

SAFETY DATA SHEET



Shodex STANDARD P-82

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

1.1 Product identifier

Product name : Shodex STANDARD P-82
EC number : 232-945-1
CAS number : 9057-02-7
Other means of identification : P-800, P-400, P-200, P-100, P-50, P-20, P-10, P-5

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

Product use : Calibration standrd for size exclusion hromatography.

1.3 Details of the supplier of the safety data sheet

Manufacturer:
Resonac Corporation
Functional Chemicals Business Unit, Specialty Chemicals Department
Tokyo Shiodome Building, 1-9-1, Higashi-Shimbashi, Minato-ku, Tokyo
105-7325, Japan Tel: +81-3-6263-8112
Email: rec_shodex@resonac.com

Supplier:
Resonac Europe GmbH
Abraham-Lincoln-Str. 44
65189 Wiesbaden Germany
Tel: +49-89-9399620

e-mail address of person responsible for this SDS : reu_sds@resonac.com

1.4 Emergency telephone number,

Supplier

Telephone number : +49 (0) 89 22 061012 (NCEC)
+44 (0) 1235 239 670 (NCEC, English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mono-constituent substance

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

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Hazardous ingredients : Not applicable.

SECTION 2: Hazards identification

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Shall not be placed on the market to the general public after 9 May 2019 in windscreen washing or defrosting fluids, in a concentration of methanol equal to or greater than 0.6 % by weight.

2.3 Other hazards

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

PBT	P	B	T	vPvB	vP	vB
No	N/A	N/A	No	N/A	N/A	N/A

Endocrine disrupting properties : This substance does not have endocrine disrupting properties.

Other hazards which do not result in classification : May form combustible dust concentrations in air.

SECTION 3: Composition/information on ingredients

3.1 Substances : Mono-constituent substance

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Pullulan	EC: 232-945-1 CAS: 9057-02-7	≥90	Not classified.	[A]
methanol	REACH #: 01-2119433307-44 EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X	<1	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 See Section 16 for the full text of the H statements declared above.	[B]
Product/ingredient name		SCL and ATE		
Pullulan		-		
methanol			STOT SE 1; H370: C ≥ 10 % STOT SE 2; H371: 3 % ≤ C < 10 %	

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[A] Constituent

[B] Impurity

[C] Stabilizing additive

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

SECTION 4: First aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).
- Unsuitable extinguishing media** : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : May form explosible dust-air mixture if dispersed.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon monoxide
carbon dioxide
Formaldehyde.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized 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 spilled 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 materials for containment and cleaning up

- Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

- 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

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.
- 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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

- Storage class (TRGS 510)** : 13

7.3 Specific end use(s)

Section 7. Handling and storage: The information in this section contains generic advice and guidance.

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

Occupational exposure limits (national)

Product/ingredient name	Exposure limit values
methanol	TRGS 900 OEL (Germany, 4/2021). Absorbed through skin. TWA: 130 mg/m ³ 8 hours. PEAK: 260 mg/m ³ 15 minutes. TWA: 100 ppm 8 hours. PEAK: 200 ppm 15 minutes.

Occupational exposure limits (European Union)

Product/ingredient name	Exposure limit values
methanol	EU OEL (Europe, 10/2019). Absorbed through skin. TWA: 200 ppm 8 hours. TWA: 260 mg/m ³ 8 hours.

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

DNEL/DMEL Summary : Not applicable.

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, 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, vapor 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. 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: Wear safety glasses with side protection in accordance with EN 166. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

SECTION 8: Exposure controls/personal 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.
Recommended: Wear suitable gloves tested to EN374.
Material: Rubber 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.
- 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.
Recommended: Particle filter device (DIN EN 143), Filter type: P2.
- 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** : Solid. [Powder.]
- Color** : White.
- Odor** : Odorless.
- Odor threshold** : Not applicable.
- pH** : Not available.
- Melting point/freezing point** : Not applicable.
- Initial boiling point and boiling range** : Not applicable.
- Flash point** : Not applicable.
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit** : Not applicable.
- Vapor pressure** : Not available.
- Vapor density** : Not applicable.
- Relative density** : Not available.
- Solubility(ies)** : Not available.
- Solubility in water** : Insoluble.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : 280°C
- Decomposition temperature** : Not available.
- Viscosity** : Not applicable.
- Explosive properties** : Not available.

SECTION 9: Physical and chemical properties

Oxidizing properties : Not available.

Particle characteristics

Median particle size : Not available.

9.2 Other information

No additional information.

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 : Keep away from heat, sparks and flame. Avoid dust generation.

10.5 Incompatible materials : Reactive or incompatible with the following materials:
oxidizing 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	Remarks
Pullulan	LD50 Oral	Mouse	>14.28 g/kg	-	-
methanol	LC50 Inhalation Vapor	Rat	>22500 ppm	8 hours	The classification of the substance for this endpoint is given by Annex VI of CLP regulation (EC No. 1272/2008) and is not deduced from the data shown.
	LD50 Dermal	Rabbit	15800 mg/kg	-	The classification of the substance for this endpoint is given by Annex VI of CLP regulation (EC No. 1272/2008) and is not deduced from the data shown.
	LD50 Oral	Rat	6200 to 9100 mg/kg	-	The classification of the substance for this endpoint is given by Annex VI of CLP regulation (EC No. 1272/2008) and is

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SECTION 11: Toxicological informationnot deduced from
the data shown.**Conclusion/Summary** : Based on available data, the classification criteria are not met.**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Shodex STANDARD P-82	10000	3000	N/A	30	N/A
Pullulan	5000	N/A	N/A	N/A	N/A
methanol	100	300	N/A	3	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	Remarks
methanol	Skin - Non-irritating to the skin.	Rabbit	-	20 hours	-	-
	Eyes - Non-irritating to the eyes.	Rabbit	-	-	-	-

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

Product/ingredient name	Route of exposure	Species	Result	Remarks
methanol	skin	Guinea pig	Not sensitizing	-

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

Product/ingredient name	Test	Experiment	Result	Remarks
Pullulan	DNA repair test	Experiment: In vitro Subject: Bacteria	Positive	Bacillus subtilis
	Reverse mutation test	Experiment: In vitro Subject: Bacteria	Negative	Salmonella typhimurium
methanol	OECD 471	Experiment: In vitro Subject: Bacteria	Negative	Salmonella typhimurium
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal	Negative	Hamster Cells
	Micronucleus-test	Experiment: In vitro Subject: Mammalian-Animal	Negative	-

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

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SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure	Remarks
Pullulan	Negative - Oral	Rat - Female	>5080 mg/kg NOAEL	62 weeks	-
	Negative - Oral	Rat - Male	>4450 mg/kg NOAEL	62 weeks	-

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 : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- 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:
irritation
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure	Remarks
Pullulan	Sub-chronic LD50 Oral	Rat	-	90 days	No known significant effects or critical hazards.
	Chronic LD50 Oral	Rat	-	14 months	No known significant effects or critical hazards.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.
- General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- 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

- Endocrine disrupting properties** : This substance does not have endocrine disrupting properties.
- Other information** : Not available.

SECTION 12: Ecological information**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure	Remarks
methanol	Acute EC50 900.73 mg/l	Crustaceans - Artemia	24 hours	-
	Acute EC50 1340 mg/l	Crustaceans - Artemia	96 hours	-
	Acute LC50 15400 mg/l	Fish - Lepomis macrochirus	96 hours	-

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

12.2 Persistence and degradability

- Conclusion/Summary** : There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Pullulan	-	-	Readily
methanol	-	50%; 17.2 day(s)	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
methanol	-0.77	0.01 to 0.51	low

12.4 Mobility in soil

- Soil/water partition coefficient (K_{oc})** : Not available.
- Mobility** : Not available.

12.5 Results of PBT and vPvB assessment

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SECTION 12: Ecological information

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Shodex STANDARD P-82	No	N/A	N/A	No	N/A	N/A	N/A

12.6 Endocrine disrupting properties : This substance does not have endocrine disrupting properties.

12.7 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

13.1 Waste treatment methods.

Product

Methods of disposal : The generation of waste should be avoided or minimized 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.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EWC, specific to the industry and process.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal : The generation of waste should be avoided or minimized 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled 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	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
Label				
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	Marine Pollutant: No	No.

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

SECTION 14: Transport information

14.7 Maritime transport in bulk according to IMO instruments : Not applicable.

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 authorization

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 : Shall not be placed on the market to the general public after 9 May 2019 in windscreen washing or defrosting fluids, in a concentration of methanol equal to or greater than 0.6 % by weight.

Other EU regulations

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 not controlled under the Seveso Directive.

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
methanol	DFG MAC-values list	Methanol; Methyl alcohol	Listed	-

Storage class (TRGS 510) : 13

Hazardous incident ordinance

This product is not controlled under the Germany Hazardous Incident Ordinance.

Hazard class for water : 2

Maternity Protection Act (MuSchG) : Not applicable.

Law on the protection of young workers : Not relevant.

Technical instruction on air quality control : TA-Luft Number 5.2.1: 90%
TA-Luft Class I - Number 5.2.5: 1%

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.

SECTION 15: Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia inventory (AIIIC)	: All components are listed or exempted.
Canada	: At least one component is not listed in DSL but all such components are listed in NDSL.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
United States	: All components are active or exempted.

15.2 Chemical Safety Assessment : Not available.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
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
EWC = European Waste Catalogue
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
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
Not classified.	

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.

Full text of classifications [CLP/GHS]

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SECTION 16: Other information

Acute Tox. 3 Flam. Liq. 2 STOT SE 1	ACUTE TOXICITY - Category 3 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
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Date of printing : 01/07/2023**Date of issue/ Date of revision** : 01/07/2023**Date of previous issue** : 01/01/2023**Version** : 1.3**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.