SAFETY DATA SHEET



TEKNOSYNT COMBI 1277 - All variants

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

1.1 Product identifier

: FEKNOSYNT COMBI 1277 - All variants **Product name**

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

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

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

responsible for this SDS

National contact

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

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : 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 **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.

Date of issue/Date of revision Version :7 : 05/10/2023 Date of previous issue · 08/12/2022 1/27 Label No :50834

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 Cobalt bis(2-ethylhexanoate)

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

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	Туре
Manium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≥25 - ≤50	Carc. 2, H351 (inhalation)	-	[1] [*]
Naphtha (petroleum), hydrotreated heavy	REACH #: 01-2119463258-33 EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6	≥25 - <50	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	EUH066: C ≥ 50%	[1]
Xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤3	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (oral, inhalation) Asp. Tox. 1, H304	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/	[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 EC: 915-687-0 CAS: 1065336-91-5	≤1	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine	REACH #: 01-2119979085-27 EC: 309-629-8 CAS: 100545-48-0	≤0.3	Skin Sens. 1B, H317 Aquatic Chronic 3, H412	-	[1]
propylidynetrimethanol	REACH #:	≤0.3	Repr. 2, H361fd	-	[1]

Date of issue/Date of revision: 05/10/2023Date of previous issue: 08/12/2022Version: 72/27▼EKNOSYNT COMBI 1277 - All variantsLabel No : 50834

SECTION 3: Composition/information on ingredients								
	01-2119486799-10 EC: 201-074-9 CAS: 77-99-6							
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 See Section 16 for the full text of the H statements declared above.	M [Acute] = 1	[1]			

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.

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.

Date of issue/Date of revision: 05/10/2023Date of previous issue: 08/12/2022Version: 73/27▼EKNOSYNT COMBI 1277 - All variantsLabel No: 50834

SECTION 4: First aid measures

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, 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 dioxide carbon monoxide phosphorus oxides 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.

Label No :50834

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".

Date of issue/Date of revision : 05/10/2023 Date of previous issue : 08/12/2022 Version : 7 4/27

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 noncombustible, 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

Date of issue/Date of revision : 05/10/2023 · 08/12/2022 Version: 7 5/27 Date of previous issue

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 : Not available.

solutions

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Kylene Cobalt bis(2-ethylhexanoate)	Regulation on Limit Values - MAC (Austria, 4/2021). [Xylenes (all isomers)] PEAK: 442 mg/m³, 4 times per shift, 15 minutes. TWA: 50 ppm 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 221 mg/m³ 8 hours. 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/m³, (measured as Co) 8 hours. Form: Inhalable fraction
	PEAK: 0.4 mg/m³, (measured as Co), 4 times per shift, 15 minutes. Form: Inhalable fraction
▼ylene	Limit values (Belgium, 5/2021). [Xylene] Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes.
K ylene	Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021). [Xylene (mixture of isomers), pure] Absorbed through skin. Limit value 8 hours: 221 mg/m³ 8 hours. Limit value 15 min: 442 mg/m³ 15 minutes. Limit value 15 min: 100 ppm 15 minutes. Limit value 8 hours: 50 ppm 8 hours.
propylidynetrimethanol	Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 6/2021). Limit value 8 hours: 50 mg/m³ 8 hours.
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/m³, (as cobalt) 8 hours.
▼ylene	Ministry of Economy, Labour and Entrepreneurship ELV/STELV (Croatia, 1/2021). [xylene (all isomers)] Absorbed through skin. STELV: 442 mg/m³ 15 minutes. STELV: 100 ppm 15 minutes. ELV: 221 mg/m³ 8 hours. ELV: 50 ppm 8 hours.
Cobalt bis(2-ethylhexanoate)	Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). [cobalt and compounds] Skin sensitiser. Inhalation sensitiser.

Date of issue/Date of revision: 05/10/2023Date of previous issue: 08/12/2022Version: 76/27★EKNOSYNT COMBI 1277 - All variantsLabel No : 50834

ELV: 0.1 mg/m³, (as Co) 8 hours. Xylene Department of labour inspection (Cyprus, 7/2021). [Xylene, mixed isomers] Absorbed through skin. STEL: 100 ppm 15 minutes. STEL: 442 mg/m3 15 minutes. TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. **X**ylene Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). [xylene, technical mixture of isomers and all isomers] Absorbed through skin. TWA: 200 mg/m³ 8 hours. TWA: 45.4 ppm 8 hours. STEL: 400 mg/m³ 15 minutes. STEL: 90.8 ppm 15 minutes. 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/m³, (as Co) 8 hours. Form: aerosol, inhalable fraction. STEL: 0.1 mg/m³, (as Co) 15 minutes. Form: aerosol, inhalable fraction. Xylene Working Environment Authority (Denmark, 6/2022). [Xylenes, all isomers] Absorbed through skin. TWA: 25 ppm 8 hours. TWA: 109 mg/m³ 8 hours. STEL: 442 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. Working Environment Authority (Denmark, 6/2022). [Inorganic Cobalt bis(2-ethylhexanoate) compounds of cobalt] Carcinogen. TWA: 0.01 mg/m³, (calculated as Co) 8 hours. Xylene Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022). [Xylenes] Absorbed through skin. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. STEL: 450 mg/m³ 15 minutes. TWA: 200 mg/m³ 8 hours. Occupational exposure limits, Regulation No. 293 (Estonia, Cobalt bis(2-ethylhexanoate) 12/2022). [Cobalt and inorganic compounds] Skin sensitiser. TWA: 0.05 mg/m³, (calculated as Co) 8 hours. Xylene EU OEL (Europe, 1/2022). [xylene, mixed isomers pure] Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes. Maphtha (petroleum), hydrotreated heavy Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2020). TWA: 500 mg/m³ 8 hours. Institute of Occupational Health, Ministry of Social Affairs **Xylene** (Finland, 10/2021). [Xylenes] Absorbed through skin. STEL: 440 mg/m³ 15 minutes.

TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.

Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021). [Cobalt and its inorganic compounds]

TWA: 0.02 mg/m³, (calculated as Co) 8 hours.

Date of issue/Date of revision : 05/10/2023 · 08/12/2022 Version :7 7/27 Date of previous issue

Cobalt bis(2-ethylhexanoate)

Xylene Ministry of Labor (France, 10/2022). [xylenes, mixed isomers, pure] Absorbed through skin. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL: 442 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours. DFG MAC-values list (Germany, 7/2022). Maphtha (petroleum), hydrotreated heavy TWA: 50 ppm 8 hours. TWA: 300 mg/m³ 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. PEAK: 600 mg/m³, 4 times per shift, 15 minutes. **Xylene** TRGS 900 OEL (Germany, 6/2022). [xylene] Absorbed through TWA: 220 mg/m³ 8 hours. PEAK: 440 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. PEAK: 100 ppm 15 minutes. DFG MAC-values list (Germany, 7/2022). [Xylene (all isomers)] Absorbed through skin. TWA: 50 ppm 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 220 mg/m³ 8 hours. PEAK: 440 mg/m³, 4 times per shift, 15 minutes. Cobalt bis(2-ethylhexanoate) DFG MAC-values list (Germany, 7/2022). [Cobalt and cobalt compounds (inhalable fraction)] Absorbed through skin. Skin sensitiser. Inhalation sensitiser. Xylene Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021). [Xylenes (all isomers)] Absorbed through skin. TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 650 mg/m³ 15 minutes. Presidential Decree 307/1986: Occupational exposure limit Cobalt bis(2-ethylhexanoate) values (Greece, 9/2021). [Compounds of cobalt] TWA: 0.1 mg/m³, (as Co) 8 hours. Xylene 5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). [xylene, mixture of isomers] Absorbed through skin. TWA: 221 mg/m³ 8 hours. PEAK: 442 mg/m³ 15 minutes. PEAK: 100 ppm 15 minutes. TWA: 50 ppm 8 hours. 5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). [Cobalt and its Cobalt bis(2-ethylhexanoate) inorganic compounds] Skin sensitiser. Inhalation sensitiser. TWA: 0.02 mg/m³, (as Co) 8 hours. Xylene Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). [xvlene, all isomers] Absorbed through skin. STEL: 442 mg/m3 15 minutes. STEL: 100 ppm 15 minutes. TWA: 109 mg/m³ 8 hours. TWA: 25 ppm 8 hours. Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). Cobalt bis(2-ethylhexanoate) [cobalt and its inorganic compounds] Skin sensitiser. TWA: 0.02 mg/m³, (as Co) 8 hours. Form: Dust and fumes Xylene NAOSH (Ireland, 5/2021). [xylene mixed isomers] Absorbed through skin. Notes: EU derived Occupational Exposure Limit **Values** OELV-8hr: 50 ppm 8 hours. OELV-8hr: 221 mg/m³ 8 hours. OELV-15min: 100 ppm 15 minutes. OELV-15min: 442 mg/m³ 15 minutes. NAOSH (Ireland, 5/2021). [Cobalt and cobalt compounds as Co] Cobalt bis(2-ethylhexanoate)

Date of issue/Date of revision: 05/10/2023Date of previous issue: 08/12/2022Version: 78/27▼EKNOSYNT COMBI 1277 - All variantsLabel No : 50834

Sensitization potential. Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV-8hr: 0.02 mg/m³, (as Co) 8 hours. Xylene Legislative Decree No. 819/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020). [Xylenes, mixed isomers, pure] Absorbed through skin. 8 hours: 50 ppm 8 hours. 8 hours: 221 mg/m³ 8 hours. Short Term: 100 ppm 15 minutes. Short Term: 442 mg/m³ 15 minutes. Xylene Ministers Cabinet Regulations Nr.325 - AER (Latvia, 2/2021). [Xylenes] Absorbed through skin. TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes. Xylene Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). [xylene, mixed isomers, pure] Absorbed through skin. STEL: 442 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes. TWA: 221 mg/m³ 8 hours. Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). propylidynetrimethanol CEIL: 5 ppm Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). Cobalt bis(2-ethylhexanoate) [Cobalt and its inorganic compounds] Skin sensitiser. Inhalation sensitiser. TWA: 0.05 mg/m³, (as Co) 8 hours. Xylene Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021). [xylenes, mixed isomers, pure] Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes. **X**ylene EU OEL (Europe, 1/2022). [xylene, mixed isomers pure] Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes. Xylene Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 12/2022). [xylenes (all isomers)] Absorbed through skin. OEL, 8-h TWA: 210 mg/m³ 8 hours. STEL,15-min: 442 mg/m³ 15 minutes. STEL,15-min: 100 ppm 15 minutes. OEL, 8-h TWA: 47.5 ppm 8 hours. Xylene FOR-2011-12-06-1358 (Norway, 12/2022). [Xylene, all isomers] Absorbed through skin. Notes: indicative limit value TWA: 25 ppm 8 hours. TWA: 108 mg/m³ 8 hours. FOR-2011-12-06-1358 (Norway, 12/2022). [Inorganic cobalt Cobalt bis(2-ethylhexanoate) compounds (except Co(II))] Skin sensitiser. Reproductive toxin. TWA: 0.02 mg/m³, (calculated as Co) 8 hours.

Date of issue/Date of revision · 08/12/2022 Version :7 9/27 : 05/10/2023 Date of previous issue Label No : 50834

Maphtha (petroleum), hydrotreated heavy

Xylene

Cobalt bis(2-ethylhexanoate)

Xylene

Cobalt bis(2-ethylhexanoate)

Xylene

Xylene

Cobalt bis(2-ethylhexanoate)

Xylene

Xylene

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). [benzin to varnish]

TWA: 300 mg/m³ 8 hours. STEL: 900 mg/m³ 15 minutes.

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). [xylene - mixed isomers (1,2-, 1,3-, 1,4-)] Absorbed through skin.

TWA: 100 mg/m³ 8 hours. STEL: 200 mg/m³ 15 minutes.

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/m³, (calculated as Co) 8 hours.

Portuguese Institute of Quality (Portugal, 11/2014). [Xylene]

TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes.

Portuguese Institute of Quality (Portugal, 11/2014). [cobalt and inorganic compounds]

TWA: 0.02 mg/m³, (expressed as Co) 8 hours.

HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2021). [Xylene] Absorbed through skin.

VLA: 221 mg/m³ 8 hours. VLA: 50 ppm 8 hours.

Short term: 442 mg/m³ 15 minutes. Short term: 100 ppm 15 minutes.

Government regulation SR c. 355/2006 (Slovakia, 9/2020). [xylene, mixed isomers] Absorbed through skin.

TWA: 221 mg/m³, (xylene, mixed isomers) 8 hours. TWA: 50 ppm, (xylene, mixed isomers) 8 hours.

STEL: 442 mg/m³, (xylene, mixed isomers) 15 minutes. STEL: 100 ppm, (xylene, mixed isomers) 15 minutes. Government regulation SR c. 355/2006 (Slovakia, 9/2020).

[Cobalt and its compounds] Skin sensitiser.

TWA: 0.05 mg/m³, (Cobalt and its compounds, as Co) 8 hours.

Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021). [xylene (mixture of isomers)] Absorbed through skin.

TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

KTV: 442 mg/m³, 4 times per shift, 15 minutes. KTV: 100 ppm, 4 times per shift, 15 minutes.

National institute of occupational safety and health (Spain, 4/2022). [Xylene, mixture of isomers] Absorbed through skin.

TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes.

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/m³, (as Co) 8 hours.

Date of issue/Date of revision : 05/10/2023 · 08/12/2022 Version :7 10/27 Date of previous issue

Maphtha (petroleum), hydrotreated heavy Work environment authority Regulation 2018:1 (Sweden, 9/2020).

> NGV: 50 ppm 8 hours. NGV: 300 mg/m³ 8 hours. KTV: 100 ppm 15 minutes. KTV: 600 mg/m³ 15 minutes.

Xylene Work environment authority Regulation 2018:1 (Sweden,

9/2021). [xylene] Absorbed through skin.

TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes.

propylidynetrimethanol Work environment authority Regulation 2018:1 (Sweden,

9/2021).

TWA: 5 mg/m³ 8 hours.

Work environment authority Regulation 2018:1 (Sweden, Cobalt bis(2-ethylhexanoate)

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

Maphtha (petroleum), hydrotreated heavy

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.

Xylene SUVA (Switzerland, 1/2023). [Xylenes (all isomers)] Absorbed

through skin.

TWA: 50 ppm 8 hours. TWA: 220 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 440 mg/m³ 15 minutes.

SUVA (Switzerland, 1/2023). [Cobalt and its compounds] Cobalt bis(2-ethylhexanoate)

Absorbed through skin. Skin sensitiser.

TWA: 0.05 mg/m³, (calculated as Co) 8 hours. Form: inhalable

dust and aerosol

Xylene 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.

EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed Ethylbenzene

through skin.

STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m³ 8 hours.

EH40/2005 WELs (United Kingdom (UK), 1/2020). [cobalt and Cobalt bis(2-ethylhexanoate)

cobalt compounds as Co] Inhalation sensitiser.

TWA: 0.1 mg/m³, (as Co) 8 hours.

EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed 1-Methoxy 2-propanol

through skin.

STEL: 560 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

Dipropyleneglycolmethylether EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed

through skin.

TWA: 308 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

Biological exposure indices

Date of issue/Date of revision : 05/10/2023 · 08/12/2022 Version :7 11/27 Date of previous issue Label No : 50834

Product/ingredient name	Exposure indices					
Kylene	VGU BEI (Austria, 9/2020) [xylenes] BEI Fitness: 1000 μg/l, xylene [in blood]. Sampling time: one year BEI Fitness: 1.5 g/l, methylhippuricacid [in urine]. Sampling time: one year.					
Cobalt bis(2-ethylhexanoate)	VGU BEI (Austria, 9/2020) [cobalt or its compounds] BEI Fitness: 10 µg/l, cobalt [in urine]. Sampling time: one year.					
No exposure indices known.						
No exposure indices known.						
K ylene	Ministry of Economy, Labour and Entrepreneurship ILV/STEL (Croatia, 10/2018) [xylene] BEI: 1.5 mg/l, xylene [in blood]. Sampling time: at the end of the work shift. BEI: 14.13 μmol/l, xylene [in blood]. Sampling time: at the end of the work shift. BEI: 0.88 mol/mol creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the work shift. BEI: 1.5 g/g creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the work shift.					
No exposure indices known.						
⋉ ylene	Government regulation of Czech Republic Limit Values of Biological Exposure Tests (Czech Republic, 9/2015) [Xylene] Biological limit values: 820 µmol/mmol creatinine, methylhippuric acid [in urine]. Sampling time: end of the shift. Biological limit values: 1400 mg/g creatinine, methylhippuric acid [in urine]. Sampling time: end of the shift.					
No exposure indices known.						
No exposure indices known.						
No exposure indices known.						
Kylene	Institute of Occupational Health, Ministry of Social Affairs (Finland, 9/2020) [Xylene] BEI: 5 mmol/l, methylhippuricacid [in urine]. Sampling time: at the end of the work shift.					
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.						
⋉ ylene	DFG BEI-values list (Germany, 7/2022) [Xylene (all isomers)] Notes: danger from percutaneous absorption (see p. 211 and p. 228). BEI: 2000 mg/l, methylhippuric acid (toluric acid) (all isomers) [in urine]. Sampling time: end of exposure or end of shift. TRGS 903 - BEI Values (Germany, 2/2022) [Xylene (all isomers)] BEI: 2000 mg/l, methylhippuric acid [in urine]. Sampling time: end of exposure or end of shift.					
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.						

Date of issue/Date of revision : 05/10/2023 Date of previous issue :08/12/2022 Version :7 12/27 **Label No :** 50834

Xylene

No exposure indices known.

Xylene

No exposure indices known.

Xylene

Xylene

Cobalt bis(2-ethylhexanoate)

Xylene

Cobalt bis(2-ethylhexanoate)

Xylene

5/2020. (II. 6.) ITM Decree (Hungary, 12/2022) [xylene]

BEI: 1500 mg/g creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the shift.

BEI: 860 µmol/mmol creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the shift.

NAOSH (Ireland, 1/2011) [Xylene]

BMGV: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.

Portuguese Institute of Quality (Portugal, 11/2014) [Xylenes]

BEI: 1.5 g/g creatinine, (o, m, p) -methyl-boronic acids [in urine]. Sampling time: end of shift.

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

OBLV: 3 g/l, methylhippuric acid [in urine]. Sampling time: end of shift.

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

OBLV: 1 μ g/l, cobalt [in blood]. Sampling time: end of the week. OBLV: 15 μ g/l, cobalt [in urine]. Sampling time: end of the week.

Government regulation SR c. 355/2006 (Slovakia, 9/2020) [xylene, all isomers]

BLV: 781 µmol/mmol creatinine, sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift.

BLV: 1334 mg/g creatinine, sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift.

BLV: 10355 µmol/l, sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift.

BLV: 14.6 µmol/l, xylene [in blood]. Sampling time: at the end of exposure or work shift.

BLV: 2000 mg/l, sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift.

BLV: 1.5 mg/l, xylene [in blood]. Sampling time: at the end of exposure or work shift.

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 imitation.

BLV: 509.8 nmol/l, cobalt [in urine]. Sampling time: no limitation. BLV: 30 μ g/l, cobalt [in urine]. Sampling time: no limitation.

Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021) [xylene (all isomers)]

BAT: 2 g/l, methylhippuric acid (all isomers) [in urine]. Sampling time: at the end of the work shift.

Date of issue/Date of revision : 05/10/2023 Date of previous issue : 08/12/2022 Version : 7 13/27

•	•
Xylene	National institute of occupational safety and health (Spain, 4/2022) [Xylenes] VLB: 1 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.
Cobalt bis(2-ethylhexanoate)	National institute of occupational safety and health (Spain, 4/2022) [cobalt and inorganic compouns 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.	
⊠ylene	SUVA (Switzerland, 1/2023) [Xylene, all isomers] BEI: 2 g/l, methyl hippuric acid [in urine]. Sampling time: immediately after exposure or after working hours.
Cobalt bis(2-ethylhexanoate)	SUVA (Switzerland, 1/2023) [Cobalt and its compounds] BEI: 30 µg/I, cobalt [in urine]. Sampling time: immediately after exposure or after working hours. BEI: 509 nmol/I, cobalt [in urine]. Sampling time: immediately after exposure or after working hours.
X ylene	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
Maphtha (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/m ³	General population	Local
	DNEL	Long term	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/ m ³		Systemic
Xylene	DNEL	Long term	65.3 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
				•	

Date of issue/Date of revision : 05/10/2023 Date of previous issue : 08/12/2022 Version : 7 14/27

Label No : 50834

<u> </u>		1 =			1 =
	DNEL	Short term	260 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term	221 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term Oral	12.5 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term	65.3 mg/m ³	General	Systemic
		Inhalation	Ū	population	
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	212 mg/kg	Workers	Systemic
			bw/day		-,
	DNEL	Long term	221 mg/m ³	Workers	Systemic
		Inhalation			,
	DNEL	Short term	442 mg/m ³	Workers	Local
	D. 122	Inhalation	<u>_</u> g,	TV GINGIO	20041
	DNEL	Short term	442 mg/m ³	Workers	Systemic
	J. 122	Inhalation	<u>_</u> g,	TV GINGIO	Gyotomio
Octadecanoic acid, 12-hydroxy-,	DNEL	Long term	0.055 mg/	General	Local
reaction products with	DIVLE	Inhalation	m ³	population	Local
ethylenediamine		IIIIIalation	***	population	
Citylericulariirie	DNEL	Long term	0.308 mg/	Workers	Local
	DIVLE	Inhalation	m ³	VVOINCIO	Local
propylidynetrimethanol	DNEL	Long term Oral	0.34 mg/	General	Systemic
propylicyfretilifietharior	DIVLL	Long term Oral	kg bw/day	population	Gysternic
	DNEL	Long term Dermal	0.34 mg/	General	Systemic
	DIVLE	Long term Dermai	kg bw/day	population	Cysternic
	DNEL	Long term	0.58 mg/m ³		Systemic
	DINEL	Inhalation	0.30 mg/m	population	Systerric
	DNEL	Long term Dermal	0.94 mg/	Workers	Systemic
	DINEL	Long term Dermal	•	MOIVEIS	Systemic
	חאבי	Long torm	kg bw/day	Markors	Systemis
	DNEL	Long term	3.3 mg/m ³	Workers	Systemic
Cabalt bia/2 athylbayanasts	DNE	Inhalation	27	Conoral	Local
Cobalt bis(2-ethylhexanoate)	DNEL	Long term	37 µg/m³	General	Local
	DAIE	Inhalation	475//	population	0
	DNEL	Long term Oral	175 µg/kg	General	Systemic
	DAIE!	1	bw/day	population	
	DNEL	Long term	235.1 µg/	Workers	Local
		Inhalation	m³		

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

Date of issue/Date of revision : 05/10/2023 Date of previous issue : 08/12/2022 Version : 7 15/27

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.

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:

Filter type (spray application):

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour Various **Odour** Slight

Odour threshold Not available. Melting point/freezing point : Not available.

Initial boiling point and

boiling range

Ingredient name	°C	°F	Method
X /lene	136.16	277.1	
Naphtha (petroleum), hydrotreated heavy	155 to 217	311 to 422.6	

Flammability : Not available. Lower and upper explosion : Lower: 0.8% Upper: 7.6% limit

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

Auto-ignition temperature

Date of issue/Date of revision : 05/10/2023 · 08/12/2022 Version :7 16/27 Date of previous issue Label No :50834

SECTION 9: Physical and chemical properties

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

Decomposition temperature : Not available.

pН : Not available.

Kinematic (40°C): >20.5 mm²/s **Viscosity**

Solubility(ies)

Not available.

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

water

Vapour pressure

	Va	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
X ylene	6.7	0.89					
Naphtha (petroleum), hydrotreated heavy	0.75006 to 2.25018	0.1 to 0.3					

Relative density : Not available. : 1.2 g/cm³ **Density** Vapour density : Not available. **Explosive properties** : Not available. **Oxidising properties** : Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

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

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**

Date of issue/Date of revision : 05/10/2023 : 08/12/2022 Version: 7 17/27 Date of previous issue Label No : 50834

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Maphtha (petroleum),	LC50 Inhalation Vapour	Rat	8500 mg/m ³	4 hours
hydrotreated heavy				
	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	LD50 Dermal	Rat	>3170 mg/kg	-
(1,2,2,6,6-pentamethyl-				
4-piperidyl) sebacate and				
Methyl				
1,2,2,6,6-pentamethyl-				
4-piperidyl sebacate				
	LD50 Oral	Rat	3230 mg/kg	-
propylidynetrimethanol	LD50 Oral	Rat	14000 mg/kg	-
Cobalt bis(2-ethylhexanoate)	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	1.22 g/kg	-

Conclusion/Summary

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

Acute toxicity estimates

Route	ATE value
 Øermal	51083.68 mg/kg
Inhalation (vapours)	510.84 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300	-
				ug I	
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 Xylene	Category 3 Category 3		Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Date of issue/Date of revision : 05/10/2023 Date of previous issue : 08/12/2022 Version : 7 18/27

Label No : 50834

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
Xylene	Category 2	oral, inhalation	-

Aspiration hazard

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

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

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

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

to very low levels.

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

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Date of issue/Date of revision : 05/10/2023 Date of previous issue · 08/12/2022 Version :7 19/27 Label No : 50834

SECTION 11: Toxicological information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Manium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - 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 - 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
propylidynetrimethanol	Acute LC50 0.9 mg/l Chronic NOEC 1 mg/l Acute EC50 13000000 μg/l Fresh water Acute LC50 14400000 μg/l Marine water	Fish - <i>Brachydanio rerio</i> Daphnia Daphnia - <i>Daphnia magna</i> Fish - <i>Cyprinodon variegatus</i>	96 hours 21 days 48 hours 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	LogPow	BCF	Potential
Maphtha (petroleum), hydrotreated heavy	-	10 to 2500	High
Xylene	3.12	8.1 to 25.9	Low
propylidynetrimethanol	-0.47	<1	Low
Cobalt bis(2-ethylhexanoate)	-	15600	High

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

Date of issue/Date of revision : 05/10/2023 Version :7 Date of previous issue : 08/12/2022 20/27 Label No :50834

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.

Hazardous waste

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

Packaging Methods of disposal : 080111*, 200127*

: 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

: <u>Viscous liquid exception</u> 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.

user

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

Date of issue/Date of revision : 05/10/2023 · 08/12/2022 Version :7 21/27 Date of previous issue

FEKNOSYNT COMBI 1277 - All variants

Label No : 50834

SECTION 14: Transport information

14.7 Maritime transport in bulk according to IMO

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

instruments

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 : Not listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

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

Date of issue/Date of revision: 05/10/2023Date of previous issue: 08/12/2022Version: 722/27

Label No : 50834

SECTION 15: Regulatory information

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

MAL-code

3-3

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.

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: 3-3

Application: When spraying in new* booths if the operator is outside 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.

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

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. 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.

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

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

- Air-supplied full mask, arm protectors and apron must be worn.

During non-atomising spraying in existing* facilities of the combined-cabin, spraycabin and spray-booth type where the operator is working inside the spray zone.

- Air-supplied full mask, arm protectors and apron 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, coveralls 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.

Label No :50834

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

*See Regulations.

Date of issue/Date of revision : 05/10/2023 Date of previous issue : 08/12/2022 Version : 7 23/27

SECTION 15: Regulatory information

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

Social Security Code, Articles L 461-1 to L 461-7

: Maphtha (petroleum), hydrotreated heavy **RG 84**

Xylene RG 4bis, RG 84

Cobalt bis(2-ethylhexanoate) **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	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: 30.8%

TA-Luft Class I - Number 5.2.5: 0.5% TA-Luft Class I - Number 5.2.7.1.1: 0.1%

<u>Italy</u>

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
Maphtha (petroleum), hydrotreated heavy	Listed	Listed	-	-	-
xylene	-	-	-	Development 2	-
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

Label No : 50834

Date of issue/Date of revision : 05/10/2023 Date of previous issue : 08/12/2022 Version :7 24/27

SECTION 15: Regulatory information

Norway Sweden

Flammable liquid class

(SRVFS 2005:10)

Switzerland

VOC content : VOC (w/w): 30.2%

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

: 2b

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

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

assessment

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	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

⊮ 226	Flammable liquid and vapour.
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.
H360FD	May damage fertility. May damage the unborn child.
H361f	Suspected of damaging fertility.

Date of issue/Date of revision : 05/10/2023 : 08/12/2022 Version :7 25/27 Date of previous issue

Label No : 50834

SECTION 16: Other information

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

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.

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 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. Lig. 3 FLAMMABLE LIQUIDS - Category 3 Repr. 1B REPRODUCTIVE TOXICITY - Category 1B

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 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of issue/ Date of : 05/10/2023

revision

Date of previous issue : 08/12/2022

Version : 7

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.

Date of issue/Date of revision: 05/10/2023Date of previous issue: 08/12/2022Version: 726/27

Label No : 50834

Date of issue/Date of revision Version :7 : 05/10/2023 Date of previous issue : 08/12/2022 27/27 **Label No :**50834