SAFETY DATA SHEET



TEKNODUR COMBI 3560-90 - All variants

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

1.1 Product identifier

Product name : FKNODUR COMBI 3560-90 - 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

Peknos 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

▼eknos 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]

Fram. Liq. 3, H226 Skin Corr. 1C, H314 Eye Dam. 1, H318 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 : Danger

Hazard statements : H226 - Flammable liquid and vapour.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: \(\overline{\mathbb{P}}280\) - Wear protective gloves, protective clothing and eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

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sources. No smoking.

P273 - Avoid release to the environment.

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SECTION 2: Hazards identification

Response

: P391 - Collect spillage.

P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor.

Storage

Not applicable.

Disposal

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

Hazardous ingredients

: tetraethylN,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate 1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]-

cyclohexanemethylamine

EO bis(benztriazolyl)phenylpropionat

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl

1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Supplemental label

elements

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

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

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

: Mixture 3.2 Mixtures

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
retraethylN,N'- (methylenedicyclohexane- 4,1-diyl)bis-dl-aspartate	REACH #: 01-0000017556-64 EC: 429-270-1 CAS: 136210-30-5 Index: 607-521-00-8	≥10 - ≤25	Skin Sens. 1, H317 Aquatic Chronic 3, H412	-	[1]
n-Butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≤10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
Trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≤10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
1,3,3-trimethyl-N- (2-methylpropylidene)-5-[(2-methylpropylidene) amino]- cyclohexanemethylamine	REACH #: 01-2119978283-28 EC: 259-393-4 CAS: 54914-37-3	≤10	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317	-	[1]
2-Methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6	≤5	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]

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SECTION 3: Composition/information on ingredients Index: 607-195-00-7 ≤5 **Xylene** REACH #: Flam. Liq. 3, H226 ATE [Dermal] = [1] [2] Acute Tox. 4, H312 01-2119488216-32 1100 mg/kg EC: 215-535-7 Acute Tox. 4, H332 ATE [Inhalation CAS: 1330-20-7 Skin Irrit. 2, H315 (vapours)] = 11 mg/ Index: 601-022-00-9 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (oral, inhalation) Asp. Tox. 1, H304 titanium dioxide REACH #: ≤1 Carc. 2, H351 [1] [*] 01-2119489379-17 (inhalation) EC: 236-675-5 CAS: 13463-67-7 EO bis(benztriazolyl) REACH #: Skin Sens. 1A, H317 [1] <1 phenylpropionat 01-0000015075-76 Aquatic Chronic 2, EC: 400-830-7 H411 CAS: 104810-48-2

≤1

≤0.3

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.

Contains: > 1 % TiO2

Reaction mass of Bis

(1,2,2,6,6-pentamethyl-

1,2,2,6,6-pentamethyl-

4-piperidyl sebacate

Zinc oxide

4-piperidyl) sebacate and

Type

Substance classified with a health or environmental hazard

Index: 607-176-00-3

01-2119491304-40

01-2119463881-32

EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7

REACH #:

REACH #:

[2] Substance with a workplace exposure limit

[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Set medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Skin Sens. 1A, H317

Aquatic Acute 1, H400 Aquatic Chronic 1,

Aquatic Acute 1, H400

Aquatic Chronic 1,

See Section 16 for the full text of the H statements declared

Repr. 2, H361f

H410

H410

above.

M [Acute] = 1

M [Acute] = 1

M [Chronic] = 1

M [Chronic] = 1

[1]

[1]

Inhalation

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention

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SECTION 4: First aid measures

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 may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Eet medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

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, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

Mammable 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.

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SECTION 5: Firefighting measures

Hazardous combustion products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

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

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

phosphorus oxides metal oxide/oxides

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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

F 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

Kvoid 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.

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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.

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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 breathe vapour or mist. Do not ingest. 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 criteria

Category	Notification and MAPP threshold	Safety report threshold
₱5c	5000 tonne	50000 tonne
E2	200 tonne	500 tonne

7.3 Specific end use(s)

Recommendations : Mot available.

Industrial sector specific : Mot available.

solutions

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
-Butyl acetate	EU OEL (Europe, 10/2019). Notes: list of indicative occupational exposure limit values STEL: 150 ppm 15 minutes.
	STEL: 723 mg/m³ 15 minutes. TWA: 241 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
2-Methoxy-1-methylethyl acetate	EU OEL (Europe, 10/2019). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. TWA: 275 mg/m³ 8 hours. STEL: 100 ppm 15 minutes.

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SECTION 8: Exposure controls/personal protection

STEL: 550 mg/m³ 15 minutes.

Xylene EU OEL (Europe, 10/2019). [xy

EU OEL (Europe, 10/2019). [xylene, mixed isomers] Absorbed through skin. Notes: list of indicative occupational exposure limit values

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

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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
retraethylN,N'- (methylenedicyclohexane-4,1-diyl) bis-dl-aspartate	DNEL	Short term Oral	1.4 mg/kg bw/day	General population	Systemic
·	DNEL	Long term Oral	1.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	1.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	4.8 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	4.8 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	28 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	112 mg/m³	Workers	Systemic
n-Butyl acetate	DNEL	Long term Dermal	3.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	48 mg/m³	Workers	Systemic
	DNEL	Short term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	35.7 mg/m³	General population	Local
	DNEL	Short term Inhalation	300 mg/m ³	General population	Local
	DNEL	Short term Inhalation	300 mg/m ³	General population	Systemic

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SECTION 8: Exposure controls/personal protection

		DNEL	Long term	300 mg/m ³	Workers	Local
			Inhalation			
		DNEL	Short term	600 mg/m ³	Workers	Local
		5	Inhalation			
		DNEL	Short term	600 mg/m ³	Workers	Systemic
		5	Inhalation			
	Trizinc bis(orthophosphate)	DNEL	Long term Oral	0.83 mg/	General	Systemic
		5.151		kg bw/day	population	
		DNEL	Long term	2.5 mg/m ³	General	Systemic
		DAIFI	Inhalation	F / 3	population	0 1 .
		DNEL	Long term	5 mg/m³	Workers	Systemic
		DAIEL	Inhalation	00//	0	0
		DNEL	Long term Dermal	83 mg/kg	General	Systemic
		DNE	Long torm Dormal	bw/day	population	Cuatamia
		DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	1,3,3-trimethyl-N-	DNEL	Long term Oral	0.526 mg/	General	Systemic
	(2-methylpropylidene)-5-[DINEL	Long term Oral	kg bw/day	population	Systemic
	(2-methylpropylidene)amino]-			kg bw/day	population	
	cyclohexanemethylamine					
	Cyclonic xancinicallylaninic	DNEL	Long term	150 mg/m ³	Workers	Systemic
		DIVLL	Inhalation	100 mg/m	Workoro	Cyclonic
	2-Methoxy-1-methylethyl acetate	DNEL	Long term Oral	1.67 mg/	General	Systemic
	,,,			kg bw/day	population	-,
		DNEL	Long term	33 mg/m³	General	Local
			Inhalation	J. 3.	population	
		DNEL	Long term	33 mg/m³	General	Systemic
			Inhalation	Ü	population	,
		DNEL	Long term Dermal	54.8 mg/	General	Systemic
				kg bw/day	population	-
		DNEL	Long term Dermal	153.5 mg/	Workers	Systemic
				kg bw/day		
		DNEL	Long term	275 mg/m ³	Workers	Systemic
			Inhalation			
		DNEL	Short term	550 mg/m ³	Workers	Local
	V 1	DAIFI	Inhalation	4.0 "		0 1 .
	Xylene	DNEL	Long term Oral	1.6 mg/kg	General	Systemic
		DNEL	l and tarm	bw/day	population	Customia
		DINEL	Long term Inhalation	14.8 mg/m³	population	Systemic
		DNEL	Long term	77 mg/m³	Workers	Systemic
		DINEL	Inhalation	77 mg/m	VVOIKEIS	Systemic
		DNEL	Long term Dermal	108 mg/kg	General	Systemic
		DIVLL	Long term berman	bw/day	population	Oystonio
		DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
				bw/day		- ,
		DNEL	Short term	289 mg/m ³	Workers	Local
			Inhalation	J.		
		DNEL	Short term	289 mg/m ³	Workers	Systemic
			Inhalation	•		
		DNEL	Long term	65.3 mg/m ³	General	Local
			Inhalation		population	
		DNEL	Short term	260 mg/m ³	General	Local
		- · · - ·	Inhalation		population	
		DNEL	Short term	260 mg/m ³	General	Systemic
		ראורי	Inhalation	004 / 3	population	Local
		DNEL	Long term	221 mg/m ³	Workers	Local
	titanium dioxide	DNEL	Inhalation	10 mg/m³	Workers	Local
	III III III III III III III III III II	DINCL	Long term Inhalation	10 mg/m	4401VC12	Local
		DNEL	Long term Oral	700 mg/kg	General	Systemic
		DINEL	Long term Oral	bw/day	population	Cysternic
	Zinc oxide	DNEL	Long term	0.5 mg/m ³	Workers	Local
		<i>□</i> .1∟∟	Inhalation	5.5 mg/m	.7011010	_5501
		DNEL	Long term Oral	0.83 mg/	General	Systemic
		-	3	kg bw/day	population	,
ļ			I	J,	<u>' ' </u>	

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SECTION 8: Exposure controls/personal protection DNEL Long term 2.5 mg/m³ General Systemic Inhalation population **DNEL** Long term 5 mg/m³ Workers Systemic Inhalation 83 mg/kg **DNEL** Long term Dermal General Systemic bw/day population DNEL Long term Dermal 83 mg/kg Workers Systemic 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 measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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): Mitrile gloves. thickness > 0.3 mm

1 - 4 hours (breakthrough time): polyvinyl alcohol (PVA) thickness > 0.3 mm or

4H / Silver Shield® gloves.

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

₩ash 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.

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SECTION 8: Exposure controls/personal protection

Filter type:

Filter type (spray application):

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

: Liquid. **Physical state** Colour **V**arious **Odour S**light : Not available. **Odour threshold**

Melting point/freezing point

Initial boiling point and

: Not available.

boiling range

Ingredient name	°C	°F	Method
<mark>p-</mark> Butyl acetate	126	258.8	OECD 103
Xylene	136.16	277.1	

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

: Closed cup: 25°C (77°F) Flash point

Auto-ignition temperature

Ingredient name	°C	°F	Method
[2-methoxy-4-nitrophenyl)azo]-N- (2-methoxyphenyl)-3-oxobutyramide	180	356	VDI 2263
2-[[1-[[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl) amino]carbonyl]-2-oxopropyl]azo]benzoic acid	320	608	

: Not available. **Decomposition temperature** : Not applicable. pН **Viscosity** Not available.

Solubility(ies)

Not available.

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

water

Vapour pressure

	Vapour Pressure at 20°C			Var	our pressui	re at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
p-Butyl acetate	11.25	1.5	DIN EN 13016-2			
Xylene	6.7	0.89				

: Not available. **Relative density** : 1.5 g/cm³ **Density** Not available. Vapour density Not available. **Explosive properties Oxidising properties** : Not available.

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SECTION 9: Physical and chemical properties

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 : Kvoid 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
<mark>ଜ-</mark> Butyl acetate	LC50 Inhalation Vapour	Rat	0.74 mg/l	4 hours
	LD50 Dermal	Rabbit	14112 mg/kg	-
	LD50 Oral	Rat	10760 mg/kg	-
2-Methoxy-1-methylethyl	LD50 Dermal	Rabbit	>5 g/kg	-
acetate				
	LD50 Oral	Rat	8532 mg/kg	-
Xylene	LC50 Inhalation Vapour	Rat	21.7 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Reaction mass of Bis	LD50 Dermal	Rat	>3170 mg/kg	-
(1,2,2,6,6-pentamethyl-				
4-piperidyl) sebacate and				
Methyl				
1,2,2,6,6-pentamethyl-				
4-piperidyl sebacate				
	LD50 Oral	Rat	3230 mg/kg	-

Conclusion/Summary

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

Acute toxicity estimates

Route	ATE value
	27793.57 mg/kg 277.94 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<mark>и</mark> -Butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-

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SECTION 11: Toxicological information

				mg	
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	

Conclusion/Summary

: Causes severe skin burns and eye damage.

Sensitisation

Conclusion/Summary : May cause an allergic skin reaction.

Mutagenicity

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

Carcinogenicity

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
p-Butyl acetate 2-Methoxy-1-methylethyl acetate Xylene	Category 3 Category 3 Category 3	- - -	Narcotic effects Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Product/ingredient name	Result
▼ylene	ASPIRATION HAZARD - Category 1

Information on likely routes

of exposure

: Not available.

Potential acute health effects

: Causes serious eye damage. **Eye contact**

: No known significant effects or critical hazards. Inhalation

: Causes severe burns. May cause an allergic skin reaction. **Skin contact**

: No known significant effects or critical hazards. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

: Adverse symptoms may include the following: **Eye contact**

> pain watering redness

Inhalation : No specific data.

Adverse symptoms may include the following: **Skin contact**

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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SECTION 11: Toxicological information

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

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary

: Not available.

General

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

to very low levels.

Carcinogenicity: Wo known significant effects or critical hazards.

Mutagenicity: Wo known significant effects or critical hazards.

Reproductive toxicity: Wo 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
traethylN,N'- (methylenedicyclohexane- 4,1-diyl)bis-dl-aspartate	Acute EC50 113 mg/l	Algae	72 hours
	Acute EC50 88.6 mg/l	Daphnia	48 hours
	Acute LC50 66 mg/l	Fish	96 hours
n-Butyl acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
T.::-:	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Trizinc bis(orthophosphate)	Acute EC50 0.32 mg/l	Algae - Selenastrum capricornutum	72 hours
	Acute EC50 0.96 mg/l	Crustaceans - Ceriodaphnia dubia	48 hours
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours
Reaction mass of Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	EC50 1.68 mg/l	Aquatic plants - Desmodesmodus subspicatus	72 hours
	Acute LC50 0.9 mg/l Chronic NOEC 1 mg/l	Fish - Brachydanio rerio Daphnia	96 hours 21 days
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

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SECTION 12: Ecological information Acute LC50 98 µg/l Fresh water Daphnia - Daphnia magna -48 hours Neonate Acute LC50 1.1 ppm Fresh water Fish - Oncorhynchus mykiss 96 hours

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

12.2 Persistence and degradability

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

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
tetraethylN,N'- (methylenedicyclohexane-	5.16	0.25	low
4,1-diyl)bis-dl-aspartate n-Butyl acetate Trizinc bis(orthophosphate)	2.3	- 60960	low high
2-Methoxy-1-methylethyl acetate	1.2	-	low
Xylene Zinc oxide	3.12	8.1 to 25.9 28960	low high

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

: Not available. **Mobility**

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.

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.

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SECTION 13: Disposal considerations

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	I N3469	☑ N3469	☑ N3469	☑ N3469
14.2 UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	₹ (8)	③ (8) ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	③ (8) ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	3 (8)
14.4 Packing group	III.	IM.	IM.	M
14.5 Environmental hazards	y es.	V es.	y es.	res. 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

ransport 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.

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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.

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SECTION 15: Regulatory information

Annex XVII - Restrictions : on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

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

₽5c E2

National regulations

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.

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SECTION 16: Other information

Indicates information that has changed from previously issued version.

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SECTION 16: Other information

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
Fam. Liq. 3, H226	On basis of test data
Skin Corr. 1C, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

⊬ 226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]

Cute 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
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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SECTION 16: Other information

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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.

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