

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Revision date: 18/01/2021 Version: 10.5

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Trade name : BLADE  
Product code : GS124  
Type of product : Detergent

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Main use category : Professional use  
Industrial/Professional use spec : For professional use only  
Use of the substance/mixture : Heavy-duty detergent

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet****MANGROVE PROFESSIONAL**

PO BOX 3348  
STAFFORD  
ST16 9NW  
UNITED KINGDOM

Tel: 01785 253 702

**1.4. Emergency telephone number**

Mon to Fri 8.30am to 5.00pm - 01785 253 702

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Skin corrosion/irritation, Category 1 H314  
Serious eye damage/eye irritation, Category 1 H318  
Full text of H statements : see section 16

**Adverse physicochemical, human health and environmental effects**

No additional information available

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger  
Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|                                |  |
|--------------------------------|--|
| Precautionary statements (CLP) | : P260 - Do not breathe spray.<br>P264 - Wash hands thoroughly after handling.<br>P280 - Wear eye protection, protective gloves.<br>P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.<br>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.<br>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P315 - Get immediate medical advice/attention.<br>P405 - Store locked up. |
|--------------------------------|--|

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name   | Product identifier  | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP]  |
|--|---|---------|--|
| Alcohol Alkoxyolate  | (CAS-No.) 166736-08-9<br>(REACH-no) Exempt/Polymer  | 5 – 10  | Acute Tox. 4 (Oral), H302<br>Eye Dam. 1, H318                    |
| Silicic acid (H <sub>2</sub> SiO <sub>3</sub> ), sodium salt (waterglass)<br>(SiO <sub>2</sub> :Na <sub>2</sub> O : > 2.6) | (CAS-No.) 1344-09-8<br>(EC-No.) 215-687-4<br>(REACH-no) 01-2119448725-31                                | 5 – 10  | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319                        |
| sodium hydroxide; caustic soda<br>substance with national workplace exposure limit(s)<br>(IE, GB)                          | (CAS-No.) 1310-73-2<br>(EC-No.) 215-185-5<br>(EC Index-No.) 011-002-00-6<br>(REACH-no) 01-2119457892-27 | 1 – 5   | Skin Corr. 1A, H314  |
| N,N-dimethyldecylamine N-oxide   | (CAS-No.) 2605-79-0<br>(EC-No.) 220-020-5<br>(REACH-no) 01-2119959297-22                                | 0.1 – 1 | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400 |

### Specific concentration limits:

| Name                           | Product identifier  | Specific concentration limits   |
|--------------------------------|---|---|
| Alcohol Alkoxyolate            | (CAS-No.) 166736-08-9<br>(REACH-no) Exempt/Polymer  | ( 1 <C ≤ 10) Eye Irrit. 2, H319<br>( 10 <C < 100) Eye Dam. 1, H318  |
| sodium hydroxide; caustic soda | (CAS-No.) 1310-73-2<br>(EC-No.) 215-185-5<br>(EC Index-No.) 011-002-00-6<br>(REACH-no) 01-2119457892-27 | ( 0.5 ≤C < 2) Skin Irrit. 2, H315<br>( 0.5 ≤C < 2) Eye Irrit. 2, H319<br>( 2 ≤C < 5) Skin Corr. 1B, H314<br>( 5 ≤C ≤ 100) Skin Corr. 1A, H314 |

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : Get medical advice/attention if you feel unwell.   |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.   |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention. |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|                                      |  |
|--------------------------------------|--|
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. |
| First-aid measures after ingestion   | : Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Get medical advice/attention.  |

### 4.2. Most important symptoms and effects, both acute and delayed

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Symptoms/effects after inhalation   | : May cause respiratory irritation. |
| Symptoms/effects after skin contact | : Burns.                            |
| Symptoms/effects after eye contact  | : Causes serious eye damage.        |
| Symptoms/effects after ingestion    | : Burns.                            |

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                              |                                     |
|------------------------------|-------------------------------------|
| Suitable extinguishing media | : Carbon dioxide. Dry powder. Foam. |
|------------------------------|-------------------------------------|

### 5.2. Special hazards arising from the substance or mixture

|  |                      |
|--|----------------------|
| Hazardous decomposition products in case of fire | : Corrosive vapours. |
|--|----------------------|

### 5.3. Advice for firefighters

No additional information available

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

|                      |                                   |
|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

#### 6.1.2. For emergency responders

|                      |  |
|----------------------|--|
| Protective equipment | : Use personal protective equipment as required. |
|----------------------|--|

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

|                         |   |
|-------------------------|---|
| For containment         | : Collect spillage.   |
| Methods for cleaning up | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. |

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                               |   |
|-------------------------------|---|
| Precautions for safe handling | : Avoid contact with skin and eyes.                   |
| Hygiene measures              | : Do not eat, drink or smoke when using this product. |

### 7.2. Conditions for safe storage, including any incompatibilities

|                        |   |
|------------------------|---|
| Technical measures     | : Does not require any specific or particular technical measures. |
| Storage conditions     | : Keep container closed when not in use.                          |
| Incompatible products  | : Oxidizing agent. Strong acids.                                  |
| Incompatible materials | : Metals.   |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Special rules on packaging : Keep only in original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| sodium hydroxide; caustic soda (1310-73-2)           |                     |
|--|---------------------|
| <b>Ireland - Occupational Exposure Limits</b>        |                     |
| Local name   | Sodium hydroxide    |
| OEL STEL   | 2 mg/m <sup>3</sup> |
| <b>United Kingdom - Occupational Exposure Limits</b> |                     |
| Local name   | Sodium hydroxide    |
| WEL STEL (OEL STEL)                                  | 2 mg/m <sup>3</sup> |

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No additional information available

#### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



##### 8.2.2.1. Eye and face protection

|                        |
|------------------------|
| <b>Eye protection:</b> |
| Safety glasses. EN 166 |

##### 8.2.2.2. Skin protection

|   |
|---|
| <b>Skin and body protection:</b>          |
| Not required for normal conditions of use |

|  |
|--|
| <b>Hand protection:</b>  |
| Chemical resistant gloves (according to European standard EN 374 or equivalent). Nitrile rubber gloves |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### Other skin protection

#### Materials for protective clothing:

Not required for normal conditions of use

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Not required for normal conditions of use

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                     |
|---|---------------------|
| Physical state                                  | : Liquid            |
| Appearance                                      | : Liquid.           |
| Colour  | : Green.            |
| Odour   | : sharp.            |
| Odour threshold                                 | : No data available |
| pH  | : 13.2              |
| Relative evaporation rate (butylacetate=1)      | : No data available |
| Melting point                                   | : No data available |
| Freezing point                                  | : No data available |
| Boiling point                                   | : $\geq 100$ °C     |
| Flash point                                     | : No data available |
| Auto-ignition temperature                       | : No data available |
| Decomposition temperature                       | : No data available |
| Flammability (solid, gas)                       | : No data available |
| Vapour pressure                                 | : No data available |
| Relative vapour density at 20 °C                | : No data available |
| Relative density                                | : 1.06              |
| Solubility                                      | : Soluble in water. |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Viscosity, kinematic                            | : No data available |
| Viscosity, dynamic                              | : No data available |
| Explosive properties                            | : No data available |
| Oxidising properties                            | : No data available |
| Explosive limits                                | : No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal use.

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Acids.

### 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 (oral)             | : Not classified                         |
| Acute toxicity (dermal)           | : Not classified                         |
| Acute toxicity (inhalation)       | : Not classified                         |
| Skin corrosion/irritation         | : Causes severe skin burns.<br>pH: 13.2  |
| Serious eye damage/irritation     | : Causes serious eye damage.<br>pH: 13.2 |
| Respiratory or skin sensitisation | : Not classified                         |
| Germ cell mutagenicity            | : Not classified                         |
| Carcinogenicity                   | : Not classified                         |
| Reproductive toxicity             | : Not classified                         |
| STOT-single exposure              | : Not classified                         |
| STOT-repeated exposure            | : Not classified                         |
| Aspiration hazard                 | : Not classified                         |

## SECTION 12: Ecological information

### 12.1. Toxicity

|   |                  |
|---|------------------|
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

#### Alcohol Alkoxylate (166736-08-9)

|                            |               |
|----------------------------|---------------|
| LC50 - Fish [1]            | 10 – 100 mg/l |
| EC50 - Crustacea [1]       | 10 – 100 mg/l |
| ErC50 other aquatic plants | 10 – 100 mg/l |

#### Silicic acid (H<sub>2</sub>SiO<sub>3</sub>), sodium salt (waterglass) (SiO<sub>2</sub>:Na<sub>2</sub>O : > 2.6) (1344-09-8)

|                                    |                     |
|------------------------------------|---------------------|
| LC50 - Fish [1]                    | 260 mg/l            |
| EC50 - Other aquatic organisms [1] | 1700 mg/l waterflea |
| EC50 - Other aquatic organisms [2] | 207 mg/l            |

#### sodium hydroxide; caustic soda (1310-73-2)

|                 |           |
|-----------------|-----------|
| LC50 - Fish [1] | > 35 mg/l |
|-----------------|-----------|

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|                                    |                     |
|------------------------------------|---------------------|
| EC50 - Other aquatic organisms [1] | > 33 mg/l waterflea |
|------------------------------------|---------------------|

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

|   |       |
|---|-------|
| <b>sodium hydroxide; caustic soda (1310-73-2)</b> |       |
| Partition coefficient n-octanol/water (Log Pow)   | -3.88 |

|   |      |
|---|------|
| <b>N,N-dimethyldodecylamine N-oxide (2605-79-0)</b> |      |
| Partition coefficient n-octanol/water (Log Pow)     | 3.69 |

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

No additional information available

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

### 14.1 UN number

|               |           |
|---------------|-----------|
| UN-No. (ADR)  | : UN 1760 |
| UN-No. (IMDG) | : UN 1760 |
| UN-No. (IATA) | : UN 1760 |

### 14.2. UN proper shipping name

|                                       |   |
|---------------------------------------|---|
| Proper Shipping Name (ADR)            | : CORROSIVE LIQUID, N.O.S.  |
| Proper Shipping Name (IMDG)           | : CORROSIVE LIQUID, N.O.S.  |
| Proper Shipping Name (IATA)           | : Corrosive liquid, n.o.s.  |
| Transport document description (ADR)  | : UN 1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, SODIUM METASILICATE), 8, III, (E) |
| Transport document description (IMDG) | : UN 1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, SODIUM METASILICATE), 8, III      |
| Transport document description (IATA) | : UN 1760 Corrosive liquid, n.o.s., 8, III  |

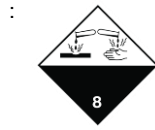
### 14.3. Transport hazard class(es)

#### ADR

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADR) | : 8 |
| Danger labels (ADR)              | : 8 |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

**IMDG**

Transport hazard class(es) (IMDG) : 8  
 Danger labels (IMDG) : 8

**IATA**

Transport hazard class(es) (IATA) : 8  
 Danger labels (IATA) : 8

**14.4. Packing group**

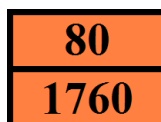
Packing group (ADR) : III  
 Packing group (IMDG) : III  
 Packing group (IATA) : III

**14.5. Environmental hazards**

Dangerous for the environment : No  
 Marine pollutant : No  
 Other information : No supplementary information available

**14.6. Special precautions for user****Overland transport**

Classification code (ADR) : C9  
 Special provisions (ADR) : 274  
 Limited quantities (ADR) : 5I  
 Excepted quantities (ADR) : E1  
 Packing instructions (ADR) : P001, IBC03, LP01, R001  
 Mixed packing provisions (ADR) : MP19  
 Portable tank and bulk container instructions (ADR) : T7  
 Portable tank and bulk container special provisions (ADR) : TP1, TP28  
 Tank code (ADR) : L4BN  
 Vehicle for tank carriage : AT  
 Transport category (ADR) : 3  
 Special provisions for carriage - Packages (ADR) : V12  
 Hazard identification number (Kemler No.) : 80  
 Orange plates :



Tunnel restriction code (ADR) : E  
 EAC code : 2X  
 APP code : B

**Transport by sea**

Special provisions (IMDG) : 223, 274  
 Limited quantities (IMDG) : 5 L  
 Excepted quantities (IMDG) : E1



## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|                                 |              |
|---------------------------------|--------------|
| Packing instructions (IMDG)     | : P001, LP01 |
| IBC packing instructions (IMDG) | : IBC03      |
| Tank instructions (IMDG)        | : T7         |
| Tank special provisions (IMDG)  | : TP1, TP28  |
| EmS-No. (Fire)                  | : F-A        |
| EmS-No. (Spillage)              | : S-B        |
| Stowage category (IMDG)         | : A          |

### Air transport

|  |        |
|--|--------|
| PCA Excepted quantities (IATA)               | : E1   |
| PCA Limited quantities (IATA)                | : Y841 |
| PCA limited quantity max net quantity (IATA) | : 1L   |
| PCA packing instructions (IATA)              | : 852  |
| PCA max net quantity (IATA)                  | : 5L   |
| CAO packing instructions (IATA)              | : 856  |
| CAO max net quantity (IATA)                  | : 60L  |
| Special provisions (IATA)                    | : A3   |
| ERG code (IATA)                              | : 8L   |

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

|          |                   |
|----------|-------------------|
| IBC code | : Not applicable. |
|----------|-------------------|

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Detergent Regulation (648/2004/EC): Labelling of contents:

| Component              | %     |
|------------------------|-------|
| non-ionic surfactants  | 5-15% |
| amphoteric surfactants | <5%   |
| perfumes               |       |

#### 15.1.2. National regulations

##### United Kingdom

|                              |  |
|------------------------------|--|
| British National Regulations | : Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).<br>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.<br>Detergent Regulation (648/2004/EC). |
|------------------------------|--|

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

### Full text of H- and EUH-statements:

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4                               |
| Aquatic Acute 1     | Hazardous to the aquatic environment — Acute Hazard, Category 1 |

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

|               |  |
|---------------|--|
| Eye Dam. 1    | Serious eye damage/eye irritation, Category 1          |
| Eye Irrit. 2  | Serious eye damage/eye irritation, Category 2          |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1, Sub-Category 1A |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2                  |
| H302          | Harmful if swallowed.                                  |
| H314          | Causes severe skin burns and eye damage.               |
| H315          | Causes skin irritation.                                |
| H318          | Causes serious eye damage.                             |
| H319          | Causes serious eye irritation.                         |
| H400          | Very toxic to aquatic life.                            |

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

|              |      |                       |
|--------------|------|-----------------------|
| Skin Corr. 1 | H314 | On basis of test data |
| Eye Dam. 1   | H318 | On basis of test data |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.