

Hydraulan® 404

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#### 1. Identification

#### Product identifier used on the label

## Hydraulan® 404

#### Recommended use of the chemical and restriction on use

Recommended use\*: Chemical

\* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

Company:

BASF CORPORATION 100 Park Avenue Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### **Emergency telephone number**

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

Chemical family: Blend based on: polyglycol, glycol ether, inhibitors

#### 2. Hazards Identification

#### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

Eye Dam./Irrit. 1 Serious eye damage/eye irritation

Repr. 2 (unborn child) Reproductive toxicity

#### Label elements

Pictogram:

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Signal Word: Danger

Hazard Statement:

H318 Causes serious eye damage.

H361 Suspected of damaging the unborn child.

Precautionary Statements (Prevention):

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

protection.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage): P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

#### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

#### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### **Emergency overview**

WARNING:

Causes serious eye damage.

CONTAINS MATERIAL THAT MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS IN FEMALES BASED ON ANIMAL DATA.

May be harmful if swallowed in large quantities.

Ensure adequate ventilation.

Eye wash fountains and safety showers must be easily accessible.

Wear protective clothing.

Wear chemical resistant protective gloves.

Avoid contact with the skin, eyes and clothing.

#### 3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u> <u>Content (W/W)</u> <u>Chemical name</u>

>= 3.0 - < 5.0 % 2-(2-(2-butoxyethoxy)ethoxy)ethanol

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111-77-3 >= 1.0 - < 3.0 % 2-(2-methoxyethoxy)ethanol >= 1.0 - < 3.0 % 1,1'-iminodipropan-2-ol

#### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

| CAS Number | Content (W/W)    | Chemical name                       |
|------------|------------------|-------------------------------------|
| 143-22-6   | >= 3.0 - < 5.0 % | 2-(2-(2-butoxyethoxy)ethoxy)ethanol |
| 111-77-3   | >= 1.0 - < 3.0 % | 2-(2-methoxyethoxy)ethanol          |
| 110-97-4   | >= 1.0 - < 3.0 % | 1,1'-iminodipropan-2-ol             |

The product contains:

| CAS Number | Content (W/W)      | Chemical name                                       |
|------------|--------------------|-----------------------------------------------------|
| 71243-41-9 | >= 50.0 - < 75.0 % | Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-, |
|            |                    | ester with boric acid (H3BO3), methyl ether         |

#### 4. First-Aid Measures

#### **Description of first aid measures**

#### General advice:

Remove contaminated clothing.

#### If inhaled:

Remove the affected individual into fresh air and keep the person calm. Seek medical attention.

#### If on skin:

Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

#### If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If irritation develops, seek medical attention.

#### If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

#### Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

Hazards: No applicable information available.

#### Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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#### 5. Fire-Fighting Measures

#### **Extinguishing media**

Suitable extinguishing media: water spray, dry powder, foam

#### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

#### Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

#### **Further information:**

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

#### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Breathing protection required.

#### **Environmental precautions**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

#### Methods and material for containment and cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder).

Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

Place absorbed material in the same container as the spilled substance/product for disposal.

#### 7. Handling and Storage

#### Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Take precautionary measures against static discharges.

#### Conditions for safe storage, including any incompatibilities

No applicable information available.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

#### 8. Exposure Controls/Personal Protection

#### Components with occupational exposure limits

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Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.hydroxy-, ester with boric acid (H3BO3), methyl ether

ACGIH TLV TWA value 2 mg/m3 Inhalable fraction; STEL

value 6 mg/m3 Inhalable fraction;

#### Advice on system design:

No applicable information available.

#### Personal protective equipment

#### Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapour/aerosol release.

#### Hand protection:

Chemical resistant protective gloves

#### Eye protection:

Safety glasses with side-shields.

#### **Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing. No eating, drinking, smoking or tobacco use at the place of work.

#### 9. Physical and Chemical Properties

Form: liquid

Odour: product specific

Odour threshold: No applicable information available.

Colour: yellow
pH value: 7 - 8.5 (FMVSS 116, S 6.4)
solidification < -50 °C (DIN ISO 3016)
temperature:

Boiling point: 265 °C (ASTM D1120)

Sublimation point:

No applicable information available.

Flash point: 135.5 °C (DIN EN 22719; ISO 2719)

Flammability: not flammable

Lower explosion limit:

For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.

Upper explosion limit: For liquids not relevant for classification and labelling.

Autoignition: > 200 °C (DIN EN 14522)

Vapour pressure: 1 mbar (20 °C)
1 mbar (50 °C)

Density: approx. 1.06 (20 °C) g/cm3

Relative density:

Vapour density:

No applicable information available.

No applicable information available.

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Partitioning coefficient n- Study scientifically not justified.

octanol/water (log Pow):

Self-ignition not self-igniting

temperature:

Viscosity, dynamic: not determined

Viscosity, kinematic: No applicable information available.

Solubility in water: soluble

Solubility (quantitative): No applicable information available.

Solubility (qualitative): soluble

solvent(s): polar solvents,

Evaporation rate: Value can be approximated from Henry's

Law Constant or vapor pressure.

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

#### 10. Stability and Reactivity

#### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties: not fire-propagating

#### **Chemical stability**

The product is stable if stored and handled as prescribed/indicated.

#### Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

#### Conditions to avoid

Avoid open flames.

#### **Incompatible materials**

strong oxidizing agents, atmospheric moisture

#### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

2.5 K/min (DSC (DIN 51007))

#### 11. Toxicological information

#### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

#### **Acute Toxicity/Effects**

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#### Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from the properties of the individual components.

#### Oral

Type of value: LD50 Species: rat

Value: > 2,000 mg/kg

#### Inhalation

No applicable information available.

#### Dermal

No applicable information available.

#### Assessment other acute effects

No applicable information available.

#### Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the skin. Corrosive to eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

#### Sensitization

Assessment of sensitization: Based on available Data, the classification criteria are not met.

#### **Chronic Toxicity/Effects**

#### Repeated dose toxicity

Assessment of repeated dose toxicity: No applicable information available.

#### Genetic toxicity

Assessment of mutagenicity: No applicable information available.

#### Carcinogenicity

Assessment of carcinogenicity: The whole of the information assessable provides no indication of a carcinogenic effect.

#### Reproductive toxicity

Assessment of reproduction toxicity: No applicable information available.

#### **Teratogenicity**

Assessment of teratogenicity: Based on the ingredients, there is a suspicion of a teratogenic effect.

#### Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

#### 12. Ecological Information

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#### **Toxicity**

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish

LC50 (96 h) > 100 mg/l, Leuciscus idus

#### Microorganisms/Effect on activated sludge

#### Toxicity to microorganisms

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

#### Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

#### Additional information

Other ecotoxicological advice:

Do not release untreated into natural waters.

The product has not been tested. The statement has been derived from the properties of the individual components.

#### 13. Disposal considerations

#### Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

#### Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

#### 14. Transport Information

#### Land transport

USDOT

Not classified as a dangerous good under transport regulations

#### Sea transport

**IMDG** 

Not classified as a dangerous good under transport regulations

# Air transport

Not classified as a dangerous good under transport regulations

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#### 15. Regulatory Information

#### **Federal Regulations**

#### Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Acute; Chronic

**EPCRA 313:** 

CAS Number Chemical name

111-77-3 2-(2-methoxyethoxy)ethanol

112-35-6 2-(2-(2-methoxyethoxy)ethoxy)ethanol 143-22-6 2-(2-(2-butoxyethoxy)ethoxy)ethanol

#### **State regulations**

State RTK CAS Number Chemical name

NJ, PA 143-22-6 2-(2-butoxyethoxy)ethoxy)ethanol

MA, NJ, PA 111-77-3 2-(2-methoxyethoxy)ethanol MA, PA 110-97-4 1,1'-iminodipropan-2-ol

#### **CA Prop. 65:**

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

#### NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 2<sup>m</sup> Flammability: 1 Physical hazard:0

#### 16. Other Information

#### SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2014/09/05

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