SAFETY DATA SHEET

ÄKTA LINOLJEFÄRG - All variants

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

1.1 Product identifier

Product name : ÄKTA LINOLJEFÄRG - All variants

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

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

e-mail address of person responsible for this SDS : Prod-safe@teknos.com

National contact

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

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : In an emergency, call 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Eye Irrit. 2, H319
Skin Sens. 1, H317
Aquatic Chronic 2, H411

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.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

General : P102 - Keep out of reach of children.

SECTION 2: Hazards identification

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

Response : P391 - Collect spillage.

Storage : Not applicable.

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

Hazardous ingredients : Contains: neodecanoic acid, cobalt salt; 4,5-dichloro-2-octyl-2H-isothiazol-3-one and 2-Octyl-2H-isothiazol-3-one

Supplemental label elements : Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Contains biocidal products for dry film and in-can preservation: DCOIT and OIT.

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 EC: 236-675-5 CAS: 13463-67-7	≥10 - ≤25	Carc. 2, H351 (inhalation)	-	[1] [*]
Zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≤7.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Naphtha (petroleum), hydrotreated heavy	REACH #: 01-2119457273-39 EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6	≤5	Asp. Tox. 1, H304 EUH066	EUH066: C ≥ 50%	[1]
Naphtha (petroleum), hydrotreated heavy	REACH #: 01-2119463258-33 EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6	≤5	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	EUH066: C ≥ 50%	[1]
neodecanoic acid, cobalt salt	REACH #: 01-2119970733-31 EC: 248-373-0 CAS: 27253-31-2	≤0.3	Acute Tox. 4, H302 Skin Sens. 1, H317 STOT RE 1, H372 Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg	[1]

SECTION 3: Composition/information on ingredients

4,5-dichloro-2-octyl-2H-isothiazol-3-one	EC: 264-843-8 CAS: 64359-81-5 Index: 613-335-00-8	<0.1	Acute Tox. 4, H302 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071	ATE [Oral] = 567 mg/kg ATE [Inhalation (dusts and mists)] = 0.16 mg/l Skin Corr. 1, H314: C ≥ 5% Skin Irrit. 2, H315: 0.025% ≤ C < 5% Eye Dam. 1, H318: C ≥ 3% Eye Irrit. 2, H319: 0.025% ≤ C < 3% Skin Sens. 1, H317: C ≥ 0.0015% M [Acute] = 100 M [Chronic] = 100	[1]
2-Octyl-2H-isothiazol-3-one	EC: 247-761-7 CAS: 26530-20-1 Index: 613-112-00-5	≤0.055	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071 **See Section 16 for the full text of the H statements declared above.**	ATE [Oral] = 125 mg/kg ATE [Dermal] = 311 mg/kg ATE [Inhalation (dusts and mists)] = 0.27 mg/l Skin Sens. 1, H317: C ≥ 0.0015% M [Acute] = 100 M [Chronic] = 100	[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

[*] 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.

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

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

SECTION 4: First aid measures

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

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

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, 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 toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

SECTION 5: Firefighting measures

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. Collect spillage.

6.3 Methods and material for containment and cleaning up

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

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

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Risk of self-ignition of used cleaning rags, paper wipes etc. Contaminated materials should be soaked in water and placed in a closed metal container before disposal.

SECTION 7: Handling and storage

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 E2	5000 tonne 200 tonne	50000 tonne 500 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
neodecanoic acid, cobalt salt	**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
2-Octyl-2H-isothiazol-3-one	**Regulation on Limit Values - MAC (Austria, 4/2021). Absorbed through skin. Sensitization potential.** TWA: 0.05 mg/m³ 8 hours. Form: Inhalable fraction CEIL: 0.05 mg/m³ 15 minutes. Form: Inhalable fraction
No exposure limit value known.	
neodecanoic acid, cobalt salt	**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.
Cobalt bis(2-ethylhexanoate)	**Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). [cobalt and compounds] Skin sensitiser. Inhalation sensitiser.** ELV: 0.1 mg/m³, (as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**Ministry of Economy, Labour and Entrepreneurship ELV/ STELV (Croatia, 1/2021). [zirconium compounds]** STELV: 10 mg/m³, (as Zr) 15 minutes. ELV: 5 mg/m³, (as Zr) 8 hours.
No exposure limit value known.	

Cobalt bis(2-ethylhexanoate)	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). [Cobalt and its compounds] Skin sensitiser.** TWA: 0.05 mg/m³, (as Co) 8 hours. Form: aerosol, inhalable fraction. STEL: 0.1 mg/m³, (as Co) 15 minutes. Form: aerosol, inhalable fraction.
Cobalt bis(2-ethylhexanoate)	**Working Environment Authority (Denmark, 6/2022). [Inorganic compounds of cobalt] Carcinogen.** TWA: 0.01 mg/m³, (calculated as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**Working Environment Authority (Denmark, 6/2022). [Compounds of zirconium]** TWA: 5 mg/m³, (calculated as Zr) 8 hours. STEL: 10 mg/m³, (calculated as Zr) 15 minutes.
Cobalt bis(2-ethylhexanoate)	**Occupational exposure limits, Regulation No. 293 (Estonia, 12/2022). [Cobalt and inorganic compounds] Skin sensitiser.** TWA: 0.05 mg/m³, (calculated as Co) 8 hours.
No exposure limit value known.	
Naphtha (petroleum), hydrotreated heavy	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2020).** TWA: 500 mg/m³ 8 hours.
Naphtha (petroleum), hydrotreated heavy	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2020).** TWA: 500 mg/m³ 8 hours.
neodecanoic acid, cobalt salt	**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.
No exposure limit value known.	
Naphtha (petroleum), hydrotreated heavy	**DFG MAC-values list (Germany, 7/2022).** 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.
Naphtha (petroleum), hydrotreated heavy	**DFG MAC-values list (Germany, 7/2022).** 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.
neodecanoic acid, cobalt salt	**DFG MAC-values list (Germany, 7/2022). [Cobalt and cobalt compounds (inhalable fraction)] Absorbed through skin. Skin sensitiser. Inhalation sensitiser.**
2-Octyl-2H-isothiazol-3-one	**TRGS 900 OEL (Germany, 6/2022). Absorbed through skin.** TWA: 0.05 mg/m³ 8 hours. Form: Inhalable fraction PEAK: 0.1 mg/m³ 15 minutes. Form: Inhalable fraction **DFG MAC-values list (Germany, 7/2022). Absorbed through skin. Skin sensitiser.** TWA: 0.05 mg/m³ 8 hours. Form: inhalable fraction PEAK: 0.1 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction
neodecanoic acid, cobalt salt	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021). [Compounds of cobalt]** TWA: 0.1 mg/m³, (as Co) 8 hours.
Cobalt bis(2-ethylhexanoate)	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). [Cobalt and its inorganic compounds] Skin sensitiser. Inhalation sensitiser.** TWA: 0.02 mg/m³, (as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2022). [Zirconium compounds]** TWA: 5 mg/m³, (as Zr) 8 hours. PEAK: 20 mg/m³, (as Zr) 15 minutes.

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Cobalt bis(2-ethylhexanoate)	**Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). [cobalt and its inorganic compounds] Skin sensitiser.** TWA: 0.02 mg/m³, (as Co) 8 hours. Form: Dust and fumes
2-ethylhexanoic acid, zirconium salt	**Ministry of Welfare, List of Exposure Limits (Iceland, 5/2021). [zirconium compounds]** TWA: 5 mg/m³, (as Zr) 8 hours.
neodecanoic acid, cobalt salt	**NAOSH (Ireland, 5/2021). [Cobalt and cobalt compounds as Co] Sensitization potential. Notes: Advisory Occupational Exposure Limit Values (OELVs)** OELV-8hr: 0.02 mg/m³, (as Co) 8 hours.
No exposure limit value known.	
No exposure limit value known.	
Cobalt bis(2-ethylhexanoate)	**Lithuanian Hygiene Standard HN 23 (Lithuania, 7/2022). [Cobalt and its inorganic compounds] Skin sensitiser. Inhalation sensitiser.** TWA: 0.05 mg/m³, (as Co) 8 hours.
No exposure limit value known.	
No exposure limit value known.	
No exposure limit value known.	
Cobalt bis(2-ethylhexanoate)	**FOR-2011-12-06-1358 (Norway, 12/2022). [Inorganic cobalt compounds (except Co(II))] Skin sensitiser. Reproductive toxin.** TWA: 0.02 mg/m³, (calculated as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**FOR-2011-12-06-1358 (Norway, 12/2022). [Zirconium compounds]** TWA: 5 mg/m³, (calculated as Zr) 8 hours.
Naphtha (petroleum), hydrotreated heavy	**Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [benzin to varnish]** TWA: 300 mg/m³ 8 hours. STEL: 900 mg/m³ 15 minutes.
Naphtha (petroleum), hydrotreated heavy	**Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [benzin to varnish]** TWA: 300 mg/m³ 8 hours. STEL: 900 mg/m³ 15 minutes.
Cobalt bis(2-ethylhexanoate)	**Regulation of the Minister of Family, Labor and Social Policy of 18 February 2021, regarding the highest permissible concentrations and values of agents harmful to health in the work environment (Journal of Laws 2021, item 325) (Poland, 2/2021). [cobalt and its inorganic compounds]** TWA: 0.02 mg/m³, (calculated as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**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). [zirconium and compounds as Zr]** TWA: 5 mg/m³, (calculated as Zr) 8 hours. STEL: 10 mg/m³, (calculated as Zr) 15 minutes.
Cobalt bis(2-ethylhexanoate)	**Portuguese Institute of Quality (Portugal, 11/2014). [cobalt and inorganic compounds]** TWA: 0.02 mg/m³, (expressed as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**Portuguese Institute of Quality (Portugal, 11/2014). [Zirconium compounds]** TWA: 5 mg/m³, (expressed as Zr) 8 hours. STEL: 10 mg/m³, (expressed as Zr) 15 minutes.

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2-ethylhexanoic acid, zirconium salt	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2021). [Zirconium and compounds]** VLA: 5 mg/m³, (expressed as Zr) 8 hours. Short term: 10 mg/m³, (expressed as Zr) 15 minutes.
Cobalt bis(2-ethylhexanoate)	**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.
2-ethylhexanoic acid, zirconium salt	**Government regulation SR c. 355/2006 (Slovakia, 9/2020). [Zirconium and its compounds]** TWA: 1 mg/m³, (Zirconium and its compounds, as Zr) 8 hours.
2-ethylhexanoic acid, zirconium salt	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021). [zirconium, water insoluble compounds]** TWA: 1 mg/m³ 8 hours. Form: Inhalable fraction KTV: 1 mg/m³, 4 times per shift, 15 minutes. Form: Inhalable fraction
2-Octyl-2H-isothiazol-3-one	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 5/2021). Absorbed through skin.** TWA: 0.05 mg/m³ 8 hours. Form: Inhalable fraction KTV: 0.1 mg/m³, 4 times per shift, 15 minutes. Form: Inhalable fraction
Cobalt bis(2-ethylhexanoate)	**National institute of occupational safety and health (Spain, 4/2022). [Inorganic compounds of cobalt, except those expressly stated] Skin sensitiser. Inhalation sensitiser.** TWA: 0.02 mg/m³, (as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**National institute of occupational safety and health (Spain, 4/2022). [Compounds of zirconium]** TWA: 5 mg/m³, (as Zr) 8 hours. STEL: 10 mg/m³, (as Zr) 15 minutes.
Naphtha (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.
Cobalt bis(2-ethylhexanoate)	**Work environment authority Regulation 2018:1 (Sweden, 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
Naphtha (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.
Naphtha (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.
Cobalt bis(2-ethylhexanoate)	**SUVA (Switzerland, 1/2023). [Cobalt and its compounds] Absorbed through skin. Skin sensitiser.** TWA: 0.05 mg/m³, (calculated as Co) 8 hours. Form: inhalable dust and aerosol
2-ethylhexanoic acid, zirconium salt	**SUVA (Switzerland, 1/2023). [zirconium and its insoluble compounds (except ZrO2 and ZrCl4)]** TWA: 5 mg/m³, (calculated as Zr) 8 hours. Form: Inhalable fraction STEL: 10 mg/m³, (calculated as Zr) 15 minutes. Form: Inhalable fraction
2-Octyl-2H-isothiazol-3-one	**SUVA (Switzerland, 1/2023). Absorbed through skin. Skin sensitiser.** TWA: 0.05 mg/m³ 8 hours. Form: Inhalable fraction

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	STEL: 0.1 mg/m³ 15 minutes. Form: Inhalable fraction
Cobalt bis(2-ethylhexanoate)	**EH40/2005 WELs (United Kingdom (UK), 1/2020). [cobalt and cobalt compounds as Co] Inhalation sensitiser.** TWA: 0.1 mg/m³, (as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	**EH40/2005 WELs (United Kingdom (UK), 1/2020). [zirconium compounds as Zr]** STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours.
1-Methoxy 2-propanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 560 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
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

Product/ingredient name	Exposure indices
neodecanoic acid, cobalt salt	**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.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
neodecanoic acid, cobalt salt	**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.	
neodecanoic acid, cobalt salt	**DFG BEI-values list (Germany, 7/2022) [Cobalt and its compounds] Notes: danger from percutaneous absorption (see p. 211 and p. 228).** BGV: 35 µg/l, cobalt [in urine]. Sampling time: for long-term exposures: at the end of the shift after several shifts. BEI: 1.5 µg/l, cobalt [in urine]. Sampling time: for long-term exposures: at the end of the shift after several shifts.
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	

SECTION 8: Exposure controls/personal protection

No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
Cobalt bis(2-ethylhexanoate)	**HG 1218/2006, Annex 2, with subsequent modifications and additions (Romania, 3/2020) [Cobalt compounds]** OBLV: 1 µg/l, cobalt [in blood]. Sampling time: end of the week. OBLV: 15 µg/l, cobalt [in urine]. Sampling time: end of the week.
Cobalt bis(2-ethylhexanoate)	**Government regulation SR c. 355/2006 (Slovakia, 9/2020) [cobalt and its compounds]** BLV: 38.45 nmol/mmol creatinine, cobalt [in urine]. Sampling time: no limitation. BLV: 20.03 µg/g creatinine, cobalt [in urine]. Sampling time: no limitation. BLV: 509.8 nmol/l, cobalt [in urine]. Sampling time: no limitation. BLV: 30 µg/l, cobalt [in urine]. Sampling time: no limitation.
No exposure indices known.	
Cobalt bis(2-ethylhexanoate)	**National institute of occupational safety and health (Spain, 4/2022) [cobalt and inorganic 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.	
Cobalt bis(2-ethylhexanoate)	**SUVA (Switzerland, 1/2023) [Cobalt and its compounds]** BEI: 30 µg/l, cobalt [in urine]. Sampling time: immediately after exposure or after working hours. BEI: 509 nmol/l, cobalt [in urine]. Sampling time: immediately after exposure or after working hours.
No exposure indices known.	

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
Zinc oxide	DNEL	Long term Inhalation	0.5 mg/m³	Workers	Local
	DNEL	Long term Oral	0.83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.5 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
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	General	Systemic

			bw/day	population	
	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
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
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.

SECTION 8: Exposure controls/personal protection

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: chemical splash goggles.

Skin protection

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

Recommendations : Wear suitable gloves tested to EN374.

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

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

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

Wash hands before breaks and immediately after handling the product.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

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

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

Filter type: A

Filter type (spray application): A P

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Various

Odour : Slight

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range :

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

Flammability : Not available.

SECTION 9: Physical and chemical properties

Lower and upper explosion limit : Lower: 1.4%
Upper: 7.6%

Flash point : Closed cup: 38°C (100.4°F)

Auto-ignition temperature :

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

Decomposition temperature : Not available.

pH : Not applicable.

Viscosity : Not available.

Solubility(ies) :

Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure :

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

Relative density : Not available.

Density : 1.6 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	-
Naphtha (petroleum), hydrotreated heavy	LC50 Inhalation Vapour	Rat	8500 mg/m³	4 hours
	LD50 Oral	Rat	>6 g/kg	-
4,5-dichloro-2-octyl-2H-isothiazol-3-one	LC50 Inhalation Dusts and mists	Rat - Male, Female	0.26 mg/l	4 hours
	LD50 Dermal	Rabbit	>652 mg/kg	-
	LD50 Oral	Rat	1585 mg/kg	-
2-Octyl-2H-isothiazol-3-one	LD50 Dermal	Rabbit	690 mg/kg	-
	LD50 Oral	Rat	550 mg/kg	-

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

Acute toxicity estimates

Route	ATE value
Not available.	

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-
Zinc oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
2-Octyl-2H-isothiazol-3-one	Eyes - Severe irritant	Rabbit	-	100 mg	-

Conclusion/Summary : Causes skin irritation.

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

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
neodecanoic acid, cobalt salt	Category 1	-	-

Aspiration hazard

SECTION 11: Toxicological information

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

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - *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
Zinc oxide	Acute IC50 46 µg/l Fresh water	Algae - *Pseudokirchneriella subcapitata* - Exponential growth phase	72 hours
	Acute IC50 1.85 mg/l Marine water	Algae - *Skeletonema costatum*	96 hours
	Acute LC50 98 µg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - *Oncorhynchus mykiss*	96 hours
4,5-dichloro-2-octyl-2H-isothiazol-3-one	Acute EC50 0.003 mg/l Fresh water	Algae - *Pseudokirchneriella subcapitata*	72 hours
	Acute EC50 18 ppb Marine water	Algae - *Skeletonema costatum*	96 hours
	Acute EC50 0.001 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 22 µg/l Fresh water	Crustaceans - *Gammarus pulex*	48 hours
	Acute LC50 2.7 ppb Fresh water	Fish - *Oncorhynchus mykiss*	96 hours
	Chronic NOEC 19.789 µg/l Marine water	Algae - *Nitzschia pungens*	96 hours
	Chronic NOEC 0.56 ppb	Fish - *Oncorhynchus mykiss*	97 days
2-Octyl-2H-isothiazol-3-one	Acute EC50 107 ppb Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 47 ppb Fresh water	Fish - *Oncorhynchus mykiss*	96 hours
	Chronic NOEC 74 ppb Fresh water	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC 8.5 ppb	Fish - *Pimephales promelas*	35 days

Conclusion/Summary : Toxic 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
Zinc oxide	-	28960	High
Naphtha (petroleum), hydrotreated heavy	-	10 to 2500	High
Naphtha (petroleum), hydrotreated heavy	-	10 to 2500	High
neodecanoic acid, cobalt salt	-	15600	High
2-Octyl-2H-isothiazol-3-one	2.45	-	Low

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.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC) : 080111*, 200127*

Packaging

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

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3 	3 	3 	3 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Tunnel code (D/E)

ADN : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

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.

SECTION 14: Transport information

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]
ÄKTA LINOLJEFÄRG	≥90	3

Labelling :

Other EU regulations

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

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

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c E2

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

SECTION 15: Regulatory information

Executive Order No. 1795/2015

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

MAL-code : 2-1

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: 2-1
Application: When using scraper or knife, brush, roller, etc, for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Gas filter mask must be worn.

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

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

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

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

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

- Air-supplied half mask, eye protection, 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.

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

*See Regulations.

Restrictions on use : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

List of undesirable substances : Not listed

SECTION 15: Regulatory information

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 :

Naphtha (petroleum), hydrotreated heavy	RG 84
Naphtha (petroleum), hydrotreated heavy	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	Reproductive toxicity - Fertility	Reproductive toxicity - Development
Cobalt compounds	K2	M1A	RF1A	RD1A

Storage class (TRGS 510) : 3

Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Danger criteria

Category	Reference number
P5c	1.2.5.3
E2	1.3.2

Hazard class for water : 3

Technical instruction on air quality control :
TA-Luft Number 5.2.5: 32.8%
TA-Luft Class I - Number 5.2.5: 0.3%
TA-Luft Class I - Number 5.2.7.1.1: 0.2%

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

Italy

D.Lgs. 152/06 : Not determined.

Netherlands

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

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

SECTION 15: Regulatory information

Norway

Sweden

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

Switzerland

VOC content : VOC (w/w): 6.9%

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.

SECTION 16: Other information

H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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.
EUH071	Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 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 Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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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.