

**SAFETY DATA SHEET**  
According to Regulation (EC) No 1907/2006  
**Marisol BT**

Version number: 4

Issued: 2022-04-27

Replaces SDS: 2021-06-15

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

### 1.1. Product identifier

<b>Trade name</b>	Marisol BT
<b>Article No.</b>	24-4510
<b>UFI code</b>	8H14-A010-000X-Q8P2

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

<b>Product type</b>	Additives for water treatment of steam boilers. Prevents scale deposits and corrosion.
<b>Relevant identified uses</b>	For professional use only.
<b>Not suitable for use in</b>	No dissuasions as long as the product is used to its purpose.

### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	AB DFS
Street address	Fiskebäcks Hamn 7 426 58 Västra Frölunda Sweden
Telephone	031-29 14 35
Email	order@dfs-ab.se
Web site	www.dfs-ab.se

### 1.4. Emergency telephone number

<b>Emergency phone number</b>	112
<b>Available outside office hours</b>	Yes

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

<b>Classification</b>	Corrosive to metals, hazard category 1 Skin corrosion, hazard category 1A Serious eye damage, hazard category 1
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<b>Hazard statements</b>	H290, H314, H318
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### 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

**Hazard pictograms**



<b>Signal word</b>	Danger
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<b>Hazard statements</b>	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.
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## Marisol BT

### Precautionary statements

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
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.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P363 Wash contaminated clothing before reuse.  
P310 Immediately call a POISON CENTER/doctor

### More information

Contains: Sodium hydroxide

### 2.3. Other hazards

### Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Sodium hydroxide	1310-73-2 215-185-5 01-2119457892-27 011-002-00-6	7%	Met. Corr. 1, Skin Corr. 1A	H290, H314 - -	Eye Irrit. 2; H319: 0,5 % ≤ C < 2 % Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 %

### Substance additional information

Section 16 for the full text of H-phrases mentioned in this section.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if needed. Call a physician immediately.

#### Skin contact

Remove contaminated clothing. Rinse the skin immediately with lots of water. Wash skin thoroughly with soap and water or use recognized skin cleanser. Call a physician immediately.

#### Eye contact

Rinse immediately with a gentle jet of water or eye wash for at least 15 minutes. Remove any contact lenses. Keep your eyelids wide open during rinsing so that nothing gets stuck under them. Seek medical attention after initial flushing. Continue rinsing until medical personnel take over.

#### Ingestion

Rinse mouth with water. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Call a physician or Poison Control Centre immediately. Take victim immediately to hospital.

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

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

Causes severe caustic burns to skin and eyes.

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

<b>Indication of any immediate medical attention and special treatment needed</b>	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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<b>Unsuitable extinguishing media</b>	Avoid powerful jets of water directly at the fire.
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### 5.2. Special hazards arising from the substance or mixture

<b>Special hazards arising from the substance or mixture</b>	If involved in a fire, it may emit noxious and toxic fumes.
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### 5.3. Advice for firefighters

<b>Special protective equipment for fire-fighters</b>	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face mask. Firefighter equipment (eg helmet, safety boots and gloves) that complies with the European standard EN 469, provides basic protection in the event of chemical accidents.
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<b>Measures in case of fire</b>	Immediately isolate the area by dismissing people in the vicinity of the fire.
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## SECTION 6: Accidental release measures

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

<b>Personal precautions, protective equipment and emergency procedures</b>	Ensure good ventilation. Ventilate the area. Avoid contact with the skin and eyes. Wear suitable protective equipment. Prevent further leakage or spillage if safe to do so. Keep away from incompatible products. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Prevent entry to sewers and public waters. Notify the responsible authority in the event of contamination of soil or water, or discharges into sewage systems.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods and material for containment and cleaning up</b>	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Small quantities may be flushed away with water. Pick up and transfer to properly labelled containers.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	Personal protection see section 8 and for disposal see section 13.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

<b>Preventive handling precautions</b>	Handle in accordance with good industrial hygiene and safety practice. Ensure good ventilation. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.
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**General hygiene** Wash hands before breaks and at the end of workday.

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

**Conditions for safe storage, including any incompatibilities** Keep container tightly closed. Keep locked-up. Keep in properly labelled containers. Keep in a frost-free place. Keep in a well-ventilated place. Keep in a dry place.

*7.3. Specific end use(s)*

**Specific end use(s)** Identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/personal protection

*8.1. Control parameters*

No data available

*8.2. Exposure controls*

**Appropriate engineering controls** Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye / face protection** Use goggles or face shield (EN 166).

**Hand protection** Protective gloves complying with EN 374.  
The following materials are suitable for protective gloves (Permeation time  $\geq$  8 hours): Natural rubber/Natural latex - NR (0,5 mm) (use non-powdered and allergen free products), Polychloroprene - CR (0,5 mm), Nitrile rubber/Nitrile latex - NBR (0,35 mm), Butyl rubber - Butyl (0,5 mm), Fluoro carbon rubber - FKM (0,4 mm), Polyvinyl chloride - PVC (0,5 mm).

**Other skin protection** Wear full protective clothing.

**Respiratory protection** Breathing protection is not normally required.  
In case of inadequate ventilation wear respiratory protection.

**Environmental exposure controls** Do not discharge into drains, water courses or onto the ground.

## SECTION 9: Physical and chemical properties

*9.1. Information on basic physical and chemical properties*

**Physical state** Liquid

**Colour** Brownish

**Odour** Slight odour.

**Melting point / freezing point** No information available

**Boiling point or initial boiling point and boiling range** No information available

**Flammability** The product is not flammable.

**Lower and upper explosion limit** No information available

**Flash point** No data available

**Auto-ignition temperature** The product is not self-ignitable.

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<b>Decomposition temperature</b>	No information available
<b>pH</b>	Approx 13.5 (concentrate)
<b>Kinematic viscosity</b>	No information available
<b>Solubility</b>	Easily soluble
<b>Partition coefficient n-octanol/water</b>	No information available
<b>Vapour pressure</b>	No information available
<b>Density and/or relative density</b>	1050 kg/m <sup>3</sup>
<b>Relative vapour density</b>	No information available
<b>Particle characteristics</b>	Not relevant.
<i>9.2. Other information</i>	
<b>Other information</b>	No information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	Potential for exothermic hazard. May be corrosive to metals. Hydrogen gas is formed upon contact with metals, that can form explosive mixtures with air.
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### 10.2. Chemical stability

<b>Chemical stability</b>	Stable under normal usage and storage conditions.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Gives off hydrogen by reaction with metals. Exothermic reaction with strong acids. Risk of violent reaction. Risk of explosion. Reacts violently with water.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Keep away from direct sunlight. To avoid thermal decomposition, do not overheat.
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### 10.5. Incompatible materials

<b>Incompatible materials</b>	Metals, oxidizing agents, acids, aluminium, other light metals and their alloys.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Hydrogen
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## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

<b>Acute toxicity</b>	Based on the available data, the classification criteria are not met.
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<b>Skin corrosion/irritation</b>	Causes severe skin burns.
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<b>Serious eye damage/irritation</b>	Causes severe eye burns.
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**Germ cell mutagenicity** Based on the available data, the classification criteria are not met.

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

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

**STOT-single exposure** Based on the available data, the classification criteria are not met.

**STOT-repeated exposure** Based on the available data, the classification criteria are not met.

**Aspiration hazard** Based on the available data, the classification criteria are not met.

*11.2. Information on other hazards*

**Endocrine disrupting properties** Contains no substances with endocrine disrupting properties.

**Other information** No information available

## SECTION 12: Ecological information

*12.1. Toxicity*

**Acute toxicity** The product is not classified as environmentally harmful.

**Acute fish toxicity**

Product / Substance name CAS / EC no.	Measurement type	Value / Result
Sodium hydroxide 1310-73-2 / 215-185-5	LC50	35-189 mg/l

*12.2. Persistence and degradability*

**Persistence and degradability** No information available

*12.3. Bioaccumulative potential*

**Bioaccumulative potential** Bio-accumulation is unlikely.

*12.4. Mobility in soil*

**Mobility** No information available

*12.5. Results of PBT and vPvB assessment*

**Results of PBT and vPvB assessment** Sodium hydroxide is an inorganic substance. According to Annex XIII of the REACH Regulation the PBT and vPvB assessment only applies to organic substances, including organo-metals. Therefore the PBT and vPvB assessment does not apply to sodium hydroxide.

*12.6. Endocrine disrupting properties*

**Endocrine disrupting properties** Contains no substances with endocrine disrupting properties.

*12.7. Other adverse effects*

**Other adverse effects** No information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal considerations**

The product should be disposed of as hazardous waste. Dispose of any product, residue or packing material according to national and local regulations. Do not dispose of waste into sewer.

**Packaging**

Contaminated packaging must be disposed of as product. Empty, cleaned packaging can be sorted for recycling.

Waste code	Description
06 02 04*	sodium and potassium hydroxide

Please note - an asterisk (\*) next to a code denotes that it is HAZARDOUS WASTE.

### Other

**Waste code**

The waste code is a recommendation. Depends on business area and use. Appropriate classification of waste is the user's responsibility.

## SECTION 14: Transport information

### 14.1. UN number

**UN number**

1824

### 14.2. UN proper shipping name

SODIUM HYDROXIDE SOLUTION

**IMDG proper shipping name**

SODIUM HYDROXIDE SOLUTION

### 14.3. Transport hazard class(es)

**Label**

8

**ADR / RID Class**

8

**ADR / RID Classification code**

C5

**ADR / RID hazard identification number**

8

**IMDG Class**

8

### 14.4. Packing group

**Packing group**

II

### 14.5. Environmental hazards

**Environmental hazards**

The product is not classified as environmentally hazardous.

**IMDG Marine Pollutant**

No

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*14.6. Special precautions for user*

**Special precautions for user**

The product is classified as corrosive and should be handled as such. Follow precautionary statements and accompanying transport cards when handling the product.

Tunnel restriction code: E

IMDG EmS: F-A, S-B

Transported separately from acids according to IMDG.

*14.7. Maritime transport in bulk according to IMO instruments*

**Maritime transport in bulk according to IMO instruments**

The load is not intended for bulk transport.

## SECTION 15: Regulatory information

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

**EU regulations**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council, (REACH).  
Regulation (EC) No 1272/2008 of the European Parliament and of the Council.  
The International Maritime Dangerous Goods (IMDG) Code, 2020 Edition.  
ADR 2021: Agreement concerning the International Carriage of Dangerous Goods by Road, ECE/TRANS/300.

**National regulations**

Local laws and regulations should be carefully observed.

*15.2. Chemical safety assessment*

**Chemical safety assessment**

A chemical safety assessment has been performed for:  
Sodiumhydroxide

## SECTION 16: Other information

**Changes to previous revision**

1

**Abbreviations**

PBT: Persistent, Bioaccumulative and Toxic.  
vPvB: very Persistent and very Bioaccumulative.  
LD50: Lethal dose, the dose that kills 50% of a population.  
LC50: Lethal concentration for 50% of a test population.  
DNEL: Derived level without observed effects.  
PNEC: Presumed concentration without observed effects.

**References to key literature and data sources**

REACH registration dossier.  
<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Evaluation methods for classification**

The classification is based on the addition method according to Regulation (EC) No 1272/2008 (CLP).

**Phrase meaning**

Met. Corr. 1 - Corrosive to metals, hazard category 1  
Skin Corr. 1A - Skin corrosion, hazard category 1A  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.