# Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

# **SAFETY DATA SHEET**



**TEKNOZINC 3233 - GREY** 

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

# 1.1 Product identifier

Product name : TEKNOZINC 3233 - GREY

**1.2 Relevant identified uses of the substance or mixture and uses advised againstProduct 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 (UK) Limited, 7 Longlands Rd, Bicester, Oxfordshire OX26 5AH, United Kingdom. Tel. +44 (0) 1869 208005.

#### **1.4 Emergency telephone number**

National advisory body/Poison Centre

Telephone number : NHS: 111

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

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

#### **Classification according to UK CLP/GHS**

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 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	: Danger
Hazard statements	<ul> <li>H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 - May cause respiratory irritation. H351 - Suspected of causing cancer.</li> </ul>

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# **SECTION 2: Hazards identification**

		H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	<ul> <li>P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.</li> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P273 - Avoid release to the environment.</li> </ul>
Response	:	P391 - Collect spillage.
Storage	:	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	1	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	1	Contains isocyanates. May produce an allergic reaction.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	As from August 24 2023 adequate training is required before industrial or professional use.
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 : N	lixture			
Product/ingredient name	Identifiers	%	Classification	Туре
Inc powder - zinc dust (stabilized)	REACH #: 01-2119467174-37 EC: 231-175-3 CAS: 7440-66-6	≥50 - ≤75	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
Xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	<10	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	[1] [2]
Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	CAS: 67815-87-6	<10	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373 (inhalation)	[1] [2]
Diphenylmethane diisocyanate (isomers and homologues)	CAS: 9016-87-9	≤5	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373	[1] [2]
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SECTION 3: Compositio			(inhalation)	
2-Methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6	≤3	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Ethylbenzene	Index: 607-195-00-7 REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) (oral, inhalation)	[1] [2]
4-isocyanatosulphonyltoluene	REACH #: 01-2119980050-47 EC: 223-810-8 CAS: 4083-64-1 Index: 615-012-00-7	≤3	Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 STOT SE 3, H335 EUH014	[1] [2]
4,4'-methylenediphenyl diisocyanate	REACH #: 01-2119457014-47 EC: 202-966-0 CAS: 101-68-8 Index: 615-005-00-9	<1	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 (inhalation)	[1] [2]
o-(p-isocyanatobenzyl)phenyl isocyanate	REACH #: 01-2119480143-45 EC: 227-534-9 CAS: 5873-54-1 Index: 615-005-00-9	<1	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373	[1] [2]
Ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≤0.3	Flam. Liq. 2, H225 Eye Irrit. 2, H319	[1] [2]
Ethyl acetate	REACH #: 01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5	≤0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
2,2'-methylenediphenyl diisocyanate	REACH #: 01-2119927323-43 EC: 219-799-4 CAS: 2536-05-2 Index: 615-005-00-9	<0.1	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373	[1] [2]
tosyl chloride Butanone	EC: 202-684-8 CAS: 98-59-9 REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≤0.1 ≤0.1	Stor Ittl 2, H315 Skin Irrit. 2, H315 Eye Dam. 1, H318 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2] [1] [2]
			See Section 16 for the full text of the H statements declared above.	

# **SECTION 3: Composition/information on ingredients**

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.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

## SECTION 4: First aid measures

4.1 Description of first aid n	ures	
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 it is suspected that fumes are still present, the rescuer should wear an appropriat mask or self-contained breathing apparatus. If not breathing, if breathing is irregula 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 physiciar 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. In case of inhalation of decomposition products in a fire, symptoms ma be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.	ar h n.
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.	re
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 no 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. 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.	5,
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 <u>Over-exposure signs/symptoms</u>

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma
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

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# SECTION 4: First aid measures Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Specific treatments : No specific treatment.

# SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising f	rom 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 very 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 nitrogen oxides sulfur 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	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

# **SECTION 6: Accidental release measures**

6.1 Personal precautions, pro	ote	ctive 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	СО	ontainment 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.

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

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 (see Section 13).
	Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
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 sensitisation problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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.
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 criteriaCategoryNotification and MAPP<br/>thresholdSafety report thresholdP5c<br/>E15000 tonne<br/>100 tonne50000 tonne<br/>200 tonne

#### 7.3 Specific end use(s)

# Recommendations

: Not available.

# Industrial sector specific solutions

: Not available.

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

#### 8.1 Control parameters **Occupational exposure limits X**ylene EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin. STEL: 441 mg/m<sup>3</sup> 15 minutes. TWA: 50 ppm 8 hours. TWA: 220 mg/m<sup>3</sup> 8 hours. STEL: 100 ppm 15 minutes. Isocyanic acid, polymethylenepolyphenylene EH40/2005 WELs (United Kingdom (UK), 1/2020). [isocyanates, ester, polymer with 1,2-ethanediamine, all, except methyl isocyanate as -NCO] Inhalation sensitiser. 2-methyloxirane and 1,2-propanediol STEL: 0.07 mg/m<sup>3</sup>, (as -NCO) 15 minutes. TWA: 0.02 mg/m<sup>3</sup>, (as -NCO) 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). [isocyanates, Diphenylmethane diisocyanate (isomers and homologues) all, except methyl isocyanate as -NCO] Inhalation sensitiser. STEL: 0.07 mg/m<sup>3</sup>, (as -NCO) 15 minutes. TWA: 0.02 mg/m<sup>3</sup>, (as -NCO) 8 hours. 2-Methoxy-1-methylethyl acetate EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 548 mg/m<sup>3</sup> 15 minutes. TWA: 50 ppm 8 hours. TWA: 274 mg/m<sup>3</sup> 8 hours. STEL: 100 ppm 15 minutes. Ethylbenzene EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m<sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m<sup>3</sup> 8 hours. 4-isocyanatosulphonyltoluene EH40/2005 WELs (United Kingdom (UK), 1/2020). [isocyanates, all, except methyl isocyanate as -NCO] Inhalation sensitiser. STEL: 0.07 mg/m<sup>3</sup>, (as -NCO) 15 minutes. TWA: 0.02 mg/m<sup>3</sup>, (as -NCO) 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). [isocyanates, 4,4'-methylenediphenyl diisocyanate all, except methyl isocyanate as -NCO] Inhalation sensitiser. STEL: 0.07 mg/m<sup>3</sup>, (as -NCO) 15 minutes. TWA: 0.02 mg/m<sup>3</sup>, (as -NCO) 8 hours. o-(p-isocyanatobenzyl)phenyl isocyanate EH40/2005 WELs (United Kingdom (UK), 1/2020). [isocyanates, all, except methyl isocyanate as -NCO] Inhalation sensitiser. STEL: 0.07 mg/m<sup>3</sup>, (as -NCO) 15 minutes. TWA: 0.02 mg/m<sup>3</sup>, (as -NCO) 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). Ethanol TWA: 1000 ppm 8 hours. TWA: 1920 mg/m<sup>3</sup> 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). Ethyl acetate STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours. STEL: 1468 mg/m<sup>3</sup> 15 minutes. TWA: 734 mg/m<sup>3</sup> 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). [isocyanates, 2,2'-methylenediphenyl diisocyanate all, except methyl isocyanate as -NCO] Inhalation sensitiser. STEL: 0.07 mg/m<sup>3</sup>, (as -NCO) 15 minutes. TWA: 0.02 mg/m<sup>3</sup>, (as -NCO) 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). tosyl chloride STEL: 5 mg/m<sup>3</sup> 15 minutes. EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed Butanone through skin. STEL: 899 mg/m<sup>3</sup> 15 minutes. STEL: 300 ppm 15 minutes. TWA: 600 mg/m<sup>3</sup> 8 hours. TWA: 200 ppm 8 hours. **Biological exposure indices**

#### **SECTION 8: Exposure controls/personal protection Product/ingredient name Exposure indices 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. Butanone EH40/2005 BMGVs (United Kingdom (UK), 8/2018) BGV: 70 µmol/l, butan-2-one [in urine]. Sampling time: post shift. **Recommended monitoring**

procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Populatio	on Effects
Zinc powder - zinc dust (stabilized)	DNEL	Long term Oral	0.83 mg/	General	Systemic
	DNEL	Long term	kg bw/day 2.5 mg/m³	population General	Systemic
	DNEL	Inhalation Long term	5 mg/m³	population Workers	Systemic
	DNEL	Inhalation Long term Dermal	83 mg/kg	General	Systemic
	DNEL	Long term Dermal	bw/day 83 mg/kg	population Workers	Systemic
Xylene	DNEL	Long term	bw/day 65.3 mg/m³		Local
	DNEL	Inhalation Short term	260 mg/m <sup>3</sup>	population General	Local
	DNEL	Inhalation Short term	260 mg/m <sup>3</sup>	population General	Systemic
	DNEL	Inhalation Long term	221 mg/m <sup>3</sup>	population Workers	Local
	DNEL	Inhalation Long term Oral	12.5 mg/	General	Systemic
	DNEL	Long term	kg bw/day 65.3 mg/m³	population General	Systemic
	DNEL	Inhalation Long term Dermal	125 mg/kg	population General	Systemic
	DNEL	Long term Dermal	bw/day 212 mg/kg	population Workers	Systemic
	DNEL	Long term	bw/day 221 mg/m³	Workers	Systemic
	DNEL	Inhalation Short term	442 mg/m <sup>3</sup>	Workers	Local
	DNEL	Inhalation Short term	442 mg/m <sup>3</sup>	Workers	Systemic
2-Methoxy-1-methylethyl acetate	DNEL	Inhalation	33 mg/m <sup>3</sup>	General	Local
		Long term Inhalation	-	population	
	DNEL	Long term Inhalation	33 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Oral	36 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	275 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	320 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	550 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Dermal	796 mg/kg bw/day	Workers	Systemic
Ethylbenzene	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	15 mg/m <sup>3</sup>	General population	Systemic

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DNEL	Long term	77 ma/m <sup>3</sup>	Workers	Systemic
DILLE		, , , , , , , , , , , , , , , , , , ,	T officie	Cyclonic
DNEL	Long term Dermal	180 mg/kg bw/dav	Workers	Systemic
DNEL	Short term	293 mg/m <sup>3</sup>	Workers	Local
DMEL	Long term	442 mg/m³	Workers	Local
DMEL	Short term	884 mg/m³	Workers	Systemic
DNEL	Long term Oral	0.46 mg/	General	Systemic
DNEL	Long term Dermal	0.46 mg/	General	Systemic
DNEL	Long term	0.8 mg/m <sup>3</sup>	General	Systemic
DNEL	Long term Dermal	0.92 mg/	Workers	Systemic
DNEL	Long term	3.24 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Long term	0.025 mg/	General	Local
	Inhalation	m <sup>3</sup>	population	
DNEL	Short term Inhalation	0.05 mg/m³	General population	Local
DNEL	Long term Inhalation	0.05 mg/m <sup>3</sup>	Workers	Local
DNEL	Short term Inhalation	0.1 mg/m³	Workers	Local
DNEL	Long term	0.025 mg/ m³	General	Local
DNEL	Short term	0.05 mg/m <sup>3</sup>	General	Local
DNEL	Long term	0.05 mg/m <sup>3</sup>	Workers	Local
DNEL	Short term	0.1 mg/m³	Workers	Local
DNEL	Long term Oral	87 mg/kg bw/day	General	Systemic
DNEL	Long term	114 mg/m <sup>3</sup>	General	Systemic
DNEL	Long term Dermal	206 mg/kg	General	Systemic
DNEL	Long term Dermal	343 mg/kg	Workers	Systemic
DNEL	Short term	bw/day 950 mg/m <sup>3</sup>	General	Local
DNEL	Long term	950 mg/m³	population Workers	Systemic
DNEL	Short term	1900 mg/	Workers	Local
DNEL	Inhalation Long term Oral	4.5 mg/kg	General	Systemic
DNEL	Long term Dermal	bw/day 37 mg/kg	population General	Systemic
DNEL	Long term Dermal	bw/day 63 mg/kg	population Workers	Systemic
DNEL	Long term	bw/day 367 mg/m³	General	Local
	Inhalation	-	population	Systemic
	Inhalation		population	Local
	Inhalation	7 54 Mg/M	population	LUCAI
DNEL	Short term Inhalation	734 mg/m³	General population	Systemic
1	Long term	734 mg/m <sup>3</sup>	Workers	Local
	DNEL DMEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DN	DNELInhalation Long term DermalDNELShort term Inhalation DMELDMELShort term Inhalation DMELDNELLong term OralDNELLong term DermalDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELShort term Inhalation DNELDNELShort term Inhalation DNELDNELShort term Inhalation DNELDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELShort term Inhalation DNELDNELLong term DermalDNELShort term Inhalation DNELDNELShort term Inhalation DNELDNELShort term Inhalation DNELDNELLong term DermalDNELLong term OralDNELLong term DermalDNELLong term DermalDNELLong term DermalDNELLong term Inhalation DNELDNELLong term DermalDNELLong term DermalDNELLong term Inhalation Inhalation DNELDNELLong term Inhalation Inhalation DNELDNELLong term Inhalation Inhalation 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	DNEL	Long term	734 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation	-		-
	DNEL	Short term	1468 mg/	Workers	Local
		Inhalation	m³		
	DNEL	Short term	1468 mg/	Workers	Systemic
		Inhalation	m³		
2,2'-methylenediphenyl diisocyanate	DNEL	Long term	0.025 mg/	General	Local
		Inhalation	m³	population	
	DNEL	Short term	0.05 mg/m <sup>3</sup>	General	Local
		Inhalation		population	
	DNEL	Long term	0.05 mg/m <sup>3</sup>	Workers	Local
		Inhalation			
	DNEL	Short term	0.1 mg/m <sup>3</sup>	Workers	Local
		Inhalation			
tosyl chloride	DNEL	Long term Dermal	0.5 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term Inhalation	3.5 mg/m <sup>3</sup>	Workers	Systemic
Butanone	DNEL	Long term Oral	31 mg/kg	General	Systemic
		U U	bw/day	population	2
	DNEL	Long term	106 mg/m <sup>3</sup>	General	Systemic
		Inhalation	_	population	
	DNEL	Long term Dermal	412 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term	600 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation			
	DNEL	Long term Dermal	1161 mg/	Workers	Systemic
			kg bw/day		

#### **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 meas	<u>ures</u>
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: 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
	> 8 hours (breakthrough time): 4H / Silver Shield® gloves.
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# **SECTION 8: Exposure controls/personal protection**

		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.
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 2 - P 2
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

in mormation on baolo phyoida			nour proport			
<u>Appearance</u>						
Physical state	:	Liquid.				
Colour	:	Grey.				
Odour	:	Slight				
Odour threshold	:	Not ava	ilable.			
Melting point/freezing point	:	Not ava	ilable.			
Initial boiling point and boiling range	:					
Ingredient name			°C	°F	Method	
Fthylbenzene			136.1	277	OECD 104	
Xylene			136.16	277.1		
Flammability (solid, gas)	:	Not ava	ilable.			
Upper/lower flammability or explosive limits	:		0.8% (xylene) 6.7% (xylene)			
Flash point	:	Closed	cup: 24°C (7	5.2°F)		
Auto-ignition temperature	:					
Ingredient name			°C	°F	Method	
2-Methoxy-1-methylethyl acetate			333	631.4	DIN 51794	
Xylene			432	809.6		
Decomposition temperature	:	Not ava	ilable.			
рН	:	Not app	licable.			
Viscosity	:	Not ava	ilable.			
Solubility(ies)	:					
Not available.						
Solubility in water	:	Not ava	ilable.			
Partition coefficient: n-octanol/ water	:	Not app	licable.			
Vapour pressure	:					

	V	apour Pres	sure at 20°C	Vapour pressure at 50°C			
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
<mark>,</mark> <i>E</i> thylbenzene	9.30076	1.2					
Xylene	6.7	0.89					
elative density	: Not	available.					
ensity	: 2.6	g/cm³					
apour density	: Not	available.					
xplosive properties	: Not	available.					
xidising properties	: Not	available.					
article characteristics							
ledian 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 toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene	LC50 Inhalation Vapour	Rat	21.7 mg/l	4 hours
, <u>, ,</u>	LD50 Oral	Rat	4300 mg/kg	-
Diphenylmethane	LC50 Inhalation Vapour	Rat	490 mg/m <sup>3</sup>	4 hours
diisocyanate (isomers and			5	
homologues)				
<b>S</b> ,	LD50 Dermal	Rabbit	>9400 mg/kg	-
	LD50 Oral	Rat	49 g/kg	-
2-Methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
Ethylbenzene	LC50 Inhalation Dusts and	Rat	29000 mg/l	4 hours
,	mists			
	LD50 Dermal	Rabbit	15400 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
4-isocyanatosulphonyltoluene	LD50 Oral	Rat	2234 mg/kg	-
4,4'-methylenediphenyl	LD50 Oral	Rat	9200 mg/kg	-
diisocyanate				
Ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-
Ethyl acetate	LD50 Oral	Rat	5620 mg/kg	-
Butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-

# **SECTION 11: Toxicological information**

#### **Conclusion/Summary**

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

#### Acute toxicity estimates

Route	ATE value
	12954.67 mg/kg 51.45 mg/l

#### Irritation/Corrosion

Zinc powder - zinc dust (stabilized) Xylene	Skin - Mild irritant Eyes - Mild irritant Eyes - Severe irritant Skin - Mild irritant Skin - Moderate irritant	Human Rabbit Rabbit	-	72 hours 300 ug l 87 mg	-
	Eyes - Severe irritant Skin - Mild irritant Skin - Moderate irritant				
Xylene	Eyes - Severe irritant Skin - Mild irritant Skin - Moderate irritant			87 mg	
	Skin - Mild irritant Skin - Moderate irritant	Raddit	-		-
	Skin - Moderate irritant			24 hours 5	-
	Skin - Moderate irritant	Rat		mg 8 hours 60 uL	-
		Rabbit		100 %	-
	Skin - Moderate irritant	Rabbit	_	24 hours 500	-
		T GODIT		mg	
Diphenylmethane diisocyanate (isomers and homologues)	Eyes - Mild irritant	Rabbit	-	100 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
-	Skin - Mild irritant	Rabbit	-	24 hours 15	-
				mg	
4-isocyanatosulphonyltoluene	Eyes - Moderate irritant	Rabbit	-	100 uL	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
4.41 meethed are adire bened		Dabbit		uL	
4,4'-methylenediphenyl diisocyanate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
		T CODDIT		mg	
	Eyes - Moderate irritant	Rabbit	-	0.066666667	-
				minutes 100	
				mg	
	Eyes - Moderate irritant	Rabbit	-	100 uL	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	400 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
Dutenene	Okin Mild invitant	Dabbit		mg	
Butanone	Skin - Mild irritant	Rabbit	-	24 hours 14 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
		Rubbit		mg	
Conclusion/Summary	Causes skin irritation.			9	
Sensitisation					
Conclusion/Summary	: May cause allergy or asthma cause an allergic skin reactio		oreathing o	difficulties if inha	aled. May
<u>Mutagenicity</u>					
Conclusion/Summary	: Based on available data, the	classification c	riteria are	not met.	
Carcinogenicity					
	: Suspected of causing cancer	Risk of cance	er denend	s on duration ar	nd level of
oonoluolon/ouninary	exposure.				
Reproductive toxicity	-				
Conclusion/Summary	: Based on available data, the	classification c	riteria are	not met.	
Teratogenicity	,				
	: Based on available data, the	classification o	riteria are	not met	
Specific target organ toxicity				not mot.	

Specific target organ toxicity (single exposure)

# **SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
Xylene	Category 3	-	Respiratory tract irritation
Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	Category 3	-	Respiratory tract irritation
Diphenylmethane diisocyanate (isomers and homologues)	Category 3	-	Respiratory tract irritation
2-Methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
4-isocyanatosulphonyltoluene	Category 3	-	Respiratory tract irritation
4,4'-methylenediphenyl diisocyanate	Category 3	-	Respiratory tract irritation
o-(p-isocyanatobenzyl)phenyl isocyanate	Category 3	-	Respiratory tract irritation
Ethyl acetate	Category 3	-	Narcotic effects
2,2'-methylenediphenyl diisocyanate	Category 3	-	Respiratory tract irritation
Butanone	Category 3	-	Narcotic effects

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

Product/ingredient name	Category	Route of exposure	Target organs
Xylene Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	Category 2 Category 2	oral, inhalation inhalation	-
Diphenylmethane diisocyanate (isomers and homologues) Ethylbenzene 4,4'-methylenediphenyl diisocyanate o-(p-isocyanatobenzyl)phenyl isocyanate 2,2'-methylenediphenyl diisocyanate	Category 2 Category 2 Category 2 Category 2 Category 2	inhalation oral, inhalation inhalation - -	- hearing organs - - -

#### **Aspiration hazard**

Product/ingredient name	Result	
Xylene	ASPIRATION HAZARD - Category 1	
Ethylbenzene	ASPIRATION HAZARD - Category 1	

Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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	: Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma

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SECTION 11: Toxico	SECTION 11: Toxicological information			
Skin contact	:	Adverse symptoms may include the following: irritation redness		
Ingestion	;	No specific data.		
Delayed and immediate effect	:ts	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 eff	ect	<u>s</u>		
Not available.				
Conclusion/Summary	:	Not available.		
General	:	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.		
Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.		
Mutagenicity	:	No known significant effects or critical hazards.		
Reproductive toxicity	:	No known significant effects or critical hazards.		

#### Other information

: Not available.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc powder - zinc dust (stabilized)	Acute EC50 106 µg/l Fresh water	Algae - Green algae - <i>Pseudokirchneriella subcapitata</i> - Exponential growth phase	72 hours
	Acute EC50 10000 µg/l Fresh water	Aquatic plants - Duckweed - Lemna minor	4 days
	Acute IC50 65 μg/l Marine water	Algae - Diatom - <i>Nitzschia</i> <i>closterium</i> - Exponential growth phase	4 days
	Acute LC50 65 μg/l Fresh water	Crustaceans - Water flea - <i>Ceriodaphnia dubia</i> - Neonate	48 hours
	Acute LC50 68 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i> magna	48 hours
	Acute LC50 12.21 µg/l Marine water	Fish - Mudskipper - <i>Periophthalmus waltoni</i> - Adult	96 hours
	Chronic EC10 27.3 µg/l Fresh water	Algae - Green algae - <i>Pseudokirchneriella subcapitata</i> - Exponential growth phase	72 hours
	Chronic EC10 59.2 µg/l Fresh water	Daphnia - Water flea - Daphnia magna	21 days
	Chronic NOEC 9 mg/l Fresh water	Aquatic plants - Coontail - Ceratophyllum demersum	3 days
	Chronic NOEC 178 µg/l Marine water	Crustaceans - Rockpool prawn - Palaemon elegans	21 days
	Chronic NOEC 2.6 µg/l Fresh water	Fish - common carp - <i>Cyprinus</i> carpio	4 weeks
Ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Green algae - <i>Ulva</i> pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	, Daphnia - Water flea - <i>Daphnia</i>	48 hours
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EKNOZINC 3233 - GREY		Label No	83716

		magna	
	Acute LC50 25500 µg/l Marine water	Crustaceans - San Francisco Brine Shrimp - <i>Artemia</i> <i>franciscana</i> - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - <i>Oncorhynchus mykiss</i>	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Green algae - <i>Úlva</i> pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Water flea - <i>Daphnia</i> <i>magna</i> - Neonate	21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Eastern mosquitofish - <i>Gambusia holbrooki</i> - Larvae	12 weeks
Ethyl acetate	Acute EC50 2500000 µg/l Fresh water	Algae - Green algae - Selenastrum sp.	96 hours
	Acute LC50 750000 µg/l Fresh water	Crustaceans - Scud - Gammarus pulex	48 hours
	Acute LC50 154000 µg/l Fresh water	Daphnia - Water flea - Daphnia cucullata	48 hours
	Acute LC50 212500 µg/l Fresh water	Fish - Indian catfish - Heteropneustes fossilis	96 hours
	Chronic NOEC 12 mg/l Fresh water	Daphnia - Water flea - Daphnia magna	21 days
	Chronic NOEC 75.6 mg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i> - Embryo	32 days
Butanone	Acute EC50 >500000 µg/l Marine water		96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - Water flea - Daphnia magna - Larvae	48 hours
	Acute LC50 3220000 µg/l Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours

Conclusion/Summary

: Very toxic to aquatic life with long lasting effects.

#### 12.2 Persistence and degradability

<b>Conclusion/Summary</b>	: This product has not been tested for biodegradation.
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#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
<b>X</b> ylene	3.12	8.1 to 25.9	Low
2-Methoxy-1-methylethyl acetate	1.2	-	Low
Ethylbenzene	3.6	-	Low
4,4'-methylenediphenyl diisocyanate	4.51	200	Low
o-(p-isocyanatobenzyl) phenyl isocyanate	4.51	200	Low
Ethanol	-0.35	-	Low
Ethyl acetate	0.68	30	Low
2,2'-methylenediphenyl diisocyanate	5.22	200	Low
Butanone	0.3	-	Low

12.4 Mobility in soil	
Soil/water partition	: Not available.
coefficient (Koc)	
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.

# **SECTION 12: Ecological information**

12.6 Other adverse effects

: No known significant effects or critical hazards.

# **SECTION 13: Disposal considerations**

13.1 Waste treatment meth	nods
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.
European waste catalogue (EWC)	: 080501*
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	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3			3
14.4 Packing group		111	111	111
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  $\leq 5 \text{ L}$  or  $\leq 5 \text{ kg}$ . Tunnel code (D/E) **ADN** : The environmentally hazardous substance mark is not required when transported in sizes of  $\leq 5 L$  or  $\leq 5 kg$ . : The marine pollutant mark is not required when transported in sizes of  $\leq 5$  L or  $\leq 5$  kg. IMDG ΙΑΤΑ The environmentally hazardous substance mark may appear if required by other ÷. transportation regulations. 14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are user 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 : 25/11/2024 Date of previous issue : 25/11/2024 Version : 1.01 17/21

# **SECTION 14: Transport information**

#### 14.7 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 <u>UK (GB)/REACH</u>

#### 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.

#### **Ozone depleting substances**

Not listed.

#### **Prior Informed Consent (PIC)**

Not listed.

#### Persistent Organic Pollutants

Not 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]
FEKNOZINC 3233 4,4'-methylenediphenyl diisocyanate	≥90 <1	3 56 [Consumer products] 74
o-(p-isocyanatobenzyl)phenyl isocyanate	<1	56 [Consumer products] 74
2,2'-methylenediphenyl diisocyanate	<0.1	56 [Consumer products] 74

#### Labelling

: As from August 24 2023 adequate training is required before industrial or professional use.

#### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

Category				
P5c E1				
EU regulations				
Industrial emissions (integrated pollution prevention and control) - Air	: Listed			
Industrial emissions (integrated pollution prevention and control) - Water	: Listed			
nternational regulations				
Chemical Weapon Conventi	on List Schedu	iles I, II & III Chemicals		
Not listed.				
Montreal Protocol				
Not listed.				
ate of issue/Date of revision	: 25/11/2024	Date of previous issue	: 25/11/2024	Version : 1.01 18/21
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# **SECTION 15: Regulatory information**

#### 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
assessment	required.

# **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
	Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019
	No. 720 and amendments
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = GB 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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Resp. Sens. 1, H334	Calculation method
Skin Sens. 1, H317	Calculation method
Carc. 2, H351	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

#### Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
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.
EUH014	Reacts violently with water.
EUH066	Repeated exposure may cause skin dryness or cracking.

**Full text of classifications** 

# **SECTION 16: Other information**

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
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. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Resp. Sens. 1	RESPIRATORY SENSITISATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
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	: 25/11/2024
revision	
Date of previous issue	25/11/2024
Version	: 1.01

#### 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 TEKNOZINC 3233 - GREY : 25/11/2024 Date of previous issue

: 25/11/2024

Version :1.01 21/21 Label No :83716