# Trade name: DETER-AB BASE

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

1.1 Product identifier For industrial and professional use only.

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• Article number: 6824

- 1.2 Relevant identified uses of the substance or mixture and uses advised against Surface Coating
  Application of the substance / the mixture Surface Coating
- 1.3 Details of the supplier of the safety data sheet • Supplier: NORIGIN SCIENTIFIC LIMITED 14 Penrose Wharf, Penrose Quay, Cork, Ireland TK23 EK0E, TEL: +44 (0)7768 852657 Email: info@norigin-sci.com

• Further information obtainable from: <u>sales@norigin-sci.com</u>

**1.4 Emergency telephone number:** +44 (0)7768 852657 (business hours)

# **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No
1272/2008

Eye Dam. 1 H318 Causes serious eye damage. Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

# 2.2 Label elements

• Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the GB CLP regulation.

• Hazard pictograms: GHS05 🗸 🛣

# Signal word Danger

• Hazard-determining components of labelling: Phenol, 4,4'-(1-methylethylidene) bis-, polymer with chloromethyl)oxirane, reaction products with ethylenediamine, epichlorohydrinpolyethylene glycol polymer, cresol glycidyl ether and 1, 4-bis(methylol) cyclohexanediglycidyl ether propionic acid

• Hazard statements H318: Causes serious eye damage. H412: Harmful to aquatic life with long lasting effects.

# • Precautionary statements

P273 Avoid release to the environment.
P280 Wear eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 2.3 Other hazards

- Results of PBT and vPvB assessment
- PBT: Not applicable,
- vPvP: Not applicable

# Antibacterial Coatings

# Safety data sheet

According to 1907/2006/EC, Article 31

*Version number: 1.23* 

Revision: 01.03.2024

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# SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:				
CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: Exempt under ANNEX V article 7	barium sulphate, natural substance with a Community workplace exposure limit			
	Phenol, 4, 4'-(1-methyle- thylidene) bis-, polymer with chloromethyl)oxirane, reaction products with ethylenediamine, epichlorohy- drinpolyethylene glycol polymer, cresol glycidyl ether and 1, 4-bis(methylol) cyclohexanediglycidyl ether	10-25%		
	• Eye Dam. 1, H318			
CAS: 79-09-4 EINECS: 201-176-3 Reg.nr.: 01-2119486971-24	propionic acid			
	• Flam. Liq. 3, H226; • Skin Corr. 1B, H314	≤2.5%		
CAS: 20018-09-1 EINECS: 243-468-3	Diiodomethyl-p-tolyl sulfone			
	<ul> <li>Acute Tox. 3, H331;</li> <li>Eye Dam. 1, H318;</li> <li>Aquatic Acute 1, H400;</li> <li>Aquatic Chronic 1, H410;</li> <li>Acute Tox. 4, H302</li> </ul>	≤2.5%		
Additional information: For the wording of the listed				

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

# **SECTION 4: First aid measures**

4.1 Description of first aid measures

• After inhalation: Supply fresh air; consult doctor in case of complaints.

• After skin contact: Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing.

• After eye contact: Rinse opened eye for several minutes under running water.

• After swallowing: Do not induce vomiting; call for medical help immediately and show safety datasheet or label.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

# **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or

mixture

No further relevant information available.

**5.3 Advice for firefighters** 

**Protective equipment:** Put on breathing apparatus

# SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away.

# **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13.

# 6.4 Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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# SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
- Keep receptacles tightly sealed.
- Hygiene measures:
- Wash hands before breaks and at the end of workday.
- Information about fire and explosion protection:
- No special measures required.

# 7.2 Conditions for safe storage, including any incompatibilities

- **Storage:** Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed and in a well-ventilated place.

Keep away from heat.

## 7.3 Specific end use(s)

No further relevant information available.

# **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

• Additional information about design of technical facilities: No further data; see section 7.

7727-43-7 barium sulphate, natural				
WEL		Long-term value: 10* 4** mg/m3 *inhalable dust **respirable dust		
79-09-4 prop	ionic acid			
WEL		Short-term value: 46 mg/m3, 15 ppm Long-term value: 31 mg/m3, 10 ppm		
DNELs				
79-09-4 prop	ionic acid			
Dermal	DNEL	132 mg/day (Ind)		
Inhalative	DNEL	31 mg/m³ (Ind)		

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- **Respiratory protection:** Particulate cartridge filter type when LEV cannot
- be supplied
- Protection of hands:
- Protective gloves
- Eye protection: Tightly sealed goggles

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9.1: Information on basic physical and chemical properties			
Appearance: Form: Liquid Colour: White Odour: Characteristic Odour threshold: Not determined.	Density: Density at 20 °C: 1.726 g/cm3 Relative density: not determined Vapour density: not determined Evaporation rate: not determined		
pH-value at 20 °C: 8 Change in condition: Melting point/freezing point: Undetermined. Initial boiling point and boiling range: 100 °C	Solubility in / Miscibility with water: Fully miscible.		
Flash point: Not applicable.	Partition coefficient: n-octanol/water: Not determined.		
<b>Flammability (solid, gas):</b> Not applicable.	Viscosity: Dynamic at 20 °C: 300 mPas Kinematic: Not determined.		
<b>Decomposition temperature:</b> Not determined.	Solvent content: Organic solvents: 1.1 %, Water: 28,2 %		
<b>Ignition temperature:</b> Product is not selfigniting.	Solids content: 67,9%		
<b>Explosive properties:</b> Product does not present an explosion hazard.			
<b>Explosion limits:</b> Lower: Not determined. Upper: Not determined. Vapour pressure at 20oC: 23hPa			

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# **SECTION 10: Stability and reactivity**

### • **10.1 Reactivity** No further relevant information available.

### • 10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

• **10.3 Possibility of hazardous reactions** No dangerous reactions known.

## • **10.4 Conditions to avoid** No further relevant information available.

• **10.5 Incompatible materials:** No further relevant information available.

• **10.6 Hazardous decomposition products:** No dangerous decomposition products when stored and handled correctly

# **SECTION 11: Toxicological information**

• **11.1 Information on toxicological effects** Acute toxicity Based on available data, the classification criteria are not met.

7727-43-7 barium sulphate, natural			
Oral	LD50/4 h	>15,000 mg/kg (Rat)	
79-09-4 prop	ionic acid		
Oral	LD50	2,600 mg/kg (Rat)	
Dermal	LD50	525 mg/kg (Rat)	
Inhalative	LD50/4 h	>4.9 mg/l (Rat)	
20018-09-1 [	iiodomethyl-p-toly	/l sulfone	
Oral	LD50	> 500 mg/kg (Rat)	
Inhalative	LC50/4 h	0.77 mg/l (Rat)	

• Primary irritant effect: Skin corrosion/irritation Based on available data, the classification

criteria are not met. Serious eye damage/irritation

Causes serious eye damage.

• **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

## Additional toxicological information:

• CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available

data, the classification criteria are not met. • **Carcinogenicity** Based on available data, the

classification criteria are not met.

• **Reproductive toxicity** Based on available data, the classification criteria are not met.

• STOT-single exposure Based on available data,

the classification criteria are not met.

• **STOT-repeated exposure** Based on available

data, the classification criteria are not met.

• Aspiration hazard Based on available data,

the classification criteria are not met.

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# **SECTION 12: Ecological information**

### 12.1 Toxicity

Aquatic toxicity: No further relevant information available.

**12.2 Persistence and degradability** No further relevant information available.

**12.3 Bioaccumulative potential** No further relevant information available.

12.4 Mobility in soil

No further relevant information available. • Ecotoxical effects: Remark: Harmful to fish Additional ecological information: • General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach sewage water or drainage

**12.5 Results of PBT and vPvB assessment** PBT: Not applicable. vPvB: Not applicable.

ditch undiluted or unneutralised. Harmful to aquatic organisms

12.6 Other adverse effects

No further relevant information available.

# **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system

# • Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

• Recommended cleansing agents:

Water, if necessary together with cleansing agents'

# **SECTION 14: Transport information**

• 14.1 UN-Number ADR, ADN, IMDG, IATA Void

• 14.2 UN proper shipping name ADR, ADN, IMDG, IATA Void

• 14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Void

• 14.4 Packing group ADR, IMDG, IATA Class Void

• **14.5 Environmental hazards:** Marine pollutant: **No** 

• **14.6 Special precautions for user** Not applicable.

• 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

UN "Model Regulation": Void

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# **SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture
- Poisons Act
- **Regulated explosives precursors** None of the ingredients is listed.
- Regulated poisons
- None of the ingredients is listed.
- Reportable explosives precursors
- None of the ingredients is listed.
- **Reportable poisons** None of the ingredients is listed
- Directive 2012/18/EU

### • Named dangerous substances -

ANNEX I None of the ingredients is listed.

National regulations

### • Technical instructions (air):

Class	Share in %
Water	28.2
NK	1.1

• Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

• **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

# **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• Full text of H-Statements referred to under sections 2 and 3: H226 Flammable liquid and vapour.

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
Department issuing SDS:
Product safety department: LABORATORY
Contact: Health & Safety Officer

# • Abbreviations and acronyms:

• RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

• ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

• IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

• GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DNEL: Derived No-Effect Level (UK REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq 3: Flammable Liquids Category 3
- Acute Tox. 4: Acute toxicity Category 4
- Acute Tox. 3: Acute toxicity Category 3
- Skin Corr. 1B Skin corrosion/irritation Category 1B
- Eye Dam. 1: Serious eye damage/ eye irritation – Category 1
- Aquatic Acute 1: Hazardous to the aquatic
- environment acute aquatic hazard Category 1
- Aquatic Chronic 1: Hazardous to the aquatic
- environment long term aquatic hazard Category 1
- Aquatic Chronic 3: Hazardous to the aquatic
- environment long term aquatic hazard Category 3

\* Data compared to the previous version altered.