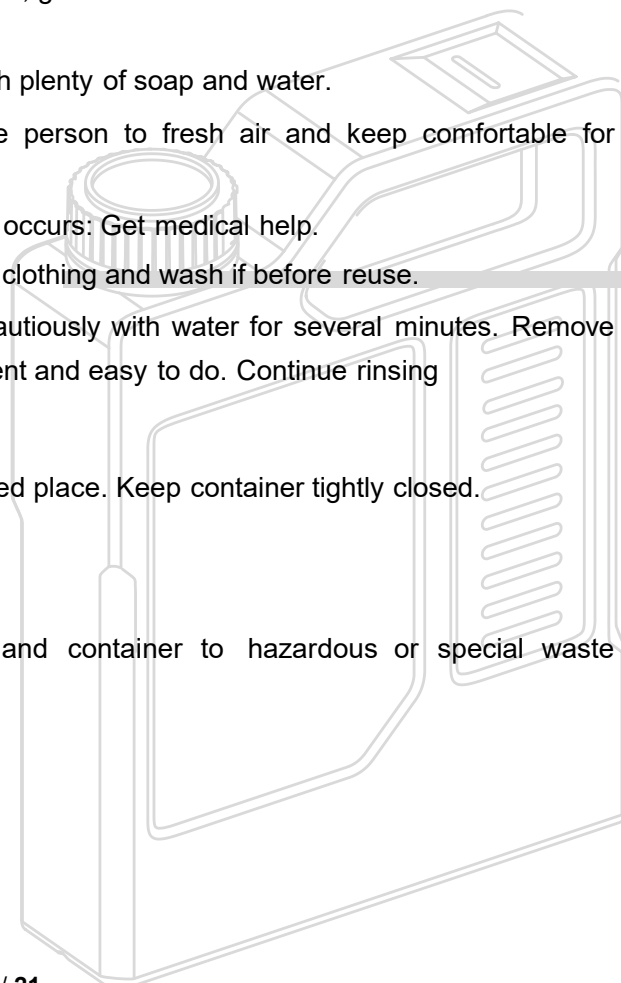
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container to hazardous or special waste collection point.

EUH-statements None.

2.3. Other hazards



Other hazards which do not result in classification : No information available.

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Epoxy resin	CAS-No.: 55818-57-0 EC-No.: 500-130-2	$\geq 43 - < 47$	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Isodecyl acrylate	CAS-No.: 1330-61-6 EC-No.: 215-542-5	$\geq 26 - < 30$	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
(5-Ethyl-1,3-dioxan-5-yl)methylacrylat	CAS-No.: 66492-51-1 EC-No.: 266-380-7	$\geq 18 - < 22$	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	CAS-No.: 75980-60-8 EC-No.: 178-355-8	5	Skin Sens. 1B, H317 Repr. 2 (fertility), H361 Repr. 2 (unborn child), H361 Aquatic Chronic 2, H411

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.
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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

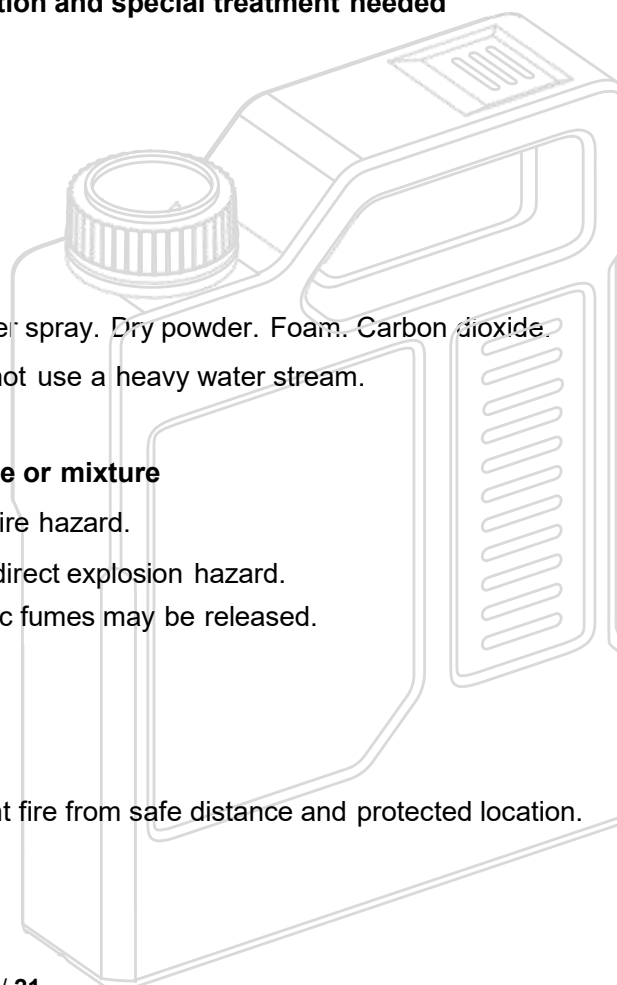
Suitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	No fire hazard.
Explosion hazard	No direct explosion hazard.
Hazardous decomposition products in case of fire	Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions	Fight fire from safe distance and protected location.
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Protection during firefighting	<p>Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all unnecessary exposure. Avoid inhalation of vapours. Wear personal protective equipment.</p> <p>Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.</p>
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	Wear recommended personal protective equipment.
Emergency procedures	Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	Evacuate unnecessary personnel. Stop leak if safe to do so.

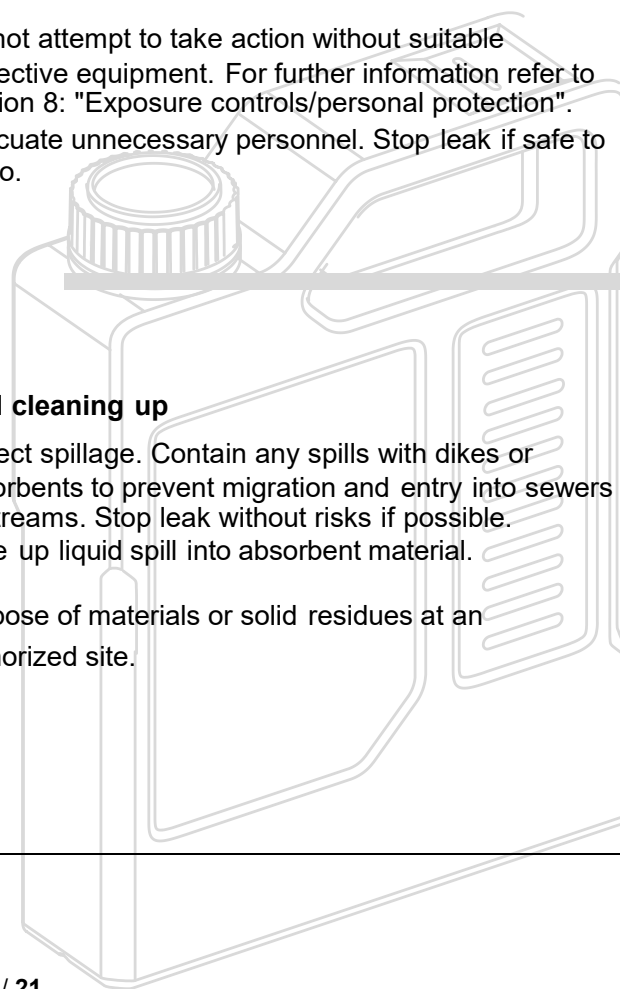
6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	Take up liquid spill into absorbent material.
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

Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures

Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Keep in a cool, well-ventilated place away from heat.

Storage conditions

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Avoid high temperatures.

Incompatible materials

No information available.

Packaging materials

Store always product in container of same material as original container.

7.3. Specific end use(s)

SDS section 1.2.1 - Additional text

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

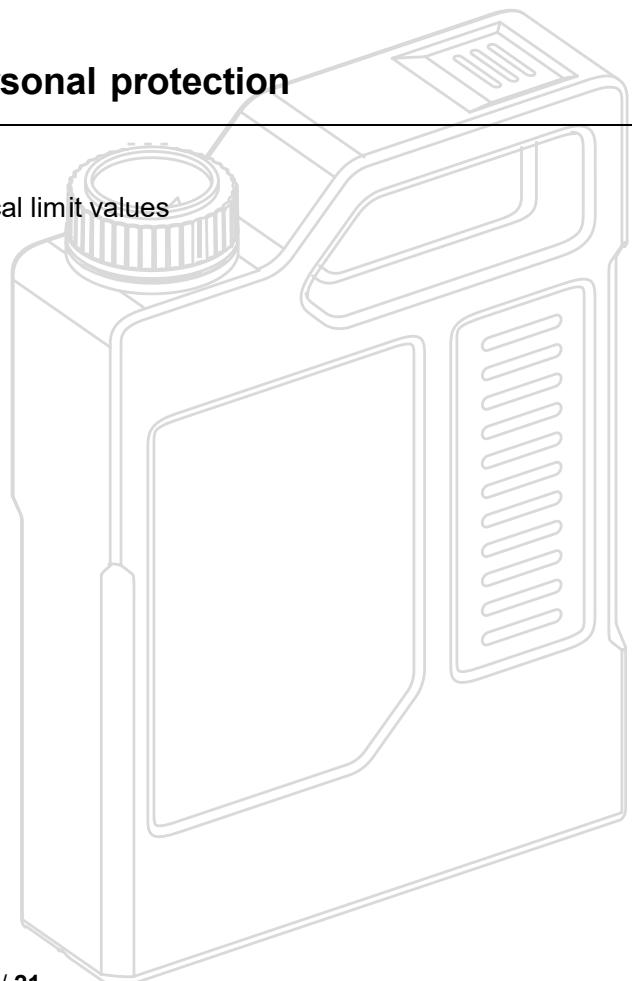
8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:



Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Clear
Odour	Slight odour
Odour threshold	Not available
Melting point	-60 °C
Freezing point	Not available
Boiling point	140 °C
Flammability	Not flammable
Lower explosion limit	Not available
Upper explosion limit	Not available
Flash point	> 250 °C
Auto-ignition temperature	Not available



Decomposition temperature	> 250 °C
pH	6,8 – 7,2
Viscosity, kinematic	Not available
Viscosity, dynamic	250 – 350 mPa·s @ 25 °C
Solubility	Slightly soluble in water. Soluble in benzene, alcohol, ethers. Soluble in other organic solvents.
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	< 0,01 mm Hg
Vapour pressure at 50°C	Not available
Density	1,05 g/cm ³ @ 25 °C
Relative density	Not available
Relative vapour density at 20°C	Not available
Particle characteristics	Not applicable
Self-igniting	> 450 °C
Vapour density	> 1 g/m ³

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

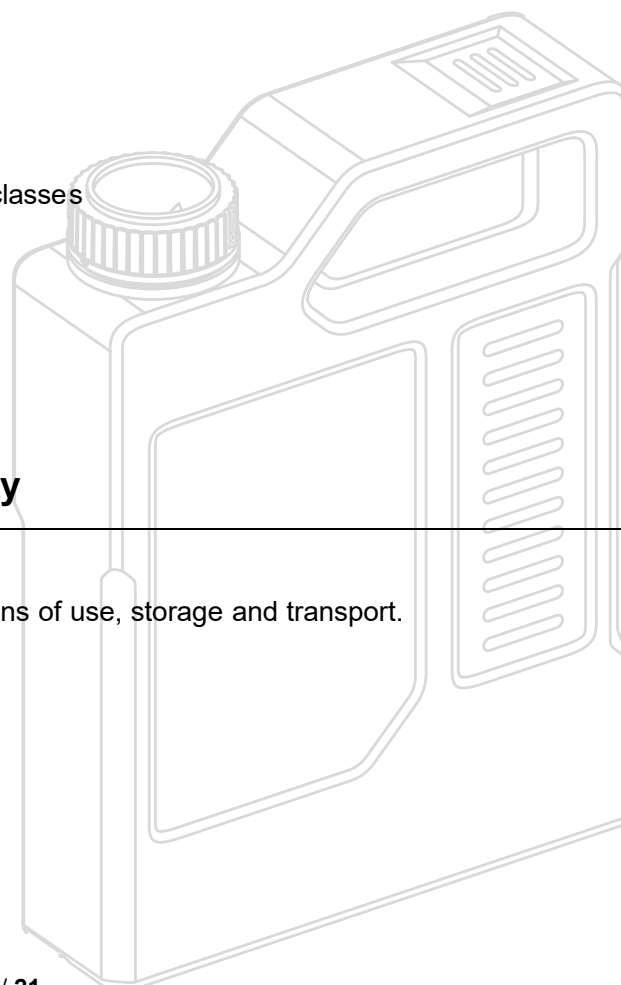
10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions



No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

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

ABSCHNITT 11: Toxikologische Angaben

11.1. Acute toxicity

Based on available data, the classification criteria are not met, yet still harm in ingesting small amounts.

11.2. Skin irritation:

Skin contact causes irritation.

11.3. Eye irritation:

Eye contact causes serious irritation , including severe pain, feeling of burning, shedding tears, or swelling.

11.4. Respiratory/Skin sensitization:

Sensitization after skin contact possible.

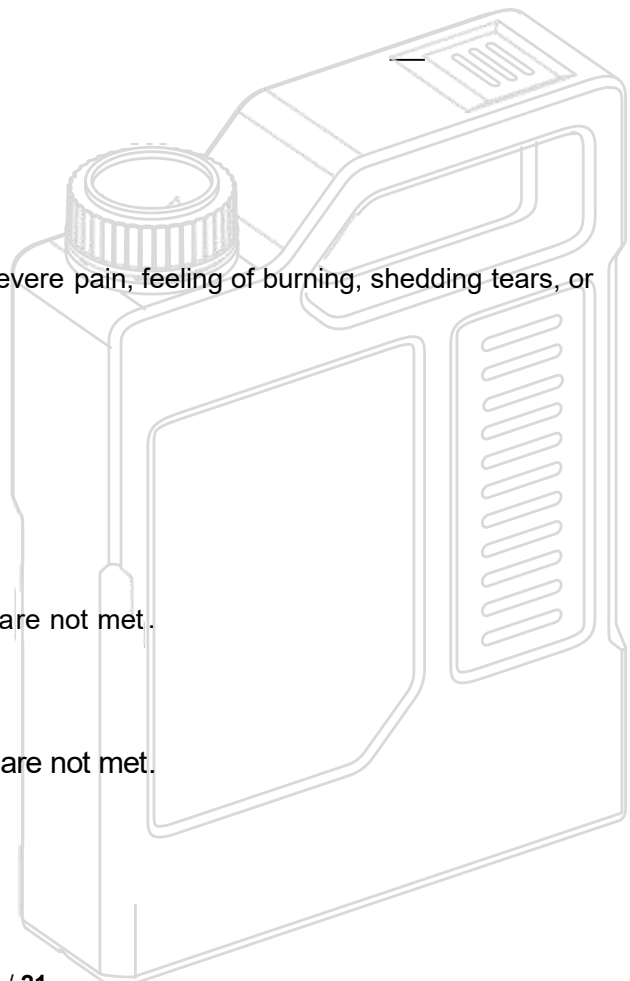
11.5. Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

11.6. Carcinogenicity:

Based on available data, the classification criteria are not met.

11.7. Reproductive toxicity:



Information on: diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

Assessment of reproduction toxicity:

The results of animal studies suggest a fertility impairing effect.

11.8. Specific target organ toxicity (single exposure):

Causes temporary irritation of the respiratory tract.

Remarks: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

11.9. Repeated dose toxicity and Specific target organ toxicity (repeated exposure):

Based on available data, the classification criteria are not met.

11.10. Aspiration hazard:

With low volatility in the normal service condition , the product are not expected to cause obvious symptoms. But it may generate gases/vapours after heating up , which results in respiratory irritation, including cough , secreting mucus , polypnea.

11.11. Information on other hazards

11.11.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

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11.11.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.