SAFETY DATA SHEET

Aerodux 185

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

1.1 Product identifier

Product name : Aerodux 185

Product type : Liquid.

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

Use of the substance/ mixture : Industrial/Professional Use: Adhesive. Woodworking industry.

1.3 Details of the supplier of the safety data sheet

Supplier : Dynea AS
P.O.Box 160, N-2001 Lillestrøm
Norway
Tel. +47 63897100
Fax. +47 63897610

e-mail address of person responsible for this SDS : sds@dynea.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Not available.

Supplier

Telephone number : +47 63897100

Hours of operation : 24 hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Acute Tox. 4, H302
Acute Tox. 4, H332
Skin Corr. 1B, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
Muta. 2, H341
STOT SE 2, H371
STOT RE 2, H373

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

SECTION 2: Hazards identification

Hazard pictograms :

Signal word : Danger

Hazard statements : H302 + H332 - Harmful if swallowed or if inhaled.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H341 - Suspected of causing genetic defects.
H371 - May cause damage to organs.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention : P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
P260 - Do not breathe vapour.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash thoroughly after handling.

Response : P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor.
P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.
P363 - Wash contaminated clothing before reuse.
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
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 : Not applicable.

Disposal : P501 - 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.

Special packaging requirements

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.

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	Type
Formaldehyde, polymer with 1,3-benzenediol and phenol	REACH #: Exempt CAS: 25986-71-4	≥25 - ≤50	Skin Sens. 1, H317	[1]
phenol	REACH #: 01-2119471329-32 EC: 203-632-7 CAS: 108-95-2 Index: 604-001-00-2	≥10 - ≤25	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Muta. 2, H341 STOT RE 2, H373 (kidneys, liver, nervous system, skin)	[1] [2]
ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≤10	Flam. Liq. 2, H225	[2]
resorcinol	REACH #: 01-2119480136-40 EC: 203-585-2 CAS: 108-46-3 Index: 604-010-00-1	≤4,4	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 1, H370 (central nervous system (CNS)) (oral) STOT SE 2, H371 (respiratory tract) (oral) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412	[1] [2]
methanol	REACH #: 01-2119433307-44 EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X	≤2	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 (blood system, central nervous system (CNS), optic nerve)	[1] [2]
sodium hydroxide	REACH #: 01-2119457892-27 EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6	<1	Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412 **See Section 16 for the full text of the H statements declared above.**	[1] [2]

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.

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. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Move exposed person to fresh air. If breathing is difficult, give oxygen. If necessary, call a poison center or physician.

Skin contact : Get medical attention immediately. 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. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation occurs.

Ingestion : Get medical attention immediately. 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. 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.

General : Move the victim to a safe area as soon as possible. If unconscious, place in recovery position and seek medical advice. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Allow the victim to rest in a well-ventilated area.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause damage to organs following a single exposure if inhaled. May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system.

Skin contact : Causes severe burns. May cause damage to organs following a single exposure in contact with skin. May cause an allergic skin reaction.

Ingestion : Harmful if swallowed. May cause damage to organs following a single exposure if swallowed. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

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 : 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, CO_2, water spray (fog) or foam.

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.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

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.

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".

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. Absorb with liquid-binding material (sand, diatomite, universal binders etc.) or use a spill kit.

Large spill : Approach the release from upwind. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not handle until all safety precautions have been read and understood. 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.

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 away from incompatible materials (see Section 10). Store locked up. Keep away from food, drink and animal feeding stuffs. 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.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
phenol	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** TWA: 2 ppm 8 hours. STEL: 16 mg/m³ 15 minutes. STEL: 4 ppm 15 minutes. TWA: 7,8 mg/m³ 8 hours.
ethanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020).** TWA: 1000 ppm 8 hours. TWA: 1920 mg/m³ 8 hours.
resorcinol	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 20 ppm 15 minutes. TWA: 10 ppm 8 hours. TWA: 46 mg/m³ 8 hours. STEL: 92 mg/m³ 15 minutes.
methanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.** STEL: 333 mg/m³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 266 mg/m³ 8 hours. TWA: 200 ppm 8 hours.
sodium hydroxide	**EH40/2005 WELs (United Kingdom (UK), 1/2020).** STEL: 2 mg/m³ 15 minutes.
formaldehyde	***[Air contaminant - Curing]*** **EH40/2005 WELs (United Kingdom (UK), 1/2020).** STEL: 2,5 mg/m³ 15 minutes. STEL: 2 ppm 15 minutes. TWA: 2 ppm 8 hours.

SECTION 8: Exposure controls/personal protection

	TWA: 2,5 mg/m³ 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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
phenol	DNEL	Long term Oral	0,5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0,5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0,452 mg/m³	General population	Systemic
	DNEL	Long term Dermal	1,23 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	16 mg/m³	Workers	Local
	DNEL	Long term Inhalation	8 mg/m³	Workers	Systemic
ethanol	DNEL	Long term Inhalation	380 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8238 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	114 mg/m³	General population	Systemic
resorcinol	DNEL	Long term Oral	0,4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	33 mg/m³	General population	Local
	DNEL	Long term Inhalation	1,39 mg/m³	General population	Systemic
	DNEL	Long term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	132,8 mg/m³	Workers	Local
	DNEL	Long term Inhalation	5,6 mg/m³	Workers	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 Inhalation	26 mg/m³	General population	Local
	DNEL	Long term Inhalation	26 mg/m³	General population	Local
	DNEL	Short term Inhalation	26 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	26 mg/m³	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	130 mg/m³	Workers	Local

SECTION 8: Exposure controls/personal protection

		Inhalation			
	DNEL	Long term Inhalation	130 mg/m³	Workers	Local
	DNEL	Short term Inhalation	130 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	130 mg/m³	Workers	Systemic
sodium hydroxide	DNEL	Long term Inhalation	1 mg/m³	General population	Local
	DNEL	Long term Inhalation	1 mg/m³	Workers	Local

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
phenol	Fresh water	0,008 mg/l	Assessment Factors
	Intermittent release	0,031 mg/l	Assessment Factors
	Marine	0,001 mg/l	Assessment Factors
	Sewage Treatment Plant	2,1 mg/l	Assessment Factors
	Fresh water sediment	0,091 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0,0091 mg/kg dwt	Equilibrium Partitioning
	Soil	0,136 mg/kg dwt	Assessment Factors
ethanol	Fresh water	0,96 mg/l	Assessment Factors
	Intermittent release	2,75 mg/l	Assessment Factors
	Marine	0,79 mg/l	Assessment Factors
	Sewage Treatment Plant	580 mg/l	Assessment Factors
	Fresh water sediment	3,6 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	2,9 mg/kg dwt	Equilibrium Partitioning
	Soil	0,63 mg/kg dwt	Assessment Factors
	Secondary Poisoning	380 mg/kg	Assessment Factors
resorcinol	Fresh water	0,017 mg/l	Assessment Factors
	Marine	0,002 mg/l	Assessment Factors
	Sewage Treatment Plant	0,79 mg/l	Assessment Factors
	Fresh water sediment	0,08 mg/kg dwt	Sensitivity Distribution
	Marine water sediment	0,008 mg/kg dwt	Sensitivity Distribution
	Soil	10 mg/kg dwt	Assessment Factors

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.

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. Immediately remove any contaminated clothing, shoes or socks. 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 : Use eye protection according to EN 166, designed to protect against liquid splashes. Recommended: Tightly-fitting goggles

Skin protection

Hand protection : Wear suitable gloves tested to EN374. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

Recommended: Protective Index 6 / Breakthrough time >480 minutes: neoprene rubber 0.7 mm thickness or butyl rubber 0.7 mm thickness

Body protection : Wear work clothing with long sleeves. Cotton or cotton/synthetic overalls or coveralls are normally suitable.

SECTION 8: Exposure controls/personal protection

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 : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. No personal respiratory protective equipment normally required.

Long Term Exposure / high concentrations : Self-contained respirator (DIN EN 133) or full face mask (DIN EN 136)

Short term exposure / Low exposure : Half-face mask (DIN EN 140)

Recommended: Filter type: Type A (Brown): organic gases and vapours with a boiling point higher than 65°C. Type B (grey): Inorganic gases and vapours.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

The information provided in this section are typical values and not sales specifications

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 : Brown.

Odour : Sweet.

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range

Ingredient name	°C	Method
methanol	64,7	

Flammability (solid, gas) : Not available.

Upper/lower flammability or explosive limits : Not available.

Flash point : Closed cup: 37°C [Pensky-Martens] [Product does not sustain combustion.]

Auto-ignition temperature

Ingredient name	°C	Method
ethanol	455	DIN 51794

Decomposition temperature : Not available.

pH : 7 to 9

Viscosity : Dynamic (room temperature): 260 to 445 mPa·s
Kinematic (40°C): Not applicable.

Solubility(ies)

Media	Result
cold water	Partially soluble

Miscible with water : Yes.

Partition coefficient: n-octanol/water : 1,8

Vapour pressure

SECTION 9: Physical and chemical properties

	Vapour Pressure at 20˚C		Vapour pressure at 50˚C	
Ingredient name	**kPa**	**Method**	**kPa**	**Method**
methanol	16,9			

Relative density : Not available.

Density : 1,1 g/cm³ [ASTM D 4052]

Vapour density : Not available.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

No specific data.

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 : Formaldehyde and phenol may be released during processing.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Aerodux 185	LD50 Oral	Rat	2048 mg/kg	-
phenol	LC0 Inhalation Vapour	Rat - Female	900 mg/m³	8 hours
	LD50 Dermal	Rat - Female	660 mg/kg	-
	LD50 Oral	Rat - Male, Female	340 mg/kg	-
	LDLo Oral	Human	140 mg/kg	-
ethanol	LC50 Inhalation Vapour	Rat - Male, Female	124,7 mg/l	4 hours
	LD50 Oral	Rat	10470 mg/kg	-
resorcinol	LD50 Dermal	Rabbit	2830 mg/kg	-
	LD50 Oral	Rat	501 mg/kg	-
methanol	LC50 Inhalation Vapour	Rat - Male, Female	128,2 mg/l	4 hours
	LD50 Dermal	Rabbit	17100 mg/kg	-

phenol: Toxic by inhalation, in contact with skin and if swallowed.
ethanol: Based on available data, the classification criteria are not met.
resorcinol: Harmful if swallowed.
methanol: Toxic by inhalation, in contact with skin and if swallowed.

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Aerodux 185	442,5	2773,1	N/A	13,6	N/A
phenol	100	660	N/A	3	N/A
ethanol	10470	N/A	N/A	124,7	N/A
resorcinol	501	2830	N/A	N/A	N/A
methanol	100	300	N/A	3	N/A

Product Conclusion/ Summary : Harmful if swallowed. Harmful if inhaled.

Chronic toxicity

Product/ingredient name	Result	Species	Dose	Exposure
phenol	Sub-acute NOAEL Dermal	Rabbit	130 mg/kg	18 days; 5 hours per day
	Sub-chronic NOAEL Oral	Rat - Male	300 mg/kg	13 weeks
ethanol	Sub-acute LOAEC Inhalation Vapour	Rat	13,3 mg/l	6 weeks
	Sub-chronic LOAEL Oral	Rat	3200 mg/kg	14 weeks; 7 days per week
	Sub-acute NOAEC Inhalation Vapour	Rat	2,65 mg/l	6 weeks
	Sub-chronic NOAEL Oral	Rat	1730 mg/kg	14 weeks; 7 days per week
resorcinol	Sub-acute NOAEC Inhalation Dusts and mists	Rat	991 mg/m³ Local	14 hours; 7 days per week
	Sub-chronic NOAEL Oral	Rat	80 mg/kg	13 weeks

Irritation/Corrosion

Skin : phenol: Corrosive to the skin.
ethanol: Based on available data, the classification criteria are not met.
resorcinol: Irritating to skin.
methanol: Based on available data, the classification criteria are not met.
sodium hydroxide: Causes severe burns.

Eyes : phenol: Corrosive to eyes.
resorcinol: Risk of serious damage to eyes.
methanol: Based on available data, the classification criteria are not met.
sodium hydroxide: Risk of serious damage to eyes.

Product Conclusion/ Summary : Causes severe skin burns and eye damage.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
resorcinol	skin	Human	Sensitising
methanol	Respiratory	Guinea pig	Not sensitizing
	skin	Guinea pig	Not sensitizing
sodium hydroxide	skin	Human	Not sensitizing

Skin : Formaldehyde, polymer with 1,3-benzenediol and phenol: May cause sensitisation by skin contact.
phenol: Not sensitizing
resorcinol: Sensitising
methanol: Not sensitizing
sodium hydroxide: Not sensitizing

Respiratory :

SECTION 11: Toxicological information

phenol: Not sensitizing
resorcinol: Based on available data, the classification criteria are not met.
methanol: Not sensitizing

Product Conclusion/ Summary : May cause an allergic skin reaction.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
phenol	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic Metabolic activation: Yes	Positive
	OECD 487 In vitro Micronucleus Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic Metabolic activation: Yes	Positive
ethanol	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: + & -	Negative
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: + & -	Negative
	OECD 478 Genetic Toxicology: Rodent Dominant Lethal Test	Experiment: In vivo Subject: Mammalian-Animal Metabolic activation: + & -	Equivocal

phenol: Mutagenic in mammalian somatic cells, based on *in vitro* studies.
ethanol: Based on available data, the classification criteria are not met.
resorcinol: Based on available data, the classification criteria are not met.
methanol: Based on available data, the classification criteria are not met.

Product Conclusion/ Summary : Suspected of causing genetic defects.

Carcinogenicity

phenol: Phenol is not considered to be carcinogen in experimental animals after repeated oral exposure. There is evidence for promoting activity of phenol after repeated dermal application at concentrations inducing severe local effects due to the corrosive properties. There is no evidence for carcinogenicity in epidemiology.
ethanol: Based on available data, the classification criteria are not met.
resorcinol: Based on available data, the classification criteria are not met.
methanol: Based on available data, the classification criteria are not met.

Formaldehyde is classified as a category 1B carcinogen by EU (Suspected of causing cancer in humans). The classification is mainly based on carcinogenic effects demonstrated in animal experiments, but also on experience from occupational use indicating, but not proving, increased risk of cancer in humans. The actual risk is a rare type of cancer in the nasopharyngeal area (upper part of the throat, behind the nose).

Animal experiments have demonstrated that the cancer risk has a strong link to high and repeated doses of formaldehyde, with an effect threshold at 2 ppm. This is the basis for the derived no effect level (DNEL) for occupational use of 0,3 ppm. Exposure below this level gives limited or no risk of adverse effects.

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

SECTION 11: Toxicological information

Reproductive toxicity

phenol: In a long-term drinking water study in rats and mice mammary gland, no effects on reproductive organs were detected.
ethanol: Based on available data, the classification criteria are not met.
resorcinol: Based on available data, the classification criteria are not met.
methanol: Based on available data, the classification criteria are not met.

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

Teratogenicity

phenol: Oral exposure to phenol resulted in growth retardation of the offspring and impaired postnatal viability and growth. However, these effects were found in dose levels that were also toxic to the dams. Therefore, phenol is not considered to have specific embryo- or fetotoxic effects.
methanol: Based on available data, the classification criteria are not met.

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

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
resorcinol	Category 1	oral	central nervous system (CNS)
	Category 2	oral	respiratory tract
methanol	Category 1	-	blood system, central nervous system (CNS), optic nerve

Product Conclusion/ Summary :

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
phenol	Category 2	-	kidneys, liver, nervous system, skin

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

Aspiration hazard

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

Potential Adverse effects

Eye contact : Causes serious eye damage.

Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Harmful if inhaled. May cause damage to organs following a single exposure if inhaled. May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin.

Skin contact : Causes severe burns. May cause damage to organs following a single exposure in contact with skin. May cause an allergic skin reaction.

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

SECTION 11: Toxicological information

Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Harmful if swallowed. May cause damage to organs following a single exposure if swallowed. May cause burns to mouth, throat and stomach.

Adverse symptoms may include the following:
stomach pains

Interactive effects : No specific data.

Other information : No specific data.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Aerodux 185	Acute EC50 48 mg/l Marine water	Algae - Algae - Skeletonema	72 hours
phenol	Acute EC50 61,1 mg/l Static Fresh water	Algae - Algae - Pseudokirchnerella subcapitata	96 hours Static
	Acute EC50 3,1 mg/l Static Fresh water	Daphnia - Daphnia - Ceriodaphnia dubia - Neonate	48 hours Static
	Acute IC50 21 mg/l Static Fresh water	Micro-organism - Activated sludge - Nitrosomonas sp.	24 hours Static
	Acute LC50 8,9 mg/l Flow through Fresh water	Fish - Trout - Oncorhinchus Mykiss	96 hours Flow through
	Acute NOEC 5 mg/l Static Marine water	Algae - Algae - Entomoneis cf punctulata	72 hours Static
	Chronic EC10 0,46 mg/l Semi-static Fresh water	Daphnia - Daphnia - Daphnia magna	16 days Semi-static
	Chronic NOEC 0,077 mg/l Semi-static Fresh water	Fish - Cirrhina mrigala	60 days Semi-static
ethanol	EC50 4432 mg/l Fresh water	Algae - Chlorella vulgaris	4 days Static
	EC50 4432 mg/l Fresh water	Aquatic plants - Lemna gibba	7 days Static
	NOEC 280 mg/l Fresh water	Aquatic plants	7 days Static
	NOEC 250 mg/l Fresh water	Fish	104 days Flow through
	Acute LC50 857 mg/l Marine water	Daphnia	48 hours Static
	Acute LC50 11200 mg/l Fresh water	Fish	96 hours Flow through
	Chronic NOEC 9,6 mg/l Fresh water	Daphnia	10 days Semi-static
resorcinol	EC50 97 mg/l	Algae	72 hours
	NOEC 97 mg/l	Algae	72 hours
	NOEC 0,172 mg/l Fresh water	Daphnia	21 days
	Acute EC50 1 mg/l	Daphnia	48 hours
	Acute LC50 26,8 mg/l Fresh water	Fish	96 hours
methanol	EC50 22000 mg/l Fresh water	Algae - Selenastrum capricornutum	96 hours Static
	Acute EC50 >10000 mg/l Fresh water	Daphnia - Daphnia magna	48 hours Static
	Acute LC50 15400 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours Flow through

SECTION 12: Ecological information

	Chronic NOEC 208 mg/l Fresh water	Daphnia	21 days Static
	Chronic NOEC 450 mg/l Fresh water	Fish	28 days Static
sodium hydroxide	LC50 35 to 189 mg/l	Fish	96 hours
	Acute EC50 40,4 mg/l	Daphnia - Ceriodaphia sp.	48 hours

phenol: Toxic to aquatic organisms.
methanol: No known significant effects or critical hazards.

Product Conclusion/ Summary : Inherently biodegradable This product shows a low bioaccumulation potential.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Aerodux 185	OECD 306	28 % - Inherent - 28 days	-	-
phenol	-	86 to 96 % - 20 days	3 to 10 mg/l	Fresh water Marine water
	-	80,1 % - 50 days	20 to 50 mg/l	Activated sludge
	OECD 301C	62 % - Readily - 4,16 days	100 mg/l	Activated sludge
resorcinol	-	89 % - 2 days	446 mg/l	-
methanol	-	83 to 91 % - Readily - 3 days	-	Fresh water Sediment
	-	71 to 83 % - Readily - 5 days	BOD/ThOD	Sewage
	-	69 to 97 % - 5 days	O_2 Consumption	Marine water
	-	53,4 % - 5 days	-	-
	-	46,3 % - 5 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Aerodux 185	-	-	Inherent
Formaldehyde, polymer with 1,3-benzenediol and phenol	-	-	Inherent
phenol	Estuarine water 7 days, 24°C Estuarine water 73 days, 10°C Estuarine water 15 days, 10 to 24°C	-	Readily
ethanol	-	-	Readily
resorcinol	-	-	Readily
methanol	-	50%; 17.2 day(s)	Readily

phenol: Readily biodegradable
methanol: Readily biodegradable

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Aerodux 185	1,8	-	low
phenol	1,47	647	high
ethanol	-0,35	4,5	low
resorcinol	0,8	3,16	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.

SECTION 12: Ecological information

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.

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	UN1760	UN1760	UN1760	UN1760
14.2 UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Phenol components in phenolic resin)	CORROSIVE LIQUID, N.O.S. (Phenol components in phenolic resin)	CORROSIVE LIQUID, N.O.S. (Phenol components in phenolic resin)	Corrosive liquid, n.o.s. (Phenol components in phenolic resin)
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	No.	No.	No.

Additional information

ADR/RID : **Hazard identification number** 80
Limited quantity 5 L
Special provisions 274
Tunnel code (E)

ADN : **Special provisions** 274

SECTION 14: Transport information

IMDG : **Emergency schedules** F-A, S-B
Special provisions 223, 274

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 5 L. Packaging instructions: 852. Cargo Aircraft Only: 60 L. Packaging instructions: 856. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y841.
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

UK (GB) /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.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

SECTION 15: Regulatory information

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	Not determined.
Eurasian Economic Union	:	**Russian Federation inventory**: All components are listed or exempted.
Japan	:	**Japan inventory (CSCL)**: Not determined. **Japan inventory (ISHL)**: Not determined.
New Zealand	:	Not determined.
Philippines	:	Not determined.
Republic of Korea	:	Not determined.
Taiwan	:	Not determined.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States	:	All components are active or exempted.
Viet Nam	:	Not determined.

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
Acute Tox. 4, H302	Calculation method
Acute Tox. 4, H332	Calculation method
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Muta. 2, H341	Calculation method
STOT SE 2, H371	Calculation method
STOT RE 2, H373	Calculation method

Full text of abbreviated H statements

SECTION 16: Other information

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic 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.
H341	Suspected of causing genetic defects.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications

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 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
Muta. 2	GERM CELL MUTAGENICITY - 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. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 1	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1
STOT SE 2	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2

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Previous product name : Not available.

Version : 0.1