# SAFETY DATA SHEET



Label No : #9893

TEKNODUR AQUA 3390-03 - All variants

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

1.1 Product identifier

Product name : FEKNODUR AQUA 3390-03 - All variants

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person : Prod-safe@teknos.com

responsible for this SDS

**National contact** 

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

1.4 Emergency telephone number

**National advisory body/Poison Centre** 

Telephone number : National Poisons Information Centre: 01 809 2566

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

**Product definition**: Mixture

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

Skin Sens. 1, H317

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Hazard pictograms



Signal word : Warning

**Hazard statements**: H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention**: P280 - Wear protective gloves.

P273 - Avoid release to the environment.

P261 - Avoid breathing vapour.

**Response**: P362 + P364 - Take off contaminated clothing and wash it before reuse.

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

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version : 2 1/16

# **SECTION 2: Hazards identification**

**Hazardous ingredients** 

: Contains: 2,4,7,9-tetramethyl-5-decyne-4,7-diol and Reaction mass of Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Supplemental label elements

: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**Annex XVII - Restrictions** on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

#### 2.3 Other hazards

**Product meets the criteria** for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

# SECTION 3: Composition/information on ingredients

: Mixture 3.2 Mixtures

| Product/ingredient name   | Identifiers   | %         | Classification  | Specific Conc.<br>Limits, M-factors<br>and ATEs  | Туре    |
|---|---|-----------|---|--|---------|
| iranium dioxide   | REACH #:<br>01-2119489379-17<br>EC: 236-675-5<br>CAS: 13463-67-7                        | ≥10 - ≤25 | Carc. 2, H351<br>(inhalation)   | -  | [1] [*] |
| 2-Butoxyethanol   | REACH #:<br>01-2119475108-36<br>EC: 203-905-0<br>CAS: 111-76-2<br>Index: 603-014-00-0   | ≤5        | Acute Tox. 4, H302<br>Acute Tox. 3, H331<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319   | ATE [Oral] = 1200<br>mg/kg<br>ATE [Inhalation<br>(vapours)] = 3 mg/l                             | [1] [2] |
| Solvent naphtha (petroleum), light aromatic   | REACH #:<br>01-2119455851-35<br>EC: 265-199-0<br>CAS: 64742-95-6<br>Index: 649-356-00-4 | ≤3        | Flam. Liq. 3, H226<br>STOT SE 3, H335<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2,<br>H411<br>EUH066           | -  | [1]     |
| 2,4,7,9-tetramethyl-<br>5-decyne-4,7-diol   | REACH #:<br>01-2119954390-39<br>EC: 204-809-1<br>CAS: 126-86-3                          | <1        | Eye Dam. 1, H318<br>Skin Sens. 1B, H317<br>Aquatic Chronic 3,<br>H412   | -  | [1]     |
| Reaction mass of Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | REACH #:<br>01-2119491304-40<br>EC: 915-687-0<br>CAS: 1065336-91-5                      | ≤0.3      | Skin Sens. 1A, H317<br>Repr. 2, H361f<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1,<br>H410                                    | M [Acute] = 1<br>M [Chronic] = 1   | [1]     |
| 2-Dimethylaminoethanol  | REACH #:<br>01-2119492298-24<br>EC: 203-542-8<br>CAS: 108-01-0<br>Index: 603-047-00-0   | ≤0.3      | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Acute Tox. 3, H331<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318 | ATE [Oral] = 2000<br>mg/kg<br>ATE [Dermal] =<br>1100 mg/kg<br>ATE [Inhalation<br>(gases)] = 1641 | [1]     |

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version :2 2/16 Label No : **49**893

| SECTION 3: Composition/information on ingredients |   |      |   |                                   |     |
|---|---|------|---|-----------------------------------|-----|
|   |   |      | STOT SE 3, H335   | ppm<br>STOT SE 3, H335:<br>C ≥ 5% |     |
| propylidynetrimethanol                            | REACH #:<br>01-2119486799-10<br>EC: 201-074-9<br>CAS: 77-99-6 | ≤0.3 | Repr. 2, H361fd   | -                                 | [1] |
|   |   |      | See Section 16 for<br>the full text of the H<br>statements declared<br>above. |                                   |     |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [\*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

Occupational exposure limits, if available, are listed in Section 8.

#### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

**Eye contact** 

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** 

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** 

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

#### **Over-exposure signs/symptoms**

**Eye contact** : No specific data. Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation redness

Date of issue/Date of revision : 07/09/2023 • 21/10/2022 Version : 2 3/16 Date of previous issue Label No : #9893

### **SECTION 4: First aid measures**

Ingestion : No specific data.

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

Notes to physician : Treat symptoma

: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

## SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

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

Hazards from the substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide metal oxide/oxides

#### 5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

#### **SECTION 6: Accidental release measures**

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** 

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

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

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Label No : #9893

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version : 2 4/16

#### **SECTION 6: Accidental release measures**

#### Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

# 6.4 Reference to other sections

: See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

### 7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

#### **Occupational exposure limits**

| Product/ingredient name | Exposure limit values   |
|-------------------------|---|
|                         | NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values  OELV-8hr: 20 ppm 8 hours.  OELV-8hr: 98 mg/m³ 8 hours.  OELV-15min: 50 ppm 15 minutes.  OELV-15min: 246 mg/m³ 15 minutes. |

#### **Biological exposure indices**

Date of issue/Date of revision: 07/09/2023Date of previous issue: 21/10/2022Version: 25/16FEKNODUR AQUA 3390-03 - All variantsLabel No : 49893

# **SECTION 8: Exposure controls/personal protection**

| Product/ingredient name | Exposure indices  |
|-------------------------|---|
|                         | NAOSH (Ireland, 1/2011) BMGV: 200 mg/g creatinine, BAA [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases. |

# Recommended monitoring procedures

European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

| Product/ingredient name               | Type  | Exposure                | Value                  | Population            | Effects   |
|---------------------------------------|-------|-------------------------|------------------------|-----------------------|-----------|
| <b>2</b> -Butoxyethanol               | DNEL  | Long term Oral          | 6.3 mg/kg              | General               | Systemic  |
|                                       |       |                         | bw/day                 | population            |           |
|                                       | DNEL  | Short term Oral         | 26.7 mg/               | General               | Systemic  |
|                                       |       |                         | kg bw/day              | population            |           |
|                                       | DNEL  | Long term               | 59 mg/m³               | General               | Systemic  |
|                                       |       | Inhalation              |                        | population            |           |
|                                       | DNEL  | Long term               | 98 mg/m³               | Workers               | Systemic  |
|                                       |       | Inhalation              |                        |                       |           |
|                                       | DNEL  | Short term              | 147 mg/m <sup>3</sup>  | General               | Local     |
|                                       |       | Inhalation              |                        | population            |           |
|                                       | DNEL  | Short term              | 246 mg/m <sup>3</sup>  | Workers               | Local     |
|                                       | 5.151 | Inhalation              | 400 / 2                |                       |           |
|                                       | DNEL  | Short term              | 426 mg/m <sup>3</sup>  | General               | Systemic  |
|                                       | DATE  | Inhalation              | 4004 /                 | population            |           |
|                                       | DNEL  | Short term              | 1091 mg/               | Workers               | Systemic  |
|                                       | DATE  | Inhalation              | m³                     |                       |           |
| Solvent naphtha (petroleum), light    | DNEL  | Long term               | 0.41 mg/m <sup>3</sup> |                       | Systemic  |
| aromatic                              | DAIEI | Inhalation              | 4.0                    | population            | 0         |
|                                       | DNEL  | Long term               | 1.9 mg/m <sup>3</sup>  | Workers               | Systemic  |
|                                       | DNIEL | Inhalation              | 170 F7 mag/            | Camaral               | Local     |
|                                       | DNEL  | Long term               | 178.57 mg/             | General               | Local     |
|                                       | DNIEL | Inhalation              | m <sup>3</sup>         | population            | Local     |
|                                       | DNEL  | Short term              | 640 mg/m <sup>3</sup>  | General               | Local     |
|                                       | DNEL  | Inhalation              | 927 5 mg/              | population<br>Workers | Local     |
|                                       | DINEL | Long term<br>Inhalation | 837.5 mg/<br>m³        | Workers               | Local     |
|                                       | DNEL  | Short term              | 1066.67                | Workers               | Local     |
|                                       | DINEL | Inhalation              | mg/m <sup>3</sup>      | Workers               | Lucai     |
|                                       | DNEL  | Short term              | 1152 mg/               | General               | Systemic  |
|                                       | DINLL | Inhalation              | m <sup>3</sup>         | population            | Oysternic |
|                                       | DNEL  | Short term              | 1286.4 mg/             | Workers               | Systemic  |
|                                       | DIVLL | Inhalation              | m <sup>3</sup>         | WORKEIS               | Cystonic  |
| 2,4,7,9-tetramethyl-5-decyne-4,7-diol | DNEL  | Long term Oral          | 0.25 mg/               | General               | Systemic  |
|                                       | DITE  | Long tonii orai         | kg bw/day              | population            | Gyotomio  |
|                                       | DNEL  | Long term Dermal        | 0.25 mg/               | General               | Systemic  |
|                                       |       | 20119 101111 2 01111011 | kg bw/day              | population            |           |
|                                       | DNEL  | Long term               | 0.43 mg/m <sup>3</sup> | General               | Systemic  |
|                                       |       | Inhalation              | J                      | population            |           |
|                                       | DNEL  | Long term Dermal        | 0.5 mg/kg              | Workers               | Systemic  |
|                                       |       |                         | bw/day                 |                       | -         |
|                                       | DNEL  | Short term Oral         | 0.75 mg/               | General               | Systemic  |
|                                       |       |                         | kg bw/day              | population            |           |
|                                       | DNEL  | Short term Dermal       | 0.75 mg/               | General               | Systemic  |
|                                       |       |                         | kg bw/day              | population            |           |
|                                       | DNEL  | Short term              | 1.29 mg/m <sup>3</sup> |                       | Systemic  |
|                                       |       | Inhalation              |                        | population            |           |
|                                       | DNEL  | Short term Dermal       | 1.5 mg/kg              | Workers               | Systemic  |
| <u> </u>                              |       | l                       |                        |                       | l l       |

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version : 2

FEKNODUR AQUA 3390-03 - All variants

6/16

# **SECTION 8: Exposure controls/personal protection**

|                        |               |                   | bw/day                 |                |          |
|------------------------|---------------|-------------------|------------------------|----------------|----------|
|                        | DNEL          | Long term         | 1.76 mg/m <sup>3</sup> | Workers        | Systemic |
|                        |               | Inhalation        |                        |                |          |
|                        | DNEL          | Short term        | 5.28 mg/m <sup>3</sup> | Workers        | Systemic |
|                        |               | Inhalation        |                        |                |          |
| 2-Dimethylaminoethanol | DNEL          | Long term Oral    | 0.126 mg/              | General        | Systemic |
|                        |               |                   | kg bw/day              | population     |          |
|                        | DNEL          | Long term Dermal  | 0.25 mg/               | Workers        | Systemic |
|                        |               |                   | kg bw/day              |                |          |
|                        | DNEL          | Long term         | 0.43755                | General        | Systemic |
|                        |               | Inhalation        | mg/m³                  | population     |          |
|                        | DNEL          | Short term Dermal | 1.2 mg/kg              | Workers        | Systemic |
|                        |               |                   | bw/day                 |                |          |
|                        | DNEL          | Long term         | 1.76 mg/m <sup>3</sup> | Workers        | Local    |
|                        |               | Inhalation        |                        |                |          |
|                        | DNEL          | Long term         | 1.76 mg/m <sup>3</sup> | Workers        | Systemic |
|                        |               | Inhalation        |                        |                |          |
|                        | DNEL          | Short term        | 5.28 mg/m <sup>3</sup> | Workers        | Systemic |
|                        |               | Inhalation        |                        |                |          |
|                        | DNEL          | Short term        | 13.53 mg/              | Workers        | Local    |
|                        |               | Inhalation        | m³                     |                |          |
|                        | DNEL          | Short term Dermal | 100 µg/cm²             |                | Local    |
| propylidynetrimethanol | DNEL          | Long term Oral    | 0.34 mg/               | General        | Systemic |
|                        | <b>5.15</b> 1 |                   | kg bw/day              | population     |          |
|                        | DNEL          | Long term Dermal  | 0.34 mg/               | General        | Systemic |
|                        | DAIEI         |                   | kg bw/day              | population     | 0        |
|                        | DNEL          | Long term         | 0.58 mg/m <sup>3</sup> |                | Systemic |
|                        | DAIEI         | Inhalation        | 0.04                   | population     | 0        |
|                        | DNEL          | Long term Dermal  | 0.94 mg/               | Workers        | Systemic |
|                        | חאורו         |                   | kg bw/day              | VV/ o wlk o wo | Cuetamia |
|                        | DNEL          | Long term         | 3.3 mg/m <sup>3</sup>  | Workers        | Systemic |
|                        |               | Inhalation        |                        |                |          |

#### **PNECs**

No PNECs available

#### 8.2 Exposure controls

Appropriate engineering controls

 Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

# Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommendations: Wear suitable gloves tested to EN374.

> 8 hours (breakthrough time): Nitrile gloves. thickness > 0.3 mm

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version : 2 7/16

# SECTION 8: Exposure controls/personal protection

Not recommended

polyvinyl alcohol (PVA) gloves

**Body protection** 

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type (spray application):

**Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# **SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

#### **Appearance**

**Physical state** : Liquid. Colour Various Odour Slight **Odour threshold** : Not available.

Melting point/freezing point

Not available.

Initial boiling point and

boiling range

| 3 3 3                                       |            |            |        |  |
|---|------------|------------|--------|--|
| Ingredient name                             | °C         | °F         | Method |  |
| water value                                 | 100        | 212        |        |  |
| Solvent naphtha (petroleum), light aromatic | 135 to 210 | 275 to 410 |        |  |

**Flammability** : Not available. Lower and upper explosion : Lower: 1.4% Upper: 7.6% limit

: Closed cup: >100°C (>212°F) Flash point

**Auto-ignition temperature** 

| Ingredient name                             | °C         | °F         | Method    |
|---|------------|------------|-----------|
| Butoxyethanol                               | 230        | 446        | DIN 51794 |
| Solvent naphtha (petroleum), light aromatic | 280 to 470 | 536 to 878 |           |

**Decomposition temperature** : Not available.

Ha **8**.1 to 8.7 [Conc. (% w/w): 100%]

**Viscosity** Not available.

Solubility(ies)

Not available.

Solubility in water : Not available. Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure

Date of issue/Date of revision : 07/09/2023 • 21/10/2022 Version : 2 8/16 Date of previous issue Label No : #9893

# **SECTION 9: Physical and chemical properties**

|                 | Vapour Pressure at 20°C |     |        | Var   | our pressu | re at 50°C |
|-----------------|-------------------------|-----|--------|-------|------------|------------|
| Ingredient name | mm Hg                   | kPa | Method | mm Hg | kPa        | Method     |
| water value     | 17.5                    | 2.3 |        |       |            |            |
| 2-Butoxyethanol | 0.75006                 | 0.1 |        |       |            |            |

Relative density : Not available.

Density : 

✓ 4 g/cm³

Vapour density : Not available.

Explosive properties : Not available.

Oxidising properties : Not available.

**Particle characteristics** 

Median particle size : Not applicable.

## **SECTION 10: Stability and reactivity**

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products

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

# **SECTION 11: Toxicological information**

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Acute toxicity**

| Product/ingredient name     | Result               | Species | Dose        | Exposure |
|-----------------------------|----------------------|---------|-------------|----------|
| Solvent naphtha             | LD50 Oral            | Rat     | 8400 mg/kg  | -        |
| (petroleum), light aromatic |                      |         |             |          |
| Reaction mass of Bis        | LD50 Dermal          | Rat     | >3170 mg/kg | -        |
| (1,2,2,6,6-pentamethyl-     |                      |         |             |          |
| 4-piperidyl) sebacate and   |                      |         |             |          |
| Methyl                      |                      |         |             |          |
| 1,2,2,6,6-pentamethyl-      |                      |         |             |          |
| 4-piperidyl sebacate        |                      |         |             |          |
|                             | LD50 Oral            | Rat     | 3230 mg/kg  | -        |
| 2-Dimethylaminoethanol      | LC50 Inhalation Gas. | Rat     | 1641 ppm    | 4 hours  |
| ·                           | LD50 Oral            | Rat     | 2 g/kg      | -        |
| propylidynetrimethanol      | LD50 Oral            | Rat     | 14000 mg/kg | -        |

## **Conclusion/Summary**

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

#### **Acute toxicity estimates**

| Route              | ATE value                                   |  |  |
|--------------------|---|--|--|
| Inhalation (gases) | 33925.07 mg/kg<br>1073214 ppm<br>84.81 mg/l |  |  |

#### **Irritation/Corrosion**

Date of issue/Date of revision: 07/09/2023Date of previous issue: 21/10/2022Version: 29/16₱EKNODUR AQUA 3390-03 - All variantsLabel No : ₱9893

# **SECTION 11: Toxicological information**

| Product/ingredient name                     | Result                   | Species | Score | Exposure             | Observation |
|---|--------------------------|---------|-------|----------------------|-------------|
| irtanium dioxide                            | Skin - Mild irritant     | Human   | -     | 72 hours 300<br>ug I | -           |
| 2-Butoxyethanol                             | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100<br>mg   | -           |
|   | Eyes - Severe irritant   | Rabbit  | -     | 100 mg               | -           |
|   | Skin - Mild irritant     | Rabbit  | -     | 500 mg               | -           |
| Solvent naphtha (petroleum), light aromatic | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 100<br>uL   | -           |
| 2,4,7,9-tetramethyl-<br>5-decyne-4,7-diol   | Eyes - Severe irritant   | Rabbit  | -     | 0.1 MI               | -           |
|   | Skin - Mild irritant     | Rabbit  | -     | 0.5 g                | -           |
| 2-Dimethylaminoethanol                      | Eyes - Severe irritant   | Rabbit  | -     | 5 uL                 | -           |
|   | Skin - Mild irritant     | Rabbit  | -     | 445 mg               | -           |

**Conclusion/Summary** 

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

**Sensitisation** 

**Conclusion/Summary**: May cause an allergic skin reaction.

**Mutagenicity** 

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Carcinogenicity** 

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

**Conclusion/Summary**: Based on available data, the classification criteria are not met.

Reproductive toxicity

**Conclusion/Summary**: Based on available data, the classification criteria are not met.

**Teratogenicity** 

**Conclusion/Summary**: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

| Product/ingredient name                     | Category              | Route of exposure | Target organs                         |
|---|-----------------------|-------------------|---------------------------------------|
| Solvent naphtha (petroleum), light aromatic | Category 3            | -                 | Respiratory tract irritation          |
| 2-Dimethylaminoethanol                      | Category 3 Category 3 | _                 | Narcotic effects<br>Respiratory tract |
| 2-binetryianinocularior                     | Category 5            |                   | irritation                            |

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

| Product/ingredient name                     | Result                         |
|---|--------------------------------|
| Solvent naphtha (petroleum), light aromatic | ASPIRATION HAZARD - Category 1 |

Information on likely routes

of exposure

: Not available.

#### Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

**Skin contact** : May cause an allergic skin reaction.

**Ingestion**: No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version : 2 10/16

**F**EKNODUR AQUA 3390-03 - All variants

**Label No** : 49893

# **SECTION 11: Toxicological information**

**Skin contact**: Adverse symptoms may include the following:

irritation redness

**Ingestion** : No specific data.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure** 

**Potential immediate** 

: Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

**Conclusion/Summary**: Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

#### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

| Product/ingredient name                              | Result                                | Species                                       | Exposure |
|--|---------------------------------------|---|----------|
| Manium dioxide                                       | Acute LC50 3 mg/l Fresh water         | Crustaceans - Ceriodaphnia<br>dubia - Neonate | 48 hours |
|  | Acute LC50 6.5 mg/l Fresh water       | Daphnia - <i>Daphnia pulex</i> -<br>Neonate   | 48 hours |
|  | Acute LC50 >1000000 μg/l Marine water | Fish - Fundulus heteroclitus                  | 96 hours |
| 2-Butoxyethanol                                      | Acute EC50 >1000 mg/l Fresh water     | Daphnia - <i>Daphnia magna</i>                | 48 hours |
| -  | Acute LC50 800000 µg/l Marine water   | Crustaceans - Crangon crangon                 | 48 hours |
|  | Acute LC50 1250000 µg/l Marine water  | Fish - Menidia beryllina                      | 96 hours |
| Solvent naphtha (petroleum), light aromatic          | Acute EC50 3.2 mg/l                   | Daphnia                                       | 48 hours |
|  | Acute LC50 9.2 mg/l                   | Fish  | 96 hours |
| 2,4,7,9-tetramethyl-<br>5-decyne-4,7-diol            | EC50 91 mg/l                          | Daphnia - <i>Daphnia magna</i>                | 48 hours |
| ,  | LC50 42 mg/l                          | Fish - Cyprinus carpio                        | 96 hours |
| Reaction mass of Bis                                 | EC50 1.68 mg/l                        | Aquatic plants -                              | 72 hours |
| (1,2,2,6,6-pentamethyl-<br>4-piperidyl) sebacate and |                                       | Desmodesmodus subspicatus                     |          |
| Methyl   |                                       |   |          |
| 1,2,2,6,6-pentamethyl-                               |                                       |   |          |
| 4-piperidyl sebacate                                 |                                       |   |          |
| -  | Acute LC50 0.9 mg/l                   | Fish - <i>Brachydanio rerio</i>               | 96 hours |
|  | Chronic NOEC 1 mg/l                   | Daphnia                                       | 21 days  |
| propylidynetrimethanol                               | Acute EC50 13000000 μg/l Fresh water  | Daphnia - <i>Daphnia magna</i>                | 48 hours |

 Date of issue/Date of revision
 : 07/09/2023
 Date of previous issue
 : 21/10/2022
 Version
 : 2
 11/16

 ▶EKNODUR AQUA 3390-03 - All variants
 Label No : ₱9893

#### **SECTION 12: Ecological information** Acute LC50 14400000 µg/l Marine Fish - Cyprinodon variegatus 96 hours water

: Harmful to aquatic life with long lasting effects. **Conclusion/Summary** 

#### 12.2 Persistence and degradability

**Conclusion/Summary** : This product has not been tested for biodegradation.

#### 12.3 Bioaccumulative potential

| Product/ingredient name      | LogPow | BCF        | Potential |
|------------------------------|--------|------------|-----------|
| 2-Butoxyethanol              | 0.81   | -          | Low       |
| Solvent naphtha (petroleum), | -      | 10 to 2500 | High      |
| light aromatic               |        |            | _         |
| 2-Dimethylaminoethanol       | -0.55  | -          | Low       |
| propylidynetrimethanol       | -0.47  | <1         | Low       |

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

**Mobility** : Not available.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

#### 12.6 Endocrine disrupting properties

Not available.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

# SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** 

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** 

**European waste** catalogue (EWC) : The classification of the product may meet the criteria for a hazardous waste.

: 080111\*, 200127\*

**Packaging** 

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** 

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Date of issue/Date of revision : 07/09/2023 • 21/10/2022 Version : 2 12/16 Date of previous issue Label No : #9893

# **SECTION 14: Transport information**

|                                    | ADR/RID        | ADN            | IMDG           | IATA           |
|------------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN number or ID number        | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name       | -              | -              | -              | -              |
| 14.3 Transport<br>hazard class(es) | -              | -              | -              | -              |
| 14.4 Packing group                 | -              | -              | -              | -              |
| 14.5<br>Environmental<br>hazards   | No.            | No.            | No.            | No.            |

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO

instruments

: Not relevant/applicable due to nature of the product.

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

**Annex XIV - List of substances subject to authorisation** 

**Annex XIV** 

None of the components are listed.

**Substances of very high concern** 

None of the components are listed.

#### Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

| Product/ingredient name | %   | Designation [Usage] |
|-------------------------|-----|---------------------|
| FEKNODUR AQUA 3390-03   | ≥90 | 3                   |

Labelling

Other EU regulations

**Industrial emissions** : Not listed

(integrated pollution prevention and control) -

Air

**Industrial emissions** : Not listed

(integrated pollution prevention and control) -

Water

: Not applicable. **Explosive precursors** Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version : 2 13/16 Label No : #9893

# **SECTION 15: Regulatory information**

#### **Persistent Organic Pollutants**

Not listed.

#### **Seveso Directive**

This product is not controlled under the Seveso Directive.

#### **International regulations**

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

#### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

#### **Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### 15.2 Chemical safety

assessment

: This product contains substances for which Chemical Safety Assessments are still

required.

#### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

### **Abbreviations and**

acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

## Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification                                | Justification                         |
|---|---------------------------------------|
| Skin Sens. 1, H317<br>Aquatic Chronic 3, H412 | Calculation method Calculation method |

#### Full text of abbreviated H statements

| <b>⊮</b> 226 | Flammable liquid and vapour.   |
|--------------|--|
| H302         | Harmful if swallowed.  |
| H304         | May be fatal if swallowed and enters airways.                            |
| 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.   |
| H331         | Toxic if inhaled.  |
| H335         | May cause respiratory irritation.  |
| H336         | May cause drowsiness or dizziness.                                       |
| H351         | Suspected of causing cancer.   |
| H361f        | Suspected of damaging fertility.   |
| H361fd       | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H400         | Very toxic to aquatic life.  |
| H410         | Very toxic to aquatic life with long lasting effects.                    |

Date of issue/Date of revision : 07/09/2023 • 21/10/2022 Version : 2 14/16 Date of previous issue FÉKNODUR AQUA 3390-03 - All variants Label No : #9893

#### **SECTION 16: Other information**

H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

#### Full text of classifications [CLP/GHS]

Acute Tox. 3 ACUTE TOXICITY - Category 3
Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

Asp. Tox. 1 ASPIRATION HAZARD - Category 1 Carc. 2 CARCINOGENICITY - Category 2

Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3
Repr. 2 REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1A SKIN SENSITISATION - Category 1A
Skin Sens. 1B SKIN SENSITISATION - Category 1B

STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of issue/ Date of

revision

: 07/09/2023

Date of previous issue : 21/10/2022

Version : 2

KNODUR AQUA 3390-03 All variants

#### **Notice to reader**

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Date of issue/Date of revision : 07/09/2023 Date of previous issue : 21/10/2022 Version : 2 15/16

**FEKNODUR AQUA 3390-03 - All variants** 

Label No : 49893

Date of issue/Date of revision: 07/09/2023Date of previous issue: 21/10/2022Version: 216/16

**Label No** : **49**893