

Safety Data Sheet

according to Regulation (EC) No 1907/2006

3D-H11-CLEAR Premium Colorless

Revision date: 28.09.2022

Product code: 3D-H11-CLEAR

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

3D-H11-CLEAR Premium Colorless

Further trade names

3D-H11-CLEAR-1K | 3D-H11-CLEAR-5K

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

Inks, toners and related printing materials

1.3. Details of the supplier of the safety data sheet

| | | |
|-----------------|-----------------------------|--------------------------|
| Company name: | Octopus Fluids GmbH & Co.KG | |
| Street: | Hamburger Str. 14 | |
| Place: | D-01067 Dresden | |
| Telephone: | + 49 351 7968925 | Telefax: +49 351 8894982 |
| e-mail: | mail@octopus-fluids.de | |
| Contact person: | Lange | |
| e-mail: | mail@octopus-fluids.de | |
| Internet: | www.octopus-fluids.de | |

1.4. Emergency telephone number: + 49 351 7968925 (9 a.m. to 4 p.m.)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Repr. 1B; H360

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Hazard components for labelling**

2-pyrrolidinone

Signal word: Danger**Pictograms:****Hazard statements**

H360 May damage fertility or the unborn child.

Precautionary statements

| | |
|-----------|---|
| P501 | Dispose of contents/container to an appropriate recycling or disposal facility. |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P405 | Store locked up. |

Special labelling of certain mixtures

EUH208 Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-

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2H-isothiazol-3-one (3:1). May produce an allergic reaction.
Restricted to professional users.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|--|--------------|----------|-----------|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 616-45-5 | 2-pyrrolidinone | | | 1 - < 3 % |
| | Repr. 1B, Eye Irrit. 2; H360 H319 | | | |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | | | < 0.1 % |
| | 203-961-6 | 603-096-00-8 | | |
| | Eye Irrit. 2; H319 | | | |
| 52-51-7 | bronopol (INN); 2-bromo-2-nitropropane-1,3-diol | | | < 0.1 % |
| | 200-143-0 | 603-085-00-8 | | |
| | Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, Aquatic Acute 1; H312 H302 H315 H318 H335 H400 | | | |
| 55965-84-9 | reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | | | < 0.1 % |
| | - | 613-167-00-5 | | |
| | Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071 | | | |

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

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|------------|-----------|--|----------|
| | | Specific Conc. Limits, M-factors and ATE | |
| 112-34-5 | 203-961-6 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | < 0.1 % |
| | | dermal: LD50 = 4120 mg/kg; oral: LD50 = 5660 mg/kg | |
| 52-51-7 | 200-143-0 | bronopol (INN); 2-bromo-2-nitropropane-1,3-diol | < 0.1 % |
| | | dermal: ATE = 1100 mg/kg; oral: ATE = 500 mg/kg Aquatic Acute 1; H400: M=10 | |
| 55965-84-9 | - | reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | < 0.1 % |
| | | inhalation: LC50 = 94,2 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: LD50 = 141 mg/kg; oral: LD50 = 66 mg/kg Skin Corr. 1C; H314: >= 0,6 - 100 Skin Irrit. 2; H315: >= 0,06 - < 0,6 Eye Dam. 1; H318: >= 0,6 - 100 Eye Irrit. 2; H319: >= 0,06 - < 0,6 Skin Sens. 1A; H317: >= 0,0015 - 100 Aquatic Acute 1; H400: M=100 Aquatic Chronic 1; H410: M=100 | |

SECTION 4: First aid measures
4.1. Description of first aid measures
After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

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After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

In case of fire: Wear self-contained breathing apparatus.

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****General advice**

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**For cleaning up**

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

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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

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,

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drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Inks, toners and related printing materials

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

| CAS No | Name of agent | ppm | mg/m ³ | fib/cm ³ | Category | Origin |
|----------|---------------------------|-----|-------------------|---------------------|---------------|--------|
| 112-34-5 | 2-(2-Butoxyethoxy)ethanol | 10 | 67.5 | | TWA (8 h) | |
| | | 15 | 101.2 | | STEL (15 min) | |

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

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.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|---|------------|----------------|
| Physical state: | Liquid | |
| Colour: | colourless | |
| Melting point/freezing point: | | not determined |
| Boiling point or initial boiling point and boiling range: | | not determined |

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| | |
|--|----------------|
| Flammability: | not applicable |
| Lower explosion limits: | not applicable |
| Upper explosion limits: | not determined |
| Flash point: | not determined |
| Auto-ignition temperature: | not determined |
| Decomposition temperature: | not determined |
| pH-Value (at 20 °C): | 8,15 |
| Water solubility: | easily soluble |
| Solubility in other solvents | |
| not determined | |
| Partition coefficient n-octanol/water: | not determined |
| Vapour pressure: | not determined |
| Density: | not determined |
| Relative vapour density: | not determined |

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Viscosity / dynamic:

1,2 mPa·s

(at 25 °C)

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

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

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

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| CAS No | Chemical name | | | | |
|------------|---|---------------|-----------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | | | | |
| | oral | LD50 mg/kg | 5660 | Rat | |
| | dermal | LD50 mg/kg | 4120 | Rabbit | |
| 52-51-7 | bronopol (INN); 2-bromo-2-nitropropane-1,3-diol | | | | |
| | oral | ATE mg/kg | 500 | | |
| | dermal | ATE mg/kg | 1100 | | |
| 55965-84-9 | reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | | | | |
| | oral | LD50 | 66 mg/kg | | |
| | dermal | LD50 mg/kg | 141 | | |
| | inhalation vapour | LC50 | 94,2 mg/l | | |
| | inhalation dust/mist | ATE | 0,05 mg/l | | |

Irritation and corrosivity

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

Sensitising effects

Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

May damage fertility or the unborn child. (2-pyrrolidinone)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: 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.

Aspiration hazard

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

11.2. Information on other hazards
Other information

No information available.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information
12.1. Toxicity

The product is not: Ecotoxic.

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| CAS No | Chemical name | | | | | |
|----------|--|---------------|-----------|---------|-----------------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | | | | | |
| | Acute algae toxicity | ErC50 mg/l | > 100 | | Scenedesmus sp. | |
| | Acute crustacea toxicity | EC50 mg/l | > 100 | 48 h | Daphnia magna | |

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|----------|--|-------------|
| 112-34-5 | 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether | 0,56 (25°C) |

12.4. Mobility in soil

The product has not been tested.

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.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Disposal recommendations

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

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information
Land transport (ADR/RID)
14.1. UN number or ID 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.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 55, Entry 75

| | |
|---|--|
| 2004/42/EC (VOC): | 0,119 % |
| Information according to 2012/18/EU (SEVESO III): | Not subject to 2012/18/EU (SEVESO III) |

National regulatory information

| | |
|--------------------------------|---|
| Employment restrictions: | Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. |
| Water hazard class (D): | 1 - slightly 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**

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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

| Classification | Classification procedure |
|----------------|--------------------------|
| Repr. 1B; H360 | Calculation method |

Relevant H and EUH statements (number and full text)

| | |
|--------|---|
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H310 | Fatal in contact with skin. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H335 | May cause respiratory irritation. |
| H360 | May damage fertility or the unborn child. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| EUH071 | Corrosive to the respiratory tract. |
| EUH208 | Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction. |

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.)