# SAFETY DATA SHEET

TEKNOS

TEKNOSYNT COMBI 1277 - All variants

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

### 1.1 Product identifier

**Product name** : TEKNOSYNT COMBI 1277 - 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 Ireland Limited, 52 Ballymoughan Road, Magherafelt, BT45 6HN, UK. Tel. +44 (0) 2879 301 472.

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

**Telephone number** : NHS: 111

## 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
STOT SE 3, H336
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.
H336 - May cause drowsiness or dizziness.
H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**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** : P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

**Storage** : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

## SECTION 2: Hazards identification

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Contains: Naphtha (petroleum), hydrotreated heavy; Reaction mass of Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate; Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine and neodecanoic acid, cobalt salt

**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

**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| titanium dioxide | REACH #: 01-2119489379-17<br>EC: 236-675-5<br>CAS: 13463-67-7 | ≥25 - ≤50 | Carc. 2, H351 (inhalation) | - | [1] [*] |
| Naphtha (petroleum), hydrotreated heavy | REACH #: 01-2119463258-33<br>EC: 265-150-3<br>CAS: 64742-48-9<br>Index: 649-327-00-6 | ≥25 - <50 | Flam. Liq. 3, H226<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>EUH066 | EUH066: C ≥ 50% | [1] |
| Xylene | REACH #: 01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7<br>Index: 601-022-00-9 | ≤3 | Flam. Liq. 3, H226<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>STOT RE 2, H373 (oral, inhalation)<br>Asp. Tox. 1, H304 | ATE [Dermal] = 1100 mg/kg<br>ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| Ethylbenzene | REACH #: 01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4 | <1 | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373 (hearing organs) (oral, inhalation)<br>Asp. Tox. 1, H304 | ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |
| 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 #: 01-2119491304-40<br>EC: 915-687-0<br>CAS: 1065336-91-5 | ≤1 | Skin Sens. 1A, H317<br>Repr. 2, H361f<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | M [Acute] = 1<br>M [Chronic] = 1 | [1] |

## SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---|---|---|---|
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | REACH #: 01-2119979085-27<br>EC: 309-629-8<br>CAS: 100545-48-0 | ≤0.3 | Skin Sens. 1B, H317<br>Aquatic Chronic 3, H412 | - | [1] |
| propylidynetrimethanol | REACH #: 01-2119486799-10<br>EC: 201-074-9<br>CAS: 77-99-6 | ≤0.3 | Repr. 2, H361fd | - | [1] |
| neodecanoic acid, cobalt salt | REACH #: 01-2119970733-31<br>EC: 248-373-0<br>CAS: 27253-31-2 | ≤0.3 | Acute Tox. 4, H302<br>Skin Sens. 1, H317<br>STOT RE 1, H372<br>Aquatic Chronic 3, H412 | ATE [Oral] = 500 mg/kg | [1] [2] |
| 1-Methoxy 2-propanol | REACH #: 01-2119457435-35<br>EC: 203-539-1<br>CAS: 107-98-2<br>Index: 603-064-00-3 | ≤0.1 | Flam. Liq. 3, H226<br>STOT SE 3, H336 | - | [1] [2] |
| Dipropyleneglycolmethylether | REACH #: 01-2119450011-60<br>EC: 252-104-2<br>CAS: 34590-94-8 | ≤0.1 | Not classified. | - | [2] |
| 1,2,4-trimethylbenzene | EC: 202-436-9<br>CAS: 95-63-6<br>Index: 601-043-00-3 | ≤0.1 | Flam. Liq. 3, H226<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>Aquatic Chronic 2, H411<br>**See Section 16 for the full text of the H statements declared above.** | ATE [Inhalation (vapours)] = 18 mg/l | [1] [2] |

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
[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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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.

## SECTION 4: First aid measures

**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 necessary, call a poison center or physician. 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

**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, $CO_2$, 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
phosphorus oxides
metal oxide/oxides

## SECTION 5: Firefighting measures

### 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".

**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,

## SECTION 7: Handling and storage

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**

| 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 |
|---|---|
| Xylene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin.**<br>STEL: 441 mg/m³ 15 minutes.<br>TWA: 50 ppm 8 hours.<br>TWA: 220 mg/m³ 8 hours.<br>STEL: 100 ppm 15 minutes. |
| Ethylbenzene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>STEL: 552 mg/m³ 15 minutes.<br>STEL: 125 ppm 15 minutes.<br>TWA: 100 ppm 8 hours.<br>TWA: 441 mg/m³ 8 hours. |
| neodecanoic acid, cobalt salt | **EH40/2005 WELs (United Kingdom (UK), 1/2020). [cobalt and cobalt compounds as Co] Inhalation sensitiser.**<br>TWA: 0.1 mg/m³, (as Co) 8 hours. |
| 1-Methoxy 2-propanol | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.**<br>STEL: 560 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 375 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours. |
| Dipropyleneglycolmethylether | **EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed** |

| | |
|---|---|
| | **through skin.**<br>TWA: 308 mg/m³ 8 hours.<br>TWA: 50 ppm 8 hours. |
| 1,2,4-trimethylbenzene | **EH40/2005 WELs (United Kingdom (UK), 1/2020). [trimethylbenzenes, all isomers or mixtures]**<br>TWA: 25 ppm 8 hours.<br>TWA: 125 mg/m³ 8 hours. |

**Biological exposure indices**

| Product/ingredient name | Exposure indices |
|---|---|
| Xylene | **EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers]**<br>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/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 1.9 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 178.57 mg/m³ | 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/m³ | General population | Local |
| | DNEL | Long term Inhalation | 837.5 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 1066.67 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 1152 mg/m³ | General population | Systemic |
| | DNEL | Short term Inhalation | 1286.4 mg/m³ | Workers | Systemic |
| Xylene | DNEL | Long term Inhalation | 65.3 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 260 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 221 mg/m³ | Workers | Local |
| | DNEL | Long term Oral | 12.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 65.3 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 125 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 212 mg/kg | Workers | Systemic |

| | | | | | |
|---|---|---|---|---|---|
| | | | bw/day | | |
| | DNEL | Long term Inhalation | 221 mg/m³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 442 mg/m³ | Workers | Systemic |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | DNEL | Long term Inhalation | 0.055 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 0.308 mg/m³ | Workers | Local |
| propylidynetrimethanol | DNEL | Long term Oral | 0.34 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.34 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.58 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.94 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 3.3 mg/m³ | Workers | Systemic |
| neodecanoic acid, cobalt salt | DNEL | Long term Oral | 32 µg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 43 µg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 273.2 µg/m³ | 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

## SECTION 8: Exposure controls/personal protection

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.

**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 |
|---|---|---|---|
| Xylene | 136.16 | 277.1 | |
| Naphtha (petroleum), hydrotreated heavy | 155 to 217 | 311 to 422.6 | |

**Flammability** : Not available.

**Lower and upper explosion limit** : Lower: 0.8%
Upper: 7.6%

**Flash point** : Closed cup: 36°C (96.8°F)

**Auto-ignition temperature** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| Naphtha (petroleum), hydrotreated heavy | 280 to 470 | 536 to 878 | |
| Xylene | 432 | 809.6 | |

**Decomposition temperature** : Not available.

**pH** : Not available.

**Viscosity** : Kinematic (40°C): >20.5 $mm^2/s$

**Solubility(ies)** :

Not available.

## SECTION 9: Physical and chemical properties

**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 |
| Xylene | 6.7 | 0.89 | | | | |
| Naphtha (petroleum), hydrotreated heavy | 0.75006 to 2.25018 | 0.1 to 0.3 | | | | |

**Relative density** : Not available.

**Density** : 1.2 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** : 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/m³ | 4 hours |
| | LD50 Oral | Rat | >6 g/kg | - |
| Xylene | LC50 Inhalation Vapour | Rat | 21.7 mg/l | 4 hours |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| Reaction mass of Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | LD50 Dermal | Rat | >3170 mg/kg | - |
| | LD50 Oral | Rat | 3230 mg/kg | - |
| propylidynetrimethanol | LD50 Oral | Rat | 14000 mg/kg | - |

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

## SECTION 11: Toxicological information

### Acute toxicity estimates

| Route | ATE value |
|---|---|
| Dermal<br>Inhalation (vapours) | 48199.67 mg/kg<br>482 mg/l |

### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| titanium dioxide | Skin - Mild irritant | Human | - | 72 hours 300 ug l | - |
| Xylene | Eyes - Mild irritant | Rabbit | - | 87 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 mg | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 uL | - |
| | Skin - Moderate irritant | Rabbit | - | 100 % | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 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 |
|---|---|---|---|
| Naphtha (petroleum), hydrotreated heavy | Category 3 | - | Narcotic effects |
| Xylene | Category 3 | - | Respiratory tract irritation |

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|---|---|---|
| Xylene | Category 2 | oral, inhalation | - |
| neodecanoic acid, cobalt salt | Category 1 | - | - |

### Aspiration hazard

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

**Information on likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

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

**Ingestion** : Can cause central nervous system (CNS) depression.

## SECTION 11: Toxicological information

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

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

**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 - *Ceriodaphnia dubia* - Neonate | 48 hours |
| | Acute LC50 6.5 mg/l Fresh water | Daphnia - *Daphnia pulex* - Neonate | 48 hours |
| | Acute LC50 >1000000 µg/l Marine water | Fish - *Fundulus heteroclitus* | 96 hours |
| Reaction mass of Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | EC50 1.68 mg/l | Aquatic plants - *Desmodesmodus subspicatus* | 72 hours |
| | Acute LC50 0.9 mg/l | Fish - *Brachydanio rerio* | 96 hours |
| | Chronic NOEC 1 mg/l | Daphnia | 21 days |

## SECTION 12: Ecological information

| | | | |
|---|---|---|---|
| propylidynetrimethanol | Acute EC50 13000000 µg/l Fresh water<br>Acute LC50 14400000 µg/l Marine water | Daphnia - *Daphnia magna*<br>Fish - *Cyprinodon variegatus* | 48 hours<br>96 hours |

**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.

### 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Naphtha (petroleum), hydrotreated heavy | - | 10 to 2500 | High |
| Xylene | 3.12 | 8.1 to 25.9 | Low |
| propylidynetrimethanol | -0.47 | <1 | Low |
| neodecanoic acid, cobalt salt | - | 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.

**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.

**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] |
|---|---|---|
| TEKNOSYNT COMBI 1277 | ≥90 | 3 |

**Labelling** :

**Other EU regulations**

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

## SECTION 15: Regulatory information

**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**

| Product/ingredient name | List name | Name on list | Classification | Notes |
|---|---|---|---|---|
| neodecanoic acid, cobalt salt | UK Occupational Exposure Limits EH40 - WEL | cobalt and cobalt compounds as Co | Carc. | - |

**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]**

## SECTION 16: Other information

| Classification | Justification |
|---|---|
| Flam. Liq. 3, H226 | On basis of test data |
| Skin Sens. 1, H317 | Calculation method |
| STOT SE 3, H336 | Calculation method |
| Aquatic Chronic 3, H412 | Calculation method |

**Full text of abbreviated H statements**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful 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. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| 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. 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 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Carc. 2 | CARCINOGENICITY - Category 2 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Repr. 2 | REPRODUCTIVE TOXICITY - Category 2 |
| 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 RE 1 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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TEKNOSYNT COMBI 1277 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.**