

SAFETY DATA SHEET

DELO-DUOPOX® AD840 Component B

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

1.1 Product identifier

Product name : DELO-DUOPOX® AD840 Component B
UFI : QF71-R074-800N-AT5K

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

Identified uses

Use of the substance/mixture: Adhesive.
Process categories [PROC]:
PROC01: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC02: Use in closed, continuous process with occasional controlled exposure.
PROC03: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition.
PROC04: Chemical production where opportunity for exposure arises.
PROC05: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact).
PROC09: Transfer of substance or mixture into small containers (dedicated filling line, including weighing).
PROC10: Roller application or brushing of adhesive and other coating.
Environmental release categories [ERC]:
ERC02: Formulation into mixture.
ERC05: Use at industrial site leading to inclusion into/onto article.
Product categories [PC]:
PC01: Adhesives, sealants.
Sector of uses [SU]:
SU03: Industrial uses.
SU10: Formulation [mixing] of preparations and/or re-packaging (excluding alloys).
SU16: Manufacture of computer, electronic and optical products, electrical equipment.
SU17: General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment.
SU22: Professional uses.
*: Mixture.

Uses advised against

Not applicable.

**Use of the substance/
mixture** : Industrial/Professional use

1.3 Details of the supplier of the safety data sheet

Supplier's details : **DELO** Industrie Klebstoffe GmbH & Co. KGaA
DELO-Allee 1
86949 Windach
Germany
Telephone no.: +49 8193 9900-0

Information contact : sds@DELO.de
Department Chemistry - Compliance

1.4 Emergency telephone number

In case of emergency : National advisory body/Poison Centre
Telephone number : 111

Transport

Telephone number : GlobalChem24: +44 1865 407333
Hours of operation : 24-hour telephone and/or website

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

Information limitations : In case of emergency [Transport]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to CLP/GHS

Skin Corr. 1B, H314

Skin Sens. 1, H317

Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

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

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves: 1 - 4 hours (breakthrough time): Recommended: Viton® fluor rubber / Short term exposure < 15 min Nitrile gloves.. Wear protective clothing. Wear eye or face protection. Avoid release to the environment. Avoid breathing vapour.

Response : ☒ Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. 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 : Not applicable.

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

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

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.

DELO-DUOPOX® AD840 Component B**SECTION 2: Hazards identification**

Other hazards which do not result in classification : Air contaminants may be formed during use of the product.

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1	25 - 75	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	REACH #: Polymer CAS: 9046-10-0	2.5 - 10	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	[1]
Phenol, styrenated	REACH #: 01-2119980970-27 EC: 262-975-0 CAS: 61788-44-1	2.5 - 10	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	[1]
N-[3-(dimethoxymethylsilyl)propyl] ethylenediamine	REACH #: 01-2119963926-21 EC: 221-336-6 CAS: 3069-29-2	< 2.5	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317	[1]
Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl	CAS: 2156592-58-2	< 2.5	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 (digestive system, immune system, liver) Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
2-methylpentane-1,5-diamine	REACH #: 01-2119976310-41 EC: 239-556-6 CAS: 15520-10-2	< 2.5	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	[1]
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	REACH #: 01-2119560598-25 EC: 247-063-2 CAS: 25513-64-8	< 1	Acute Tox. 4, H302 Skin Corr. 1A, H314 Skin Sens. 1A, H317 Aquatic Chronic 3, H412	[1]
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 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 1, H370	[1] [2]

DELO-DUOPOX® AD840 Component B**SECTION 3: Composition/information on ingredients**

			See Section 16 for the full text of the H statements declared above.	
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Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures**4.1 Description of first aid 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. 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** : 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 delayedOver-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.

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SECTION 4: First aid measures

- 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 an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen 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.
- 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 British standard BS EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. 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".

DELO-DUOPOX® AD840 Component B**SECTION 6: Accidental release measures**

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. 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.

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. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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

Storage temperature: Observe technical data sheet/instructions for use.

Store in accordance with local regulations. 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. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds**Danger criteria**

Category	Notification and MAPP threshold	Safety report threshold
E2	200 tonne	500 tonne

DELO-DUOPOX® AD840 Component B**SECTION 8: Exposure controls/personal protection**

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).

8.1 Control parameters**Occupational exposure limits**

No exposure limit value known.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS 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
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	DNEL	Long term Oral	97.2 µg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	97.2 µg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.169 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0.272 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.952 mg/m³	Workers	Systemic
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	DNEL	Long term Dermal	2.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.29 mg/m³	Workers	Systemic
Phenol, styrenated	DNEL	Long term Oral	0.75 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.75 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.31 mg/m³	General population	Systemic
	DNEL	Long term Dermal	2.1 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	7.4 mg/m³	Workers	Systemic
N-[3-(dimethoxymethylsilyl)propyl] ethylenediamine	DNEL	Short term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.2 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	21.1 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	26400 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	0.035 mg/	General	Systemic
Amines, C12-18-(even numbered)	DNEL	Long term	0.035 mg/	General	Systemic

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and C18-(unsaturated) alkyl	DNEL	Inhalation Long term Oral	m ³ 40 µg/kg bw/day	population General population	Systemic
	DNEL	Long term Inhalation	0.38 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	1 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	1 mg/m ³	Workers	Local
2-methylpentane-1,5-diamine	DNEL	Long term Inhalation	0.125 mg/ m ³	General population	Local
	DNEL	Long term Oral	0.25 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.25 mg/m ³	General population	Local
	DNEL	Long term Inhalation	0.25 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	0.5 mg/m ³	Workers	Local
2,2,4(or 2,4,4)-trimethylhexane- 1,6-diamine	DNEL	Long term Oral	0.05 mg/ kg bw/day	General population	Systemic
methanol	DNEL	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	26 mg/m ³	General population	Local
	DNEL	Long term Inhalation	26 mg/m ³	General population	Local
	DNEL	Short term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls**Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapour 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.

Individual protection measures

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- 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. 1 - 4 hours (breakthrough time): Recommended: Viton® fluor rubber / Short term exposure < 15 min Nitrile 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: organic vapour filter (Type A)
- 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. [Viscous mass.]
- Colour** : Black.
- Odour** : Amine-like.
- Odour threshold** : Not available.
- Melting point/freezing point** : Technically not possible to measure
- Initial boiling point and boiling range** : Not applicable. [Polymerisation.]
- Flammability (solid, gas)** : Non-flammable but will burn on prolonged exposure to flame or high temperature.
- Upper/lower flammability or explosive limits** : Not available.
- Flash point** : Closed cup: >90°C
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not applicable.

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SECTION 9: Physical and chemical properties

pH	: Not applicable.
Viscosity	: ☒ Dynamic (room temperature): Not available. Kinematic (room temperature): 94000 mm²/s Kinematic (40°C): Not available. Thixotropic liquid
Solubility in water	: Not available.
Partition coefficient: n-octanol/ water	: Not applicable. [Mixture.]
Vapour pressure	: Not applicable.
Relative density	: 1.33
Density	: ☒ 1.33 g/cm³ [23°C]
Vapour density	: Not available.
Explosive properties	: Not available.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable. [Liquid.]
Additional information	: Liquid.

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	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
☒ Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Oral	Rat - Female	>2000 mg/kg	-
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	LC50 Inhalation Vapour	Rat - Male, Female	>0.74 g/m³	8 hours
Phenol, styrenated	LD50 Dermal	Rabbit	2085.8 mg/kg	-
	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Oral	Rat	2500 mg/kg	-
Amines, C12-18-(even numbered) and C18-	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-

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(unsaturated) alkyl	LD50 Oral	Rat - Male, Female	1300 mg/kg	-
2-methylpentane-1,5-diamine	LC50 Inhalation Vapour	Rat	2900 mg/m ³	1 hours
methanol	LD50 Oral	Rat	1690 mg/kg	-
	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-

Conclusion/Summary : Not available.**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Skin - Irritant	Mammal - species unspecified	-	-	-
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-Phenol, styrenated	Eyes - Severe irritant	Rabbit	-	100 mg	-
Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl	Eyes - Mild irritant	Rabbit	-	0.1 MI	-
	Skin - Mild irritant	Rabbit	-	0.5 MI	-
	Eyes - Cornea opacity	Rabbit	3.33	24 hours	72 hours
	Eyes - Oedema of the conjunctivae	Rabbit	3.11	24 hours	72 hours
	Eyes - Iris lesion	Rabbit	1	24 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	3	24 hours	72 hours
	Skin - Oedema	Rabbit	1.7	3 minutes	72 hours
	Skin - Oedema	Rabbit	1.33	60 minutes	72 hours
	Skin - Erythema/Eschar	Rabbit	1.9	3 minutes	72 hours
	Skin - Erythema/Eschar	Rabbit	1.77	60 minutes	72 hours
2-methylpentane-1,5-diamine	Eyes - Severe irritant	Rabbit	-	0.1 MI	-
methanol	Skin - Severe irritant	Rabbit	-	0.5 MI	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	40 mg	-
	Eyes - Severe irritant	Rabbit	-	0.1 MI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-

Conclusion/Summary : Not available.**Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Rabbit	Sensitising

Conclusion/Summary : Not available.**Mutagenicity****Conclusion/Summary** : Not available.**Carcinogenicity****Conclusion/Summary** : Not available.**Reproductive toxicity****Conclusion/Summary** : Not available.

DELO-DUOPOX® AD840 Component B**SECTION 11: Toxicological information****Teratogenicity****Conclusion/Summary** : Not available.**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Amides, C12-18-(even numbered) and C18-(unsaturated) alkyl	Category 3	-	Respiratory tract irritation
2-methylpentane-1,5-diamine	Category 3	-	Respiratory tract irritation
methanol	Category 1	-	-

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Amides, C12-18-(even numbered) and C18-(unsaturated) alkyl	Category 2	-	digestive system, immune system, liver

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.**Potential acute health effects**

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

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

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
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

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

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

DELO-DUOPOX® AD840 Component B**SECTION 11: Toxicological information**

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.

Other information : Not available.

SECTION 12: Ecological information**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)- Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl methanol	Acute EC50 7.7 mg/l	Daphnia	48 hours
	Acute EC50 15 mg/l	Daphnia - Daphnia	48 hours
	Acute IC50 135 mg/l	Algae - Algae	72 hours
	Acute LC50 >100 mg/l	Fish - Trout	96 hours
	Acute EC10 7 mg/l Fresh water	Micro-organism - Activated sludge	3 hours
	Acute EC50 0.39 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute EC50 32 mg/l Fresh water	Micro-organism - Activated sludge	3 hours
	Acute LC50 4.21 mg/l Fresh water	Fish - <i>Danio rerio</i>	96 hours
	Acute NOEC 0.125 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute NOEC 1.78 mg/l Fresh water	Fish - <i>Danio rerio</i>	96 hours
	Acute EC50 16.912 mg/l Marine water	Algae - Green algae - <i>Ulva pertusa</i>	96 hours
	Acute LC50 2500 mg/l Marine water	Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i> - Adult	48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 290 mg/l Fresh water	Fish - Zebra danio - <i>Danio rerio</i> - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Green algae - <i>Ulva pertusa</i>	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	-	<60 % - Not readily - 28 days	-	-

Conclusion/Summary : Not available.

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SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	1.34	-	Low
Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl	4.33	-	High
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	-0.3	-	Low
methanol	-0.77	<10	Low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

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

SECTION 13: Disposal considerations

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).

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 : Yes.

Waste catalogue

Waste code	Waste designation
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

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.

DELO-DUOPOX® AD840 Component B**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. 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	UN3259	UN3259	UN3259	UN3259
14.2 UN proper shipping name	POLYAMINES, SOLID, CORROSIVE, N.O.S. (Poly[oxy (methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-, Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl)	POLYAMINES, SOLID, CORROSIVE, N.O.S. (Poly[oxy (methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-, Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl)	POLYAMINES, SOLID, CORROSIVE, N.O.S. (Poly[oxy (methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)-, Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl). Marine pollutant (Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, Phenol, styrenated)	Polyamines, solid, corrosive, n.o.s. (Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)-, Amines, C12-18-(even numbered) and C18-(unsaturated) alkyl)
14.3 Transport hazard class(es)	8  	8  	8  	8 
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information**ADR/RID**

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

Hazard identification number 80

Limited quantity 1 kg

Special provisions 274

Tunnel code (E)

ADN

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

Special provisions 274

IMDG

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

Emergency schedules F-A, S-B

Special provisions 274

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SECTION 14: Transport information

IATA	: The environmentally hazardous substance mark may appear if required by other transportation regulations. Quantity limitation Passenger and Cargo Aircraft: 15 kg. Packaging instructions: 859. Cargo Aircraft Only: 50 kg. Packaging instructions: 863. Limited Quantities - Passenger Aircraft: 5 kg. Packaging instructions: Y844. Special provisions A3, A803
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.
14.7 Transport in bulk according to IMO instruments	: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
<u>UK (GB)/REACH</u>	
<u>Annex XIV - List of substances subject to authorisation</u>	
<u>Annex XIV</u>	None of the components are listed.
<u>Substances of very high concern</u>	None of the components are listed.
<u>Persistent Organic Pollutants</u>	Not listed.
<u>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</u>	: Not applicable.
<u>Aerosol dispensers</u>	:
<u>Seveso Directive</u>	
This product is controlled under the Seveso Directive.	
<u>Danger criteria</u>	
Category	
E2	
<u>EU regulations</u>	
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
<u>International regulations</u>	
<u>Chemical Weapon Convention List Schedules I, II & III Chemicals</u>	
Not listed.	
<u>Montreal Protocol</u>	

DELO-DUOPOX® AD840 Component B**SECTION 15: Regulatory information**

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment

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

SECTION 16: Other information
 Indicates information that has changed from previously issued version.
Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = GB CLP-specific Hazard statement
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Skin Corr. 1B, H314	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

	H225	Highly flammable liquid and vapour.
	H301	Toxic if swallowed.
	H302	Harmful if swallowed.
	H311	Toxic in contact with skin.
	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.
	H331	Toxic if inhaled.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H370	Causes damage to organs.
	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.

Full text of classifications

DELO-DUOPOX® AD840 Component B

SECTION 16: Other information

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

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