

Product Name: e3D.S01 - white

REF: 43028, 430285

Date of print: 14.04.2021 Date of last alteration: 14.04.2021



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

1.1. Product identifier

e3D.S01 - white

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

Ligth curing one component material for the fabrication of earmoulds.

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor: egger Otoplastik+Labortechnik GmbH

Street/POB-No.: Aybühlweg 59

Postal code/city/country: 87439 Kempten/Germany

Telephone: +49 831 58113-60 Telefax: +49 831 58113-14 Internet: www.eager.online E-mail: sales@egger.online

1.4. Emergency telephone number: +49 89 19240

Emergency number: Munich, Germany, toxicological dep. of the II. Med. Hospital)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Causes serious eve irritation.

May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

aliphatic urethane acrylate

tripropyleneglycol diacrylate

tetrahydrofurfuryl methacrylate THFMA purified grade

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate

Signal word **Pictograms**

Warning





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Hazard statements

- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

P501 Dispose of contents/ container in accordance with local and national regulations.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of acrylic/methacrylic resins with auxilliary matters.

Hazardous components

| CAS No | Chemical name | | | | | |
|------------|---|-----------------------------|------------------|-----------|--|--|
| | EC No | Index No | Reach No | | | |
| | GHS Classification | | | | | |
| | acrylated resin | | | 10 – 40 % | | |
| | | | | ļ | | |
| | Eye Irrit. 2; H319 | | | | | |
| | aliphatic urethane acry | aliphatic urethane acrylate | | | | |
| | 906-949-5 | | 01-2120266262-60 | | | |
| | Skin Sens. 1B, Aquatic C | Chronic 2; H317 H411 | | | | |
| 42978-66-5 | tripropyleneglycol diacrylate | | | | | |
| | 256-032-2 | | 01-2119484613-34 | | | |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 2; H315 H319 H317 H335 H411 | | | | | |
| 2455-24-5 | tetrahydrofurfuryl methacrylate THFMA purified grade | | | | | |
| | | | | | | |
| | Repr. 2, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H361 H315 H319 H317 H335 | | | | | |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | | | |
| | 278-355-8 | 015-203-00-X | | | | |
| | Repr. 2, Skin Sens. 1B, Aquatic Chronic 2; H361f H317 H411 | | | | | |
| 72869-86-4 | 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate | | | | | |
| | 276-957-5 | | 01-2120751202-68 | | | |
| | Skin Sens. 1B, Aquatic Chronic 2; H317 H411 | | | | | |



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SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

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

No information available.

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

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e. g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.



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6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

Keep away from spontaneous flammable or combustible substances.

Further information on storage conditions

Keep only in the original container in a cool, dry and well-ventilated place, away from foodstuffs. Keep away from all kind of ligth. An inert gas blanket should not be applied, because the stability of the product depends on the presence of oxygen (air).

7.3. Specific end use(s)

Ligth curing material for the generative manufacturing of earmoulds. For use by trained specialist staff.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Suitable are gloves of the following material: Butyl caoutchouc (butyl rubber).

Skin protection

Wear working clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid Colour: white

Odour: faintly like esters

| | | Test method |
|--|----------------|-------------|
| pH-Value: | not determined | |
| Changes in the physical state | | |
| Melting point: | not determined | |
| Initial boiling point and boiling range: | not determined | |
| Flash point: | > 100 °C | DIN 51755 |
| Flammability | | |
| Solid: | not applicable | |
| Gas: | not applicable | |
| Lower explosion limits: | not determined | |
| Upper explosion limits: | not determined | |
| Auto-ignition temperature | | |
| Solid: | not applicable | |
| Gas: | not applicable | |
| Decomposition temperature: | n>=190 °C | |
| Oxidizing properties | Not oxidizing. | |
| Vapour pressure (at 20 °C): | <1 hPa | |
| Density (at 20 °C): | 1,09 g/cm³ | DIN 51757 |
| Water solubility: | insoluble | |
| Solubility in other solvents | not determined | |
| Partition coefficient: | not determined | |
| Vapour density: | not determined | |
| Evaporation rate: | not determined | |

9.2. Other information

Solid content: Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Reacts with: strong oxidising agents, strong alcaline or acidic materials.

10.4. Conditions to avoid

Ultra-violet ligth and dayligth initiate polymerisation of the product. Therefore keep only in tigthly closed containers away from any sources of ligth at 15 $^{\circ}$ C – 28 $^{\circ}$ C / 59 $^{\circ}$ F – 82 $^{\circ}$ F.



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10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire, acrid acrylic fumes may occur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met. For the product itself no toxicological data are available. In products with a comparable composition, a LD50 (orally, species rat) of > 5000 mg/kg has been found.

| CAS No | Chemical name | | | | | | |
|------------|--|---------|-------------|---------|----------|--------|--|
| | Exposure routes | Dose | | Species | Source | Method | |
| | acrylated resin | | | | • | | |
| | oral | LD50 | >2000 mg/kg | Rat | | | |
| | dermal | LD50 | >2000 mg/kg | Rabbit | | | |
| | aliphatic urethane acrylate | | | | | | |
| | oral | LD50 | >5000 mg/kg | Rat | OECD 401 | | |
| 42978-66-5 | tripropyleneglycol diacrylate | | | | | | |
| | oral | LD50 | 6200 mg/kg | Rat | | | |
| | dermal | LD50 | >2000 mg/kg | Rabbit | | | |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphin | e oxide | | • | • | | |
| | oral | LD50 | >5000 mg/kg | Rat | | | |
| | dermal | LD50 | >5000 mg/kg | Rat | | | |
| 72869-86-4 | 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate | | | | | | |
| | oral | LD50 | >5000 mg/kg | Rat | OECD 401 | | |
| | dermal | LD50 | >2000 mg/kg | Rat | OECD 402 | | |

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (aliphatic urethane acrylate; tripropyleneglycol diacrylate; tetrahydrofurfuryl methacrylate THFMA purified grade; diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide; 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate).

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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



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Aspiration hazard

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

Additional information on tests

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Cas No | Chemical name | | | | | | |
|------------|--|------------------|-----------|-----------------------------------|----------|--------|--|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method | |
| | aliphatic urethane acrylate | | | | | | |
| | Acute algae toxicity | ErC50 >0,68 mg/l | 72 h | (algae) | OECD 201 | | |
| | Acute crustacea toxicity | EC50 >1,2 mg/l | 48 h | (daphnia) | OECD 202 | | |
| 42978-66-5 | tripropyleneglycol diac | rylate | | | | | |
| | Acute fish toxicity | LC50 4,5-10 mg/l | 96 h | Leuciscus idus (golden orfe) | | | |
| | Acute algae toxicity | ErC50 >28 mg/l | 72 h | Desmodesmus subspicatus. | | | |
| | Acute crustacea toxicity | EC50 88,7 mg/l | 48 h | Daphnia magna (Big water flea) | | | |
| 2455-24-5 | tetrahydrofurfuryl methacrylate THFMA purified grade | | | | | | |
| | Acute fish toxicity | LC50 34,7 mg/l | 96 h | | GESTIS | | |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | | | | |
| | Acute algae toxicity | ErC50 >2,01 mg/l | 72 h | Scenedesmus subspicatus | | | |
| | Acute crustacea toxicity | EC50 3,53 mg/l | 48 h | Daphnia magna (Big water flea) | | | |
| | Acute bacteria toxicity | (>1000 mg/l) | 3 h | Activated sludge | | | |
| 72869-86-4 | 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate | | | | | | |
| | Acute crustacea toxicity | EC50 >1,2 mg/l | 48 h | Daphnia magna (Big water flea) | OECD 202 | | |

12.2. Persistence and degradability

The product has not been tested.

| Cas No | Chemical name | | | | |
|------------|---|------------|----|--------|--|
| | Method | Value | d | Source | |
| | Evaluation | Evaluation | | | |
| | aliphatic urethane acrylate | | | | |
| | OECD 301B | 22 % | 28 | | |
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | , | |
| | | 0-10% | 28 | | |
| | Not readily biodegradable (according to OECD criteria). | | | | |



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12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|------------|---|---------|
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 3.1 |

BCF

| CAS No | Chemical name | BCF | Species | Source |
|------------|---|-------|-------------------------------|--------|
| 75980-60-8 | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 47-55 | Cyprinus carpio (Common Carp) | |

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

Not identivied as PBT/vPvB substances.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

- **14.1. UN number:** No dangerous good in sense of this transport regulation.
- **14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.
- 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
- **14.4. Packing group:** No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

- **14.1. UN number:** No dangerous good in sense of this transport regulation.
- **14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.
- 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
- **14.4. Packing group:** No dangerous good in sense of this transport regulation.



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Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to

the ,juvenile work protection guideline (94/33/EC).

Water contaminating class (D): 3 - strongly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50 %

LD50: Lethal dose, 50 %

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification | Classification procedure | |
|-------------------------|--------------------------|--|
| Eye Irrit. 2; H319 | Calculation method | |
| Skin Sens. 1; H317 | Calculation method | |
| Aquatic Chronic 3; H412 | Calculation method | |



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Relevant H and EUH statements (number and full text)

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H361f Suspected of damaging fertility.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)