

Material Safety Data Sheet

DIESELAID B - BROAD SPECTRUM BIOCIDES

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

· 1.1 Product identifier

· Trade name: DIESELAID B

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

· Application of the substance/the mixture: Biocidal product for industrial use.

· 1.3 Details of the supplier of the safety data sheet:

· Address and telephone number of the supplier:

· MarShip UK Ltd.
Alderton 2
· Priory Park, Tetbury
· Gloucestershire, GL8 8HZ
· United Kingdom
Phone: (UK) +44 (0) 1666 818 791

· Competent person responsible for the Material Safety Data Sheet:

Regulatory Department: sales@marship.eu

· 1.4 Emergency telephone number:

National Poisons Information Service (24 h service):
Phone: +44 (0) 844-892-0111 (UK only) or
Phone: +44 (0) 1666 818 791 (UK only) 9am-5pm
Monday to Friday only

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008 respectively UN GHS



GHS05 corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008 respectively UN GHS

The substance is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**



GHS05 GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**

3,3'-methylenebis[5-methyloxazolidine]

· **Hazard statements**

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

· **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing mist/vapours/spray.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards** Other hazards have not been identified for this product.

SECTION 3: Composition/information on ingredients

· **3.1 substances**

· **CAS No. Designation:**

66204-44-2 3,3'-methylenebis[5-methyloxazolidine]

· **Identification number(s):**

· **EC number:** 266-235-8

· **Molecular weight:** 186.26 g/mol

· **Empirical formula:** C9H18N2O2

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Obtain special instructions from the poison information centre: Phone: +44 (0) 844-892-0111 (UK only) - see as well section 1.4.

Personal protection for the First Aider.

· **After inhalation:** Supply fresh air; consult doctor in case of symptoms.

· **After skin contact**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a doctor immediately.

· **After eye contact:**

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

Consult an eye specialist immediately.

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- **After swallowing:**
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
Bring vomiting person into recovery position.
Do not give anything by mouth to an unconscious person.
- **4.2 Most important symptoms and effects, both acute and delayed**
Corrosive damage to gastro-intestinal tract.
Corrosive damage to upper respiratory tract.
- **Information for doctor:** Probable mucosal damage may contraindicate the use of gastric lavage.
- **Danger** Danger of gastric perforation.
- **4.3 Indication of any immediate medical attention and special treatment needed if swallowed, gastric irrigation with activated carbon.**
Rinse eyes thoroughly with physiological saline.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Water spray jet, extinguishing powder, CO₂, foam.
- **Unsuitable extinguishing agents for reasons of safety:** None
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, toxic incineration products may be released such as:
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing (see item 8).
When selecting the protective suit attention has to be paid to the complete and safe protection of skin and mucous membranes. Impermeable protective clothes, protective boots made of neoprene, complete face protection and nitrile-rubber-gloves with long tops should be worn.
- **6.2 Environmental precautions:**
As the product is hazardous for the aquatic environment, it must be prevented from reaching surface water.
Prevent from spreading (e. g. by enclosing with a ring of chemical absorbent).
Inform authorities in case of contamination of water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically.
Suitable binder: multi-purpose absorbent.
Dispose of contaminated material as waste according to item 13.

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· **6.4 Reference to other sections** None

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good exhaust ventilation at the workplace.
It is preferable to handle the product in a closed system.
Avoid air pollution at the workplace e.g. aerosol formation or product heating.
Load carefully, avoid splashes.

Risks to the safety and health of workers may not only be created by work involving chemicals but, inter alia by work equipment and the fitting-out of work-places. Those risks shall be identified and evaluated.

· **Information about protection against explosion and fire:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and containers:**

Prevent any penetration into the ground.
Store only in the original container.

· **Information about storage in a common storage facility:**

Store away from foodstuffs.
Do not store together with acids.

· **Further information about storage conditions:** Keep containers tightly sealed.

· **Recommended storage temperature:** 15-30 °C

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Components with critical values that require monitoring at the workplace:** None established.

· **Additional information:** Information valid at the time of review of safety data sheet.

· **8.2 Exposure controls**

· **Technical protective equipment:**

In case of contamination devices to rinse eyes or skin immediately under running water must be available.

· **Personal protective equipment**

· **General protective and hygienic measures:**

Use skin cream for skin protection.
Avoid contact with the eyes and the skin.
Do not inhale gases/fumes/aerosols.
Wash hands during work breaks and at the end of the shift.
Provide skin protection plan.

· **Respiratory protection:**

Filter A/P2.
Use respiratory equipment if aerosol or mist is formed.

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· **Protection of hands:**



Chemical protective gloves according to DIN EN 374 with CE-labelling.

Check the condition of protective gloves after each use for any damages like holes, cuts or tears. Do not wear protective gloves longer than necessary.

After use of gloves apply skin-cleaning agents and skin cosmetics.

· **Material of gloves** Nitrile rubber, NBR

· **Penetration time of glove material:**

Thickness: 0.4 mm; break-through time: 480 min; material: Nitrile; permeation: level 6

· **Gloves made of the following materials are not suitable:**

Gloves for mechanical protection do not provide protection against chemicals.

· **Eye protection:**



Face shield (visor)

Use visor in combination with goggle.

· **Body protection:**



Protective clothing.



Apron

Full head, face and neck protection

· **Risk management measures**

The operators shall be instructed adequately.

The workplace shall be inspected regularly by competent personnel e.g. the safety representative.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

| | |
|----------------|---------------------|
| Form: | Liquid |
| Colour: | Colourless Clear |

· **Odour:** Amine-like

· **Odour threshold:** Not determined

· **pH-value (100 g/l) at 20 °C:** 9-11

· **Change in condition**

| | |
|--------------------------------------|-------------------------------|
| Melting point/freezing point: | Not determined Initial |
|--------------------------------------|-------------------------------|

| | |
|---|-----------------------|
| boiling point and boiling range: | 182.2 °C (literature) |
|---|-----------------------|

| | |
|---------------------|--------|
| Flash point: | 105 °C |
|---------------------|--------|

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- **Explosive properties:** Product is not explosive.
- **Density at 20 °C:** 1.040-1.072 g/cm³
- **Solubility in / Miscibility with Water:** Fully miscible
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
The classification criteria for the property "corrosive to metals" according to Annex I section 2.16 of the CLP Regulation are not fulfilled. (S 4276)
- **10.2 Chemical stability**
- **Conditions to be avoided:** No decomposition if used according to specifications.
- **Minimum shelf life:** 12 months from production date.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Acids
- **10.6 Hazardous decomposition products:** Formaldehyde

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Harmful if swallowed or if inhaled.

· **LD/LC50 values that are relevant for classification:**
66204-44-2 3,3'-methylenebis[5-methyloxazolidine]

| | | |
|------------|------------------|------------------------------------|
| Oral | LD ₅₀ | 501-2000 mg/kg (rat) literature |
| Inhalation | LC ₅₀ | > 1 mg/l (rat) literature |

- **Skin corrosion/irritation:**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation:**
Causes serious eye damage.
- **Sensitisation:** Based on available data, the classification criteria are not met.
- **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:

66204-44-2 3,3'-methylenebis[5-methyloxazolidine]

| | |
|-------------------------|--|
| EC ₅₀ / 72 h | 5.7 mg/l (Scenedesmus subspicatus) (OECD 201) literature |
| EC ₅₀ / 48 h | 37.9 mg/l (Daphnia) (OECD 202) literature |
| LC ₅₀ / 96 h | 57.7 mg/l (Brachydanio rerio) (OECD 203) literature |

Evaluation:

Based on the available data the classification criteria for hazard classes aquatic acute (short term) toxicity are not fulfilled.

Based on the available data the classification criteria for hazard classes aquatic, chronic (long term) toxicity are not fulfilled.

Toxicity on activated sludge organisms:

66204-44-2 3,3'-methylenebis[5-methyloxazolidine]

| | |
|------------------|---------------------------------------|
| EC ₅₀ | 44 mg/l (Activated Sludge) literature |
|------------------|---------------------------------------|

Evaluation:

If contaminated effluent water is properly entered into the sewage system, any interference with the degrading activity of the activated sludge organisms is not expected.

12.2 Persistence and degradability

Biodegradability:

66204-44-2 3,3'-methylenebis[5-methyloxazolidine]

| | |
|-------------------------------|---|
| OECD 301 D Closed-Bottle-Test | > 60 % (Activated Sludge) (OECD 301 D) Literature |
|-------------------------------|---|

Evaluation: The component(s) is (are) rapidly biodegradable.

Behaviour in sewage treatment plants:

Evaluation: The substance is biodegradable in activated sludge units.

12.3 Bioaccumulative potential

BCF / LogKow:

66204-44-2 3,3'-methylenebis[5-methyloxazolidine]

| | |
|--|---|
| OECD 117 Log Kow Partition Coefficient | - 0.3 (n-Octanol/water) (OECD 117) Literature |
|--|---|

Evaluation: Not worth-mentioning accumulating in organisms

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: This substance does not meet the PBT criteria of REACH, annex XIII.

vPvB: This substance does not meet the vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects Any other adverse effects on the environment are not expected.

12.7 Additional information

Metals and their compounds according Directive 2006/11/EC: None

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- **European Water Framework Directive 2000/60/EC (WFD) dated 23.10.2000:**
The product does not contain any priority substances according WFD that require a water monitoring.
- **Absorbable organic halogen compounds (AOX - DIN EN ISO 9562):**
The product does not contain substances, which can influence the AOX of waste water.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must be specially treated under adherence to official regulations.
Appropriate disposal operations according to Directive 2008/98/EC on waste: D 10 Incineration on land

| | |
|-----------------------------------|--|
| · European waste catalogue | |
| 16 00 00 | WASTES NOT OTHERWISE SPECIFIED IN THE LIST |
| 16 03 00 | off-specification batches and unused products |
| 16 03 05* | organic wastes containing hazardous substances |
| HP 6 | Acute Toxicity |
| HP 8 | Corrosive |

- **Contaminated packaging:**
- **Recommendation:** Remove all product from packaging and clean thoroughly before recycling.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN3267
- **14.2 UN proper shipping name**
- **ADR, IMDG, IATA** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
(3,3'-methylenebis[5-methyloxazolidine])

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class** 8 (C7) Corrosive substances.
- **Label** 8

- **IMDG, IATA**



- **Class** 8 Corrosive substances.

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| | |
|--|--|
| <ul style="list-style-type: none"> · Label · 14.4 Packing group · ADR, IMDG, IATA · 14.5 Environmental hazards: · Marine pollutant: · 14.6 Special precautions for user · Kemler Number: · EMS Number: · Segregation groups · Stowage Category · Stowage Code · Segregation Code · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code · Transport/Additional information: | <p>8</p> <p>III</p> <p>No</p> <p>Warning: Corrosive substances.</p> <p>80</p> <p>F-A,S-B</p> <p>Alkalis</p> <p>A</p> <p>SW2 Clear of living quarters. SG35 Stow "separated from" acids.</p> <p>Not applicable.</p> |
| <ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code | <p>5L</p> <p>Code: E1</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 1000 ml</p> <p>3</p> <p>E</p> |
| <ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) | <p>5L</p> <p>Code: E1</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 1000 ml</p> |
| <ul style="list-style-type: none"> · IATA · Remarks: · UN "Model Regulation": | <p>Packing Instructions / max. net weight: Passenger aircraft: 852 / 5 L; Cargo aircraft: 856 / 60 L</p> <p>UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (3,3'-METHYLENEBIS[5-METHYLOXAZOLIDINE]), 8, III</p> |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations:**
- **Information about limitation of use:**
 Take note of Directive 94/33/EC on the protection of young people at work.
 Take note of Directive 92/85/EC on the safety and health of pregnant women at work.

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- **Regulations which may apply in event of accident: Control of Major Accident Hazards (COMAH)**

This substance/mixture is not subject to ordinance on industrial accidents (Seveso Directive; substance list, Annex I).

- **Indication of VOC:**

- **VOC according to Directive 2010/75/EC:**

This product does not contain any relevant amounts of "Volatile Organic Compounds" (VOC).

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

SECTION 16: Other information

This data is based on our current knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

- **Training hints**

Further information regarding the directions for use can be found in the Product Data Sheet.

- **Classification according to Regulation (EC) No 1272/2008**

The classification includes the relevant available information about the mixture or the substances contained therein.

The evaluation of the available information within the scope of classification refers to the forms and aggregate states in which the mixture has been placed on the market and will be used most likely.

- **Contact for technical information** Biocides: info@thor.uk.com

- **Abbreviations and acronyms:**

PBT: persistent, bioaccumulative, toxic vPvB:

very persistent, very bioaccumulative

ADR: Accord européen sur le transport 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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

- **Key literature references and sources for data:** None

- *** Data altered since the previous version.**