SAFETY DATA SHEET



TEKNOSEAL 1271-01 - All variants

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

1.1 Product identifier

Product name : TEKNOSEAL 1271-01 - All variants

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

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

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

responsible for this SDS

National contact

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

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : National Poisons Information Centre: 01 809 2566

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

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

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H336

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.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H336 - May cause drowsiness or dizziness.

Precautionary statements

Prevention: P280 - Wear protective gloves. Wear eye or face protection.

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

Label No: 85252

sources. No smoking.

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 51/18

SECTION 2: Hazards identification

Response

: P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor.

Storage

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

Disposal

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

Hazardous ingredients

: Contains: n-Butyl acetate; iso-butanol and Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane

Supplemental label elements

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

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

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
n-Butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≥10 - ≤25	Carc. 2, H351 (inhalation)	-	[1] [*]
iso-butanol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≤12	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1] [2]
Xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤7.7	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (oral, inhalation) Asp. Tox. 1, H304	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/ I	[1] [2]
Phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis	CAS: 25036-25-3	≤10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	-	[1]

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 52/18TEKNOSEAL 1271-01 - All variantsLabel No :85252

SECTION 3: Composition/information on ingredients (4,1-phenyleneoxymethylene)] bis[oxirane REACH #: Ethylbenzene ≤3 Flam. Liq. 2, H225 ATE [Inhalation [1] [2] Acute Tox. 4, H332 01-2119489370-35 (vapours)] = 11 mg/ EC: 202-849-4 STOT RE 2, H373 CAS: 100-41-4 (hearing organs) (oral, Index: 601-023-00-4 inhalation) Asp. Tox. 1, H304 See Section 16 for the full text of the H statements declared

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.

<u>Type</u>

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Get 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.

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 immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

: Get 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

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 53/18TEKNOSEAL 1271-01 - All variantsLabel No :85252

SECTION 4: First aid measures

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> pain watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatique dizziness/vertigo unconsciousness

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

: Treat symptomatically. Contact poison treatment specialist immediately if large Notes to physician

quantities have been ingested or inhaled.

: No specific treatment. **Specific treatments**

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the

substance or mixture

: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous combustion products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide 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 : 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.

Label No: 85252

Date of issue/Date of revision 4/18 : 09/09/2024 Date of previous issue : No previous validation Version : 5

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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:

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).

6.3 Methods and material for containment and cleaning up

Small spill

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

Large spill

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

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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.

Label No: 85252

7.2 Conditions for safe storage, including any incompatibilities

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 55/18

SECTION 7: Handling and storage

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

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

7.3 Specific end use(s)

Recommendations : Not available. **Industrial sector specific** : Not available. solutions

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
n-Butyl acetate	NAOSH (Ireland, 5/2021). Notes: EU derived Occupational
	Exposure Limit Values
	OELV-8hr: 50 ppm 8 hours.
	OELV-8hr: 241 mg/m³ 8 hours.
	OELV-15min: 150 ppm 15 minutes.
to a feature of	OELV-15min: 723 mg/m³ 15 minutes.
iso-butanol	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational
	Exposure Limit Values (OELVs)
	OELV-8hr: 50 ppm 8 hours.
	OELV-8hr: 150 mg/m³ 8 hours.
	OELV-15min: 75 ppm 15 minutes. OELV-15min: 225 mg/m³ 15 minutes.
Xylene	NAOSH (Ireland, 5/2021). [xylene mixed isomers] Absorbed
Aylene	through skin. Notes: EU derived Occupational Exposure Limit
	Values
	OELV-8hr: 50 ppm 8 hours.
	OELV-8hr: 221 mg/m³ 8 hours.
	OELV-15min: 100 ppm 15 minutes.
	OELV-15min: 442 mg/m³ 15 minutes.
Ethylbenzene	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU
	derived Occupational Exposure Limit Values
	OELV-8hr: 100 ppm 8 hours.
	OELV-8hr: 442 mg/m³ 8 hours.
	OELV-15min: 200 ppm 15 minutes.
	OELV-15min: 884 mg/m³ 15 minutes.

Biological exposure indices

Date of issue/Date of revision : 09/09/2024 Version:5 6/18 Date of previous issue

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure indices
Xylene	NAOSH (Ireland, 1/2011) [Xylene] BMGV: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
Ethylbenzene	NAOSH (Ireland, 1/2011) BMGV: Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question., ethylbenzene [in endexhaled air]. Sampling time: not critical. BMGV: 0.7 g/g creatinine [Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes should be used as a screening test if a quantitative test is not practical; or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question.], mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift at end of workweek.

Recommended monitoring procedures

: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
n-Butyl acetate	DNEL	Short term Oral	2 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Oral	2 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Short term Dermal	6 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Short term Dermal	11 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term	35.7 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	300 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	300 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term	300 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term	600 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term	600 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Long term Dermal	3.4 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	7 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term	12 mg/m³	General	Systemic
		Inhalation		population	
	DNEL	Long term	48 mg/m³	Workers	Systemic
		Inhalation			

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 57/18TEKNOSEAL 1271-01 - All variantsLabel No :85252

SECTION 8: Exposure controls/personal protection

iso-butanol	DNEL	Long term	55 mg/m³	General	Local
130-butanoi	DIVLL	Inhalation	oo mg/m	population	Local
	DNEL	Long term	310 mg/m ³	Workers	Local
	DIVEE	Inhalation	o ro mg/m	Workoro	Local
Xylene	DNEL	Long term	65.3 mg/m ³	General	Local
Xyleric	DIVLL	Inhalation	00.0 mg/m	population	Local
	DNEL	Short term	260 mg/m ³	General	Local
	DIVLE	Inhalation	200 mg/m	population	Local
	DNEL	Short term	260 mg/m ³	General	Systemic
	DIVLL	Inhalation	200 1119/111	population	Oysternio
	DNEL	Long term	221 mg/m³	Workers	Local
	DIVLE	Inhalation	ZZ i ilig/ili	WOIKOIS	Local
	DNEL	Long term Oral	12.5 mg/	General	Systemic
	DIVLE	Long torm oral	kg bw/day	population	Cycloniic
	DNEL	Long term	65.3 mg/m ³		Systemic
	DIVEE	Inhalation	oo.o mg/m	population	Cycloniic
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
	D. 122	Zong tonii Zoniiai	bw/day	population	Cycleniic .
	DNEL	Long term Dermal	212 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term	221 mg/m ³	Workers	Systemic
		Inhalation	3		,
	DNEL	Short term	442 mg/m ³	Workers	Local
		Inhalation	J		
	DNEL	Short term	442 mg/m ³	Workers	Systemic
		Inhalation	J		,
Ethylbenzene	DNEL	Long term Oral	1.6 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term	15 mg/m³	General	Systemic
		Inhalation	· ·	population	
	DNEL	Long term	77 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
			bw/day		-
	DNEL	Short term	293 mg/m ³	Workers	Local
		Inhalation	_		
	DMEL	Long term	442 mg/m ³	Workers	Local
		Inhalation	_		
	DMEL	Short term	884 mg/m ³	Workers	Systemic
		Inhalation			
L	·	1			

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.

Date of issue/Date of revision : 09/09/2024 Version :5 8/18 Date of previous issue : No previous validation **Label No: 85252**

SECTION 8: Exposure controls/personal protection

Skin protection

Hand protection

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

Recommendations: Wear suitable gloves tested to EN374.

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

1 - 4 hours (breakthrough time): 4H / Silver Shield® gloves.

Body protection

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

Other skin protection

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

Respiratory protection

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

Filter type:

A P Filter type (spray application):

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour : Various Odour Slight

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

Initial boiling point and

boiling range

Ingredient name	°C	°F	Method
iso-butanol	108	226.4	OECD 103
n-Butyl acetate	126	258.8	OECD 103

Flammability : Not available.

Lower and upper explosion Lower: 0.8% (xylene)

limit Upper: 7.6% (n-butyl acetate) Flash point Closed cup: 24°C (75.2°F)

Auto-ignition temperature

Date of issue/Date of revision : 09/09/2024 9/18 Date of previous issue : No previous validation Version : 5 Label No: 85252

SECTION 9: Physical and chemical properties

Ingredient name	°C	°F	Method
n-Butyl acetate	415	779	EU A.15
iso-butanol	415	779	

Decomposition temperature: Not available.

pH : Not applicable.

Viscosity : Not available.

Solubility(ies)

Not available.

water

Solubility in water : Not available.

Partition coefficient: n-octanol/ : Not applicable.

Vapour pressure

		Vapour Pressure at 20°C		V	apour pres	ssure at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
n-Butyl acetate	11.25096	1.5	DIN EN 13016-2			
iso-butanol	<12.00102	<1.6	DIN EN 13016-2			

Relative density: Not available.Density: 1 g/cm³Vapour density: Not available.Explosive properties: Not available.Oxidising properties: Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

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

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials : Reactive or incompatible with the following materials:

oxidising materials

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

Label No: 85252

should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

<u>Acute toxicity</u>

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 510/18

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
n-Butyl acetate	LC50 Inhalation Vapour	Rat	0.74 mg/l	4 hours
	LD50 Dermal	Rabbit	14112 mg/kg	-
	LD50 Oral	Rat	10760 mg/kg	-
iso-butanol	LC50 Inhalation Vapour	Rat	19200 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	2460 mg/kg	-
Xylene	LC50 Inhalation Vapour	Rat	21.7 mg/l	4 hours
	LD50 Oral	Rat	4300 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	-

Conclusion/Summary

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

Acute toxicity estimates

Route	ATE value
Dermal Inhalation (vapours)	14603 mg/kg 119.63 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-Butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
titanium dioxide	Skin - Mild irritant	Human	-	mg 72 hours 300 ug I	-
Xylene	Eyes - Mild irritant	Rabbit	_	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
	Skin - Mild irritant	Rat	-	mg 8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	_	24 hours 15	-
				mg	

Conclusion/Summary

Sensitisation

: Causes skin irritation.

Conclusion/Summary

: May cause an allergic skin reaction.

Mutagenicity

Conclusion/Summary

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

Carcinogenicity

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

Conclusion/Summary

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

Reproductive toxicity

Conclusion/Summary

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

Teratogenicity

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

Specific target organ toxicity (single exposure)

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 511/18

Label No: 85252

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
n-Butyl acetate iso-butanol	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Xylene	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene Ethylbenzene	0 ,	oral, inhalation oral, inhalation	- hearing organs

Aspiration hazard

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

Information on likely routes

of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

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

dizziness.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.Ingestion: Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion: Adverse symptoms may include the following:

stomach pains

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

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 512/18

Label No: 85252

SECTION 11: Toxicological information

Not available.

Conclusion/Summary : Not available.

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

to very low levels.

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

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours
		dubia - Neonate	
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex -	48 hours
		Neonate	
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours
iso-butanol	Acute LC50 600 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 1030000 μg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 1330000 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
iso-butanol	-	74 % - Readily - 28 days	-	-

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
iso-butanol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-Butyl acetate	2.3	-	Low
iso-butanol	1	-	Low
Xylene	3.12	8.1 to 25.9	Low
Ethylbenzene	3.6	-	Low

12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

: Not available. **Mobility**

12.5 Results of PBT and vPvB assessment

Date of issue/Date of revision : 09/09/2024 Date of previous issue Version: 5 13/18 : No previous validation **Label No**:85252

SECTION 12: Ecological information

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.

European waste catalogue (EWC) : 08 01 11*

Packaging

Methods of disposal

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

Special precautions

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

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information

ADR/RID : Tunnel code (D/E)

The product is only regulated as an environmentally hazardous substance when **ADN** transported in tank vessels.

Date of issue/Date of revision : 09/09/2024 Version:5 Date of previous issue : No previous validation Label No: 85252

14/18

SECTION 14: Transport information

user

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

14.7 Maritime transport in bulk according to IMO instruments

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

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

Product/ingredient name	%	Designation [Usage]
TEKNOSEAL 1271-01	≥90	3

Labelling

Other EU regulations

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

Explosive precursors : Not applicable. Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P₅c

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.

Date of issue/Date of revision 15/18 : 09/09/2024 Date of previous issue : No previous validation Version : 5

Label No: 85252

SECTION 15: Regulatory information

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment

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

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H336	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.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4	
Asp. Tox. 1	ASPIRATION HAZARD - Category 1	
Carc. 2	CARCINOGENICITY - Category 2	
Eye Dam. 1	SERIOUS EYE DAMAGE/EŸE İRRITATION - 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	
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

revision

: 09/09/2024

Date of issue/Date of revision : 09/09/2024 16/18 Date of previous issue : No previous validation Version: 5 **Label No: 85252**

SECTION 16: Other information

Date of previous issue : No previous validation

Version : 5

TEKNOSEAL 1271-01 All variants

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 517/18

Label No :85252

Date of issue/Date of revision: 09/09/2024Date of previous issue: No previous validationVersion: 518/18

Label No:85252