

SAFETY DATA SHEET



TEKNOLIN - All variants

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

1.1 Product identifier

Product name : TEKNOLIN - 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 responsible for this SDS : Prod-safe@teknos.com

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 : In an emergency, call 112

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]

Flam. Liq. 3, H226

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 : H226 - Flammable liquid and vapour.
H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

General : P102 - Keep out of reach of children.

Prevention : P280 - Wear protective gloves.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.

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

Storage : Not applicable.

SECTION 2: Hazards identification

- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients** : Contains: 3-iodo-2-propynyl-butyl carbamate; Cobalt bis(2-ethylhexanoate) and 4,5-dichloro-2-octyl-2H-isothiazol-3-one
- Supplemental label elements** : Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Contains biocidal products for dry film and in-can preservation: IPBC and DCOIT. Risk of skin sensitisation.
- 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

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|-----------|---|---|---------|
| Naphtha (petroleum), hydrotreated heavy | REACH #: 01-2119463258-33 EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6 | ≥10 - <20 | Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066 | EUH066: C ≥ 50% | [1] |
| titanium dioxide | REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 | ≥10 - ≤25 | Carc. 2, H351 (inhalation) | - | [1] [*] |
| Naphtha (petroleum), hydrotreated heavy | REACH #: 01-2119457273-39 EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6 | ≤3 | Asp. Tox. 1, H304 EUH066 | EUH066: C ≥ 50% | [1] |
| 3-iodo-2-propynyl-butyl carbamate | EC: 259-627-5 CAS: 55406-53-6 Index: 616-212-00-7 | ≤0.2 | Acute Tox. 4, H302 Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 (larynx) Aquatic Acute 1, H400 Aquatic Chronic 1, H410 | ATE [Oral] = 400 mg/kg ATE [Inhalation (dusts and mists)] = 0.67 mg/l M [Acute] = 10 M [Chronic] = 1 | [1] |
| Cobalt bis (2-ethylhexanoate) | REACH #: 01-2119524678-29 EC: 205-250-6 CAS: 136-52-7 | <0.3 | Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 1B, H360FD Aquatic Acute 1, H400 Aquatic Chronic 3, H412 | M [Acute] = 1 | [1] |
| 4,5-dichloro-2-octyl-2H- | EC: 264-843-8 | ≤0.022 | Acute Tox. 4, H302 | ATE [Oral] = 567 | [1] |

SECTION 3: Composition/information on ingredients

| | | | | | |
|------------------|--|--|--|--|--|
| isothiazol-3-one | CAS: 64359-81-5 Index: 613-335-00-8 | | Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071 | mg/kg ATE [Inhalation (dusts and mists)] = 0.16 mg/l Skin Corr. 1, H314: C ≥ 5% Skin Irrit. 2, H315: 0.025% ≤ C < 5% Eye Dam. 1, H318: C ≥ 3% Eye Irrit. 2, H319: 0.025% ≤ C < 3% Skin Sens. 1, H317: C ≥ 0.0015% M [Acute] = 100 M [Chronic] = 100 | |
| | | | See Section 16 for the full text of the H statements declared 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.

Type

[1] Substance classified with a health or environmental hazard

[*] 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

SECTION 4: First aid measures

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : 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 dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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".

SECTION 6: Accidental release measures

- 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. Use spark-proof tools and explosion-proof equipment. 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.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Risk of self-ignition of used cleaning rags, paper wipes etc. Contaminated materials should be soaked in water and placed in a closed metal container before disposal.
- 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidising materials. 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.

Seveso Directive - Reporting thresholds

Danger criteria

SECTION 7: Handling and storage

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| P5c | 5000 tonne | 50000 tonne |

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

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 |
|--------------------------------|--|
| Cobalt bis(2-ethylhexanoate) | Regulation on Limit Values - Technical Guidance Values (Austria, 4/2021). [Cobalt and its compounds] Absorbed through skin. Skin sensitiser. Inhalation sensitiser. TWA: 0.1 mg/m ³ , (measured as Co) 8 hours. Form: Inhalable fraction PEAK: 0.4 mg/m ³ , (measured as Co), 4 times per shift, 15 minutes. Form: Inhalable fraction |
| No exposure limit value known. | |
| Cobalt bis(2-ethylhexanoate) | Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021). [Cobalt and inorganic compounds (as cobalt)] Limit value 8 hours: 0.1 mg/m ³ , (as cobalt) 8 hours. |
| Propylene glycol | Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). ELV: 10 mg/m ³ 8 hours. Form: only particles ELV: 474 mg/m ³ 8 hours. Form: total vapour and particles ELV: 150 ppm 8 hours. Form: total vapour and particles |
| Cobalt bis(2-ethylhexanoate) | Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). [cobalt and compounds] Skin sensitiser. Inhalation sensitiser. ELV: 0.1 mg/m ³ , (as Co) 8 hours. |
| No exposure limit value known. | |
| Cobalt bis(2-ethylhexanoate) | Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). [Cobalt and its compounds] Skin sensitiser. TWA: 0.05 mg/m ³ , (as Co) 8 hours. Form: aerosol, inhalable fraction. STEL: 0.1 mg/m ³ , (as Co) 15 minutes. Form: aerosol, inhalable fraction. |
| Cobalt bis(2-ethylhexanoate) | Working Environment Authority (Denmark, 6/2022). [Inorganic compounds of cobalt] Carcinogen. TWA: 0.01 mg/m ³ , (calculated as Co) 8 hours. |
| Cobalt bis(2-ethylhexanoate) | Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022). [Cobalt and inorganic compounds] Skin sensitiser. TWA: 0.05 mg/m ³ , (calculated as Co) 8 hours. |
| No exposure limit value known. | |

SECTION 8: Exposure controls/personal protection

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| Naphtha (petroleum), hydrotreated heavy | Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2020). TWA: 500 mg/m ³ 8 hours. |
| Naphtha (petroleum), hydrotreated heavy | Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2020). TWA: 500 mg/m ³ 8 hours. |
| Cobalt bis(2-ethylhexanoate) | Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021). [Cobalt and its inorganic compounds] TWA: 0.02 mg/m ³ , (calculated as Co) 8 hours. |
| No exposure limit value known. | |
| Naphtha (petroleum), hydrotreated heavy | DFG MAC-values list (Germany, 7/2022). TWA: 50 ppm 8 hours. TWA: 300 mg/m ³ 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. PEAK: 600 mg/m ³ , 4 times per shift, 15 minutes. |
| Naphtha (petroleum), hydrotreated heavy | DFG MAC-values list (Germany, 7/2022). TWA: 50 ppm 8 hours. TWA: 300 mg/m ³ 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. PEAK: 600 mg/m ³ , 4 times per shift, 15 minutes. |
| 3-iodo-2-propynyl-butyl carbamate | DFG MAC-values list (Germany, 7/2022). Skin sensitiser. PEAK: 0.116 mg/m ³ , 4 times per shift, 15 minutes. PEAK: 0.01 ppm, 4 times per shift, 15 minutes. TWA: 0.058 mg/m ³ 8 hours. TWA: 0.005 ppm 8 hours. TRGS 900 OEL (Germany, 6/2022). Skin sensitiser. PEAK: 0.116 mg/m ³ 15 minutes. PEAK: 0.01 ppm 15 minutes. TWA: 0.058 mg/m ³ 8 hours. TWA: 0.005 ppm 8 hours. |
| Cobalt bis(2-ethylhexanoate) | DFG MAC-values list (Germany, 7/2022). [Cobalt and cobalt compounds (inhalable fraction)] Absorbed through skin. Skin sensitiser. Inhalation sensitiser. |
| Cobalt bis(2-ethylhexanoate) | Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021). [Compounds of cobalt] TWA: 0.1 mg/m ³ , (as Co) 8 hours. |
| Cobalt bis(2-ethylhexanoate) | 5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). [Cobalt and its inorganic compounds] Skin sensitiser. Inhalation sensitiser. TWA: 0.02 mg/m ³ , (as Co) 8 hours. |
| Cobalt bis(2-ethylhexanoate) | Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). [cobalt and its inorganic compounds] Skin sensitiser. TWA: 0.02 mg/m ³ , (as Co) 8 hours. Form: Dust and fumes |
| Propylene glycol | NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV-8hr: 10 mg/m ³ 8 hours. Form: particulate OELV-8hr: 470 mg/m ³ 8 hours. Form: vapour and particulates OELV-8hr: 150 ppm 8 hours. Form: vapour and particulates |
| Cobalt bis(2-ethylhexanoate) | NAOSH (Ireland, 5/2021). [Cobalt and cobalt compounds as Co] Sensitization potential. Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV-8hr: 0.02 mg/m ³ , (as Co) 8 hours. |
| No exposure limit value known. | |
| Propylene glycol | Ministers Cabinet Regulations Nr.325 - AER (Latvia, 2/2021). TWA: 7 mg/m ³ 8 hours. |
| Propylene glycol | Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). TWA: 7 mg/m ³ 8 hours. |
| Cobalt bis(2-ethylhexanoate) | Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). [Cobalt and its inorganic compounds] Skin sensitiser. Inhalation sensitiser. TWA: 0.05 mg/m ³ , (as Co) 8 hours. |

SECTION 8: Exposure controls/personal protection

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| No exposure limit value known. | |
| No exposure limit value known. | |
| No exposure limit value known. | |
| Propylene glycol | FOR-2011-12-06-1358 (Norway, 12/2022). TWA: 79 mg/m ³ 8 hours. TWA: 25 ppm 8 hours. |
| Cobalt bis(2-ethylhexanoate) | FOR-2011-12-06-1358 (Norway, 12/2022). [Inorganic cobalt compounds (except Co(II))] Skin sensitiser. Reproductive toxin. TWA: 0.02 mg/m ³ , (calculated as Co) 8 hours. |
| Naphtha (petroleum), hydrotreated heavy | Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [benzin to varnish] TWA: 300 mg/m ³ 8 hours. STEL: 900 mg/m ³ 15 minutes. |
| Naphtha (petroleum), hydrotreated heavy | Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [benzin to varnish] TWA: 300 mg/m ³ 8 hours. STEL: 900 mg/m ³ 15 minutes. |
| Propylene glycol | Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). TWA: 100 mg/m ³ 8 hours. Form: vapor and inhalable fraction |
| Cobalt bis(2-ethylhexanoate) | Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [cobalt and its inorganic compounds] TWA: 0.02 mg/m ³ , (calculated as Co) 8 hours. |
| Cobalt bis(2-ethylhexanoate) | Portuguese Institute of Quality (Portugal, 11/2014). [cobalt and inorganic compounds] TWA: 0.02 mg/m ³ , (expressed as Co) 8 hours. |
| No exposure limit value known. | |
| Cobalt bis(2-ethylhexanoate) | Government regulation SR c. 355/2006 (Slovakia, 9/2020). [Cobalt and its compounds] Skin sensitiser. TWA: 0.05 mg/m ³ , (Cobalt and its compounds, as Co) 8 hours. |
| 3-iodo-2-propynyl-butyl carbamate | Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021). KTV: 0.01 ppm, 4 times per shift, 15 minutes. TWA: 0.005 ppm 8 hours. KTV: 0.116 mg/m ³ , 4 times per shift, 15 minutes. TWA: 0.058 mg/m ³ 8 hours. |
| Cobalt bis(2-ethylhexanoate) | National institute of occupational safety and health (Spain, 4/2022). [Inorganic compounds of cobalt, except those expressly stated] Skin sensitiser. Inhalation sensitiser. TWA: 0.02 mg/m ³ , (as Co) 8 hours. |
| Naphtha (petroleum), hydrotreated heavy | Work environment authority Regulation 2018:1 (Sweden, 9/2020). NGV: 50 ppm 8 hours. NGV: 300 mg/m ³ 8 hours. KTV: 100 ppm 15 minutes. KTV: 600 mg/m ³ 15 minutes. |
| Cobalt bis(2-ethylhexanoate) | Work environment authority Regulation 2018:1 (Sweden, |

SECTION 8: Exposure controls/personal protection

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|---|---|
| Naphtha (petroleum), hydrotreated heavy | <p>9/2021). [cobalt and inorganic compounds inhalable fraction, (as Co)] Absorbed through skin. Skin sensitiser. TWA: 0.02 mg/m³, (as Co) 8 hours. Form: inhalable fraction</p> <p>SUVA (Switzerland, 1/2023). STEL: 600 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. TWA: 300 mg/m³ 8 hours.</p> |
| Naphtha (petroleum), hydrotreated heavy | <p>SUVA (Switzerland, 1/2023). STEL: 600 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. TWA: 300 mg/m³ 8 hours.</p> |
| 3-iodo-2-propynyl-butyl carbamate | <p>SUVA (Switzerland, 1/2023). Skin sensitiser. STEL: 0.24 mg/m³ 15 minutes. Form: vapour and aerosols STEL: 0.02 ppm 15 minutes. Form: vapour and aerosols TWA: 0.01 ppm 8 hours. Form: vapour and aerosols TWA: 0.12 mg/m³ 8 hours. Form: vapour and aerosols</p> |
| Cobalt bis(2-ethylhexanoate) | <p>SUVA (Switzerland, 1/2023). [Cobalt and its compounds] Absorbed through skin. Skin sensitiser. TWA: 0.05 mg/m³, (calculated as Co) 8 hours. Form: inhalable dust and aerosol</p> |
| 2-(2-butoxyethoxy)ethanol | <p>EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. TWA: 67.5 mg/m³ 8 hours. STEL: 101.2 mg/m³ 15 minutes.</p> |
| Cobalt bis(2-ethylhexanoate) | <p>EH40/2005 WELs (United Kingdom (UK), 1/2020). [cobalt and cobalt compounds as Co] Inhalation sensitiser. TWA: 0.1 mg/m³, (as Co) 8 hours.</p> |
| 1-Methoxy 2-propanol | <p>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 560 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 8 hours. TWA: 100 ppm 8 hours.</p> |
| Xylene | <p>EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin. STEL: 441 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. TWA: 220 mg/m³ 8 hours. STEL: 100 ppm 15 minutes.</p> |
| Ethylbenzene | <p>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m³ 8 hours.</p> |
| Dipropyleneglycolmethylether | <p>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. TWA: 308 mg/m³ 8 hours. TWA: 50 ppm 8 hours.</p> |

Biological exposure indices

| Product/ingredient name | Exposure indices |
|---|---|
| <p>Cobalt bis(2-ethylhexanoate)</p> <p>No exposure indices known.</p> <p>No exposure indices known.</p> <p>No exposure indices known.</p> <p>No exposure indices known.</p> | <p>VGU BEI (Austria, 9/2020) [cobalt or its compounds] BEI Fitness: 10 µg/l, cobalt [in urine]. Sampling time: one year.</p> |

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No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

Cobalt bis(2-ethylhexanoate)

Institute of Occupational Health, Ministry of Social Affairs (Finland, 9/2020) [Cobalt and its inorganic compounds]

BEI: 130 nmol/l, cobalt [in urine]. Sampling time: at the end of each work shift work step or a week or exposure period.

No exposure indices known.

Cobalt bis(2-ethylhexanoate)

DFG BEI-values list (Germany, 7/2022) [Cobalt and its compounds] Notes: danger from percutaneous absorption (see p. 211 and p. 228).

BGV: 35 µg/l, cobalt [in urine]. Sampling time: for long-term exposures: at the end of the shift after several shifts.

BEI: 1.5 µg/l, cobalt [in urine]. Sampling time: for long-term exposures: at the end of the shift after several shifts.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

No exposure indices known.

Cobalt bis(2-ethylhexanoate)

HG 1218/2006, Annex 2, with subsequent modifications and additions (Romania, 3/2020) [Cobalt compounds]

OBLV: 1 µg/l, cobalt [in blood]. Sampling time: end of the week.

OBLV: 15 µg/l, cobalt [in urine]. Sampling time: end of the week.

Cobalt bis(2-ethylhexanoate)

Government regulation SR c. 355/2006 (Slovakia, 9/2020) [cobalt and its compounds]

BLV: 38.45 nmol/mmol creatinine, cobalt [in urine]. Sampling time: no limitation.

BLV: 20.03 µg/g creatinine, cobalt [in urine]. Sampling time: no limitation.

BLV: 509.8 nmol/l, cobalt [in urine]. Sampling time: no limitation.

BLV: 30 µg/l, cobalt [in urine]. Sampling time: no limitation.

No exposure indices known.

Cobalt bis(2-ethylhexanoate)

National institute of occupational safety and health (Spain, 4/2022) [cobalt and inorganic compounds of cobalt, except oxides]

VLB: 1 µg/l, cobalt [in blood]. Sampling time: end of workweek.

VLB: 15 µg/l, cobalt [in urine]. Sampling time: end of workweek.

No exposure indices known.

Cobalt bis(2-ethylhexanoate)

SUVA (Switzerland, 1/2023) [Cobalt and its compounds]

BEI: 30 µg/l, cobalt [in urine]. Sampling time: immediately after exposure or after working hours.

BEI: 509 nmol/l, cobalt [in urine]. Sampling time: immediately after exposure or after working hours.

SECTION 8: Exposure controls/personal protection

| | |
|--------|---|
| Xylene | EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers] BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine]. Sampling time: post shift. |
|--------|---|

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: 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 |
|---|------|-----------------------|---------------------------|--------------------|----------|
| Naphtha (petroleum), hydrotreated heavy | DNEL | Long term Inhalation | 0.41 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 1.9 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 178.57 mg/m ³ | General population | Local |
| | DNEL | Long term Oral | 300 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 300 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 300 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 640 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 837.5 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 1066.67 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 1152 mg/m ³ | General population | Systemic |
| Naphtha (petroleum), hydrotreated heavy | DNEL | Short term Inhalation | 1286.4 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.41 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 1.9 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 178.57 mg/m ³ | General population | Local |
| | DNEL | Long term Oral | 300 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 300 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 300 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 640 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 837.5 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 1066.67 mg/m ³ | Workers | Local |
| 3-iodo-2-propynyl-butyl carbamate | DNEL | Short term Inhalation | 1152 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 1286.4 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.023 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 0.07 mg/m ³ | Workers | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|------------------------------|------|--------------------------------|-----------------------------|-----------------------|----------|
| Cobalt bis(2-ethylhexanoate) | DNEL | Inhalation Short term | 1.16 mg/m ³ | Workers | Local |
| | DNEL | Inhalation Long term | 1.16 mg/m ³ | Workers | Local |
| | DNEL | Inhalation Long term Dermal | 2 mg/kg bw/day | Workers | Systemic |
| | DNEL | Inhalation Long term | 37 µg/m ³ | General population | Local |
| | DNEL | Oral Long term | 175 µg/kg bw/day | General population | Systemic |
| | DNEL | Inhalation Long term | 235.1 µg/ m ³ | Workers | Local |

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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.

< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm

1 - 4 hours (breakthrough time): polyvinyl alcohol (PVA) thickness > 0.3 mm or 4H / Silver Shield® gloves.

> 8 hours (breakthrough time): Viton® thickness > 0.3 mm gloves

Wash hands before breaks and immediately after handling the product.

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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

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.

SECTION 8: Exposure controls/personal protection

- 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: A
Filter type (spray application): A P
- 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 :

| Ingredient name | °C | °F | Method |
|---|------------|--------------|--------|
| Naphtha (petroleum), hydrotreated heavy | 155 to 217 | 311 to 422.6 | |
| Naphtha (petroleum), hydrotreated heavy | 155 to 217 | 311 to 422.6 | |

- Flammability** : Not available.
Lower and upper explosion limit : Lower: 1.4%
Upper: 12.6%
Flash point : Closed cup: 38°C (100.4°F)
Auto-ignition temperature :

| Ingredient name | °C | °F | Method |
|---|------------|------------|--------|
| Naphtha (petroleum), hydrotreated heavy | 280 to 470 | 536 to 878 | |
| Naphtha (petroleum), hydrotreated heavy | 280 to 470 | 536 to 878 | |

- Decomposition temperature** : Not available.
pH : Not available.
Viscosity : Not available.
Solubility(ies) :
Not available.
Solubility in water : Not available.
Partition coefficient: n-octanol/ water : Not applicable.
Vapour pressure :

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|---|-------------------------|------------|--------|-------------------------|-----|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| Naphtha (petroleum), hydrotreated heavy | 0.75006 to 2.25018 | 0.1 to 0.3 | | | | |
| Naphtha (petroleum), hydrotreated heavy | 0.75006 to 2.25018 | 0.1 to 0.3 | | | | |

- Relative density** : Not available.
Density : 1.3 g/cm³

SECTION 9: Physical and chemical properties

| | |
|---------------------------------|-------------------|
| Vapour density | : Not available. |
| Explosive properties | : Not available. |
| Oxidising properties | : Not available. |
| <u>Particle characteristics</u> | |
| 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 | : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| 10.5 Incompatible materials | : Reactive or incompatible with the following materials: oxidising materials |
| 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 |
|--|---------------------------------|--------------------|------------------------|----------|
| Naphtha (petroleum), hydrotreated heavy | LC50 Inhalation Vapour | Rat | 8500 mg/m ³ | 4 hours |
| | LD50 Oral | Rat | >6 g/kg | - |
| Naphtha (petroleum), hydrotreated heavy | LC50 Inhalation Vapour | Rat | 8500 mg/m ³ | 4 hours |
| | LD50 Oral | Rat | >6 g/kg | - |
| 3-iodo-2-propynyl-butyl carbamate | LC50 Inhalation Dusts and mists | Rat | 0.67 g/m ³ | 4 hours |
| | LC50 Inhalation Dusts and mists | Rat | 0.763 mg/l | 4 hours |
| | LD50 Dermal | Rat | >2000 mg/kg | - |
| Cobalt bis(2-ethylhexanoate) | LD50 Oral | Rat | 400 mg/kg | - |
| | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Oral | Rat | 1.22 g/kg | - |
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | LC50 Inhalation Dusts and mists | Rat - Male, Female | 0.26 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >652 mg/kg | - |
| | LD50 Oral | Rat | 1585 mg/kg | - |

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

Acute toxicity estimates

| Route | ATE value |
|------------------------------|-------------|
| Inhalation (dusts and mists) | 378.26 mg/l |

Irritation/Corrosion

SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-----------------------------------|------------------------|---------|-------|-------------------|-------------|
| titanium dioxide | Skin - Mild irritant | Human | - | 72 hours 300 ug l | - |
| 3-iodo-2-propynyl-butyl carbamate | Eyes - Severe irritant | Rabbit | - | - | - |

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

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|-----------------------------------|-------------------|------------|-----------------|
| 3-iodo-2-propynyl-butyl carbamate | skin | Guinea pig | Not sensitizing |

Conclusion/Summary : May cause an allergic skin reaction.

Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|-----------------------------------|------|---|----------|
| 3-iodo-2-propynyl-butyl carbamate | - | Experiment: In vitro Subject: Bacteria | Negative |

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

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species | Dose | Exposure |
|-----------------------------------|-------------------|-----------|---------------------|-----------------|----------------|--------------------------|
| 3-iodo-2-propynyl-butyl carbamate | Negative | - | Negative | Rabbit - Female | Oral: 20 mg/kg | 13 days; 7 days per week |
| | Positive | - | Negative | Rabbit - Female | Oral: 50 mg/kg | 13 days; 7 days per week |

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

Teratogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-----------------------------------|-----------------|-----------------|----------|----------|
| 3-iodo-2-propynyl-butyl carbamate | Negative - Oral | Rabbit - Female | 50 mg/kg | - |

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 |
|---|------------|-------------------|------------------|
| Naphtha (petroleum), hydrotreated heavy | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-----------------------------------|------------|-------------------|---------------|
| 3-iodo-2-propynyl-butyl carbamate | Category 1 | - | larynx |

Aspiration hazard

| Product/ingredient name | Result |
|---|--------------------------------|
| Naphtha (petroleum), hydrotreated heavy | ASPIRATION HAZARD - Category 1 |
| Naphtha (petroleum), hydrotreated heavy | ASPIRATION HAZARD - Category 1 |

SECTION 11: Toxicological information

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : 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.
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 effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
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 |
|-----------------------------------|---------------------------------------|---|----------|
| titanium dioxide | Acute LC50 3 mg/l Fresh water | Crustaceans - <i>Ceriodaphnia dubia</i> - Neonate | 48 hours |
| | Acute LC50 6.5 mg/l Fresh water | Daphnia - <i>Daphnia pulex</i> - Neonate | 48 hours |
| | Acute LC50 >1000000 µg/l Marine water | Fish - <i>Fundulus heteroclitus</i> | 96 hours |
| 3-iodo-2-propynyl-butyl carbamate | Acute EC50 0.022 mg/l Fresh water | Algae - <i>Scenedemus subspicatus</i> | 72 hours |
| | Acute EC50 0.16 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 0.067 mg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |

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TEKNOLIN - All variants

Label No : 50800

SECTION 12: Ecological information

| | | | |
|--|---|--|---|
| 4,5-dichloro-2-octyl-2H-isothiazol-3-one | Acute NOEC 0.049 mg/l Fresh water Chronic NOEC 0.05 mg/l Fresh water Acute EC50 0.003 mg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> Daphnia - <i>Daphnia Magna</i> Algae - <i>Pseudokirchneriella subcapitata</i> | 96 hours 21 days 72 hours |
| | Acute EC50 18 ppb Marine water Acute EC50 0.001 mg/l Fresh water Acute LC50 22 µg/l Fresh water Acute LC50 2.7 ppb Fresh water Chronic NOEC 19.789 µg/l Marine water Chronic NOEC 0.56 ppb | Algae - <i>Skeletonema costatum</i> Daphnia - <i>Daphnia magna</i> Crustaceans - <i>Gammarus pulex</i> Fish - <i>Oncorhynchus mykiss</i> Algae - <i>Nitzschia pungens</i> Fish - <i>Oncorhynchus mykiss</i> | 96 hours 48 hours 48 hours 96 hours 96 hours 97 days |

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

12.2 Persistence and degradability

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

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-----------------------------------|-------------------|------------|------------------|
| 3-iodo-2-propynyl-butyl carbamate | - | - | Not readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---|--------------------|------------|-----------|
| Naphtha (petroleum), hydrotreated heavy | - | 10 to 2500 | High |
| Naphtha (petroleum), hydrotreated heavy | - | 10 to 2500 | High |
| 3-iodo-2-propynyl-butyl carbamate | >1 | - | Low |
| Cobalt bis(2-ethylhexanoate) | - | 15600 | High |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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. Risk of self-ignition of used cleaning rags, paper wipes etc. Contaminated materials should be soaked in water and placed in a closed metal container before disposal.

SECTION 13: Disposal considerations

- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.
- European waste catalogue (EWC)** : 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---------------------------------|---|---|--|---|
| 14.1 UN number or ID number | UN1263 | UN1263 | UN1263 | UN1263 |
| 14.2 UN proper shipping name | PAINT | PAINT | PAINT | Paint |
| 14.3 Transport hazard class(es) | 3  | 3  | 3  | 3  |
| 14.4 Packing group | III | III | III | III |
| 14.5 Environmental hazards | No. | No. | No. | No. |

Additional information

- ADR/RID** : **Viscous liquid exception** This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.
Tunnel code (D/E)
- ADN** : **Viscous liquid exception** This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.
- IMDG** : **Viscous liquid exception** This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.
- 14.6 Special precautions for user** : **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.

SECTION 15: Regulatory information

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] |
|-------------------------|-----|---------------------|
| TEKNOLIN | ≥90 | 3 |

Labelling :

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

| Category |
|----------|
| P5c |

National regulations

Austria

VbF class : A II
Very dangerous flammable liquid.

Limitation of the use of organic solvents : Permitted.

Czech Republic

Storage code : II

Denmark

Danish fire class : II-1

Executive Order No. 1795/2015

| Ingredient name | Annex I Section A | Annex I Section B |
|------------------------------|-------------------|-------------------|
| titanium dioxide | Listed | - |
| Cobalt bis(2-ethylhexanoate) | Listed | - |

MAL-code : 2-6

Protection based on MAL : According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:

General: Gloves must be worn for all work that may result in soiling. Apron/ coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

SECTION 15: Regulatory information

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 2-6

Application: When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Gas filter mask and protective clothing must be worn.

When spraying in existing* spray booths, if the operator is outside the spray zone.

- Air-supplied full mask and protective clothing must be worn.

During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied half mask, protective clothing and eye protection must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

- Restrictions on use** : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.
- List of undesirable substances** : Not listed
- Carcinogenic waste** : Waste containers must be labeled: Contains a substance or substances regulated by Danish working environment legislation on cancer risks.

[Finland](#)

[France](#)

SECTION 15: Regulatory information

- Social Security Code, Articles L 461-1 to L 461-7** : Naphtha (petroleum), hydrotreated heavy Naphtha (petroleum), hydrotreated heavy Cobalt bis(2-ethylhexanoate) RG 84
RG 84
RG 70
- Reinforced medical surveillance** : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

Germany TRGS 905

| Ingredient name | Carcinogen | Mutagen | Reproductive toxicity - Fertility | Reproductive toxicity - Development |
|------------------|------------|---------|-----------------------------------|-------------------------------------|
| Cobalt compounds | K2 | M1A | RF1A | RD1A |

Storage class (TRGS 510) : 3

Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Danger criteria

| Category | Reference number |
|----------|------------------|
| P5c | 1.2.5.3 |

Hazard class for water : 3

Technical instruction on air quality control : TA-Luft Number 5.2.5: 44.5%
TA-Luft Class I - Number 5.2.5: 0.9%
TA-Luft Class I - Number 5.2.7.1.1: 0.1%

AOX : The product contains organically bound halogens and can contribute to the AOX value in waste water.

Italy

D.Lgs. 152/06 : Not determined.

Netherlands

Ministry of Social Affairs and Employment (SZW) - Carcinogenic substances and processes, mutagenic or reprotoxic substances

| Ingredient name | Carcinogen | Mutagen | Reproductive toxicity - Fertility | Reproductive toxicity - Development | Harmful via breastfeeding |
|--|------------|---------|-----------------------------------|-------------------------------------|---------------------------|
| Naphtha (petroleum), hydrotreated heavy | Listed | Listed | - | - | - |
| Naphtha (petroleum), hydrotreated heavy | Listed | Listed | - | - | - |
| silica, crystalline (NL-carcinogen specific) | Listed | - | - | - | - |
| Naphtha (petroleum), hydrodesulfurized heavy | Listed | Listed | - | - | - |
| 2-ethylhexanoic acid and salts excluding substances specifically listed in Annex VI of CLP | - | - | - | Development 1B | - |

Water Discharge Policy (ABM) : Z(1) Non biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/ reprotoxicity/ bioacumulative potential/ toxicity or persistence). Decontamination effort: Z

Norway

Sweden

Flammable liquid class (SRVFS 2005:10) : 2b

Switzerland

VOC content : VOC (w/w): 21.1%

International regulations

SECTION 15: Regulatory information

[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 |
|---|---|
| Flam. Liq. 3, H226 Skin Sens. 1, H317 Aquatic Chronic 3, H412 | On basis of test data Calculation method Calculation method |

[Full text of abbreviated H statements](#)

| | |
|--------|---|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H360FD | May damage fertility. May damage the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very 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. |
| EUH071 | Corrosive to the respiratory tract. |

[Full text of classifications \[CLP/GHS\]](#)

SECTION 16: Other information

| | |
|-------------------|---|
| Acute Tox. 2 | ACUTE TOXICITY - Category 2 |
| 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 3 | 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. 1B | REPRODUCTIVE TOXICITY - Category 1B |
| Skin Corr. 1 | SKIN CORROSION/IRRITATION - Category 1 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1A | SKIN SENSITISATION - Category 1A |
| STOT RE 1 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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Version : 9

TEKNOLIN

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.

