

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

Version number: 5

Issued: 2022-05-02

Replaces SDS: 2021-06-30

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

### 1.1. Product identifier

<b>Trade name</b>	Marisol MB
<b>Article No.</b>	24-4071
<b>UFI code</b>	XK36-V0X4-H003-5XD6

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

<b>Product type</b>	Acidic cleaner
<b>Relevant identified uses</b>	Restricted to professional users.

### 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>	Serious eye damage, hazard category 1 Skin corrosion, hazard category 1
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<b>Hazard statements</b>	H314, H318
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### 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

**Hazard pictograms**



**Signal word** Danger

**Hazard statements** H314 Causes severe skin burns and eye damage.

**Marisol MB**

**Precautionary statements**

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.  
 P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P310 Immediately call a POISON CENTER/doctor

**More information**

Contains:  
 Sulphuric acid  
 Ammonium hydrogendifluoride  
 Isotridecanol ethoxylated  
 Phosphoric acid

*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
Sulphuric acid	7664-93-9 231-639-5 - -	5 - 10%	Skin Corr. 1A	H314 - -	Eye Irrit. 2; H319: 5 % ≤ C < 15 % Skin Corr. 1A; H314: C ≥ 15 % Skin Irrit. 2; H315: 5 % ≤ C < 15 %
Ammonium hydrogendifluoride	1341-49-7 215-676-4 - -	1 - 5%	Acute Tox. 3 - oral, Skin Corr. 1B	H301, H314 - -	Eye Irrit. 2; H319: 0,1 % ≤ C < 1 % Skin Corr. 1B; H314: C ≥ 1 % Skin Irrit. 2; H315: 0,1 % ≤ C < 1 %
Isotridecanol ethoxylated	24938-91-8 - - -	1 - 5%	Acute Tox. 4 - oral, Eye Dam. 1	H302, H318 - -	-
Phosphoric acid	7664-38-2 231-633-2 01-2119485924-24 -	1 - 5%	Skin Corr. 1B	H314 - -	Eye Irrit. 2; H319: 10 % ≤ C < 25 % Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 %

**Substance additional information**

Regulation (EC) No 648/2004 on detergents: Contains: Non-ionic surfactants. 5 - <15 %  
 For the complete text of H- / EUH-statements mentioned in this section, see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Fresh air. Rinse mouth and drink water. If symptoms persist, call a physician. Remove person to fresh air and keep comfortable for breathing.
<b>Skin contact</b>	Remove contaminated clothing. Rinse the skin immediately with lots of water. Consult a physician for specific advice. Burns should be treated by a doctor.
<b>Eye contact</b>	Rinse immediately with water for at least 15 minutes (separate eyelids). Remove any contact lenses. As a long rinsing time is required, the water must be temperate. Transport to hospital. Continue rinsing during transport.
<b>Ingestion</b>	If the injured person is fully conscious, give him/her a couple of glasses of milk or water immediately. <b>DO NOT INDUCE VOMITING!</b> Immediately to hospital.

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

<b>Most important symptoms and effects, both acute and delayed</b>	Causes severe caustic burns to skin and eyes. Perforation of stomach/intestine, burns in mouth and throat.
<b>Inhalation</b>	Inhalation of vapors may cause burning in the nose and throat, sneezing, coughing and breathing difficulties. Inhalation of high concentrations of mist entails a risk of lung injury.
<b>Skin contact</b>	May cause chemical burns with blisters and sores. Even some risk of this with dilute solutions.
<b>Eye contact</b>	Splashes causes pain and burns. Risk of permanent visual impairment.
<b>Ingestion</b>	Ingestion may cause severe burns with pain, vomiting, abdominal pain and possibly severe general effect (shock) and kidney damage. Risk of permanent damage due to scarring of burns in the esophagus or stomach.

### 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

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media** Do not use a direct jet of water.

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

**Special hazards arising from the substance or mixture** Toxic/irritating smoke.  
Hazardous combustion products: Decomposition products may include the following materials: Sulfur oxides, hydrogen fluoride, ammonia, nitrogen oxides (NOx).

### 5.3. Advice for firefighters

**Special protective equipment for fire-fighters** Containers in the vicinity of fire should be moved immediately or cooled with water. 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.

**Measures in case of fire** Immediately isolate the area by dismissing people in the vicinity of the fire.

## SECTION 6: Accidental release measures

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

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

Ensure good ventilation. Wear suitable protective equipment. Avoid inhalation and contact with the skin and eyes. Prevent further leakage or spillage if safe to do so.

### 6.2. Environmental precautions

#### Environmental precautions

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.

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

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

Small quantities may be flushed away with water. Major spillage should be banked with sand, earth or similar material and collected into suitable enclosed containers for further destruction.

### 6.4. Reference to other sections

#### Reference to other sections

Personal protection see section 8 and for disposal see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Preventive handling precautions

Ensure good ventilation. Do not breathe vapours/dust. Avoid contact with skin and eyes. Wear personal protective equipment.

#### General hygiene

Emergency shower and eyewash shall be available at the work site. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse.

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

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

The product is not flammable. Keep locked-up. Keep in a frost-free place. The product should be stored in sealed containers at room temperature or cooler. Keep in properly labelled containers.

### 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

#### Exposure limits

Phosphoric acid. Cas no: 7664-38-2, EC no: 231-633-2. Long-term exposure limit: 1 mg/m<sup>3</sup>; Short-term exposure limit: 2 mg/m<sup>3</sup>. OELs - Occupational Exposure Limits - 1st list European Union, 2000. Sulphuric acid. Cas no: 7664-93-9, EC no: 231-639-5. Long-term exposure limit: 0,05 mg/m<sup>3</sup>. OELs - Occupational Exposure Limits - 3rd list European Union, 2009.

### 8.2. Exposure controls

#### Appropriate engineering controls

Emergency shower and eyewash shall be available at the work site.

#### Eye / face protection

Use goggles or face shield (EN 166).

#### Hand protection

Protective gloves complying with EN 374. Use suitable protective gloves made of nitrile rubber.

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<b>Other skin protection</b>	Long-sleeved clothes.
<b>Respiratory protection</b>	Breathing protection is not normally required. In case of inadequate ventilation wear respiratory protection. P3 particle filter.
<b>Environmental exposure controls</b>	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

<b>Physical state</b>	Liquid
<b>Colour</b>	Colourless
<b>Odour</b>	Slight odour
<b>Melting point / freezing point</b>	No information available
<b>Boiling point or initial boiling point and boiling range</b>	100 °C
<b>Flammability</b>	No information available
<b>Lower and upper explosion limit</b>	No information available
<b>Flash point</b>	No data available
<b>Auto-ignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>pH</b>	Approx. 2 (concentrate)
<b>Kinematic viscosity</b>	No information available
<b>Solubility</b>	Water-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>	1115 kg/m <sup>3</sup>
<b>Relative vapour density</b>	No information available
<b>Particle characteristics</b>	Not relevant.

### 9.2. Other information

<b>Other information</b>	The product evaporates slowly.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	Stable under normal conditions and temperatures.
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*10.2. Chemical stability*

**Chemical stability** Stable under normal conditions and temperatures.

*10.3. Possibility of hazardous reactions*

**Possibility of hazardous reactions** No hazardous reactions known.

*10.4. Conditions to avoid*

**Conditions to avoid** Avoid heat, flames and other sources of ignition. In the event of contact with certain metals, hydrogen gas is formed, which together with air can form an explosive mixture.

*10.5. Incompatible materials*

**Incompatible materials** Strong oxidising agents, bases and reducing agents.

*10.6. Hazardous decomposition products*

**Hazardous decomposition products** Toxic gases are formed in the event of fire. Gaseous hydrogen fluoride (HF). Ammonia, nitrogen oxides (NOx).

## SECTION 11: Toxicological information

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

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

**Skin corrosion/irritation** Causes severe skin burns and eyes.

**Serious eye damage/irritation** Causes serious eye damage.

**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.

**Repeated dose toxicity** 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.

**LD50 Oral** LD50(Sulphuric acid): 2140 mg/kg (rat)  
LD50(Ammonium hydrogendifluoride): 130 mg/kg bw (rat)  
LD50(Phosphoric Acid): 2600 mg/kg bw (rat)

**LC50 Inhalation** LC50(Sulphuric acid): 375 mg/m<sup>3</sup> (rat)

*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

**Toxicity** The product is not classified as environmentally harmful.

**Acute fish toxicity** LC50 (96h) (Sulphuric acid): > 16 - < 28 mg/l (Lepomis macrochirus).

**Acute algae toxicity** EC50 (72h) (Sulphuric acid): 100 mg/l (Desmodemus subspicatus).

**Acute crustacean toxicity** EC50 (48h) (Sulphuric acid): >100 mg/l (Daphnia magna).

### 12.2. Persistence and degradability

**Persistence and degradability** The component surfactants are easily biodegradable according to Regulation (EC) No 648/2004 on detergents.

### 12.3. Bioaccumulative potential

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

### 12.4. Mobility in soil

**Mobility** Soluble in water. Easily absorbed in the ground.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** The product and its agents are not expected to be PBT and/or vPvB.

### 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
20 01 29*	detergents containing hazardous substances

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

<b>UN number</b>	3264
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### 14.2. UN proper shipping name

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulphuric acid, ammonium hydrogendifluoride)

<b>IMDG proper shipping name</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulphuric acid, ammonium hydrogendifluoride)
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### 14.3. Transport hazard class(es)

<b>Label</b>	8
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<b>ADR / RID Class</b>	8
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<b>ADR / RID Classification code</b>	C1
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<b>ADR / RID hazard identification number</b>	80
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<b>IMDG Class</b>	8
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### 14.4. Packing group

<b>Packing group</b>	III
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### 14.5. Environmental hazards

<b>Environmental hazards</b>	The product is not classified as environmentally hazardous.
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<b>IMDG Marine Pollutant</b>	No
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### 14.6. Special precautions for user

<b>Special precautions for user</b>	Tunnel restriction code: E IMDG EmS: F-A, S-B
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### 14.7. Maritime transport in bulk according to IMO instruments

<b>Maritime transport in bulk according to IMO instruments</b>	Not intended for bulk transport.
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## SECTION 15: Regulatory information

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

<b>EU regulations</b>	Regulation (EC) No 1907/2006 of the European Parliament and of the Council, (REACH). Regulation (EU) No 1272/2008 of the European Parliament and of the Council (CLP). EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EC) No 648/2004 on detergents. The International Maritime Dangerous Goods (IMDG) Code, 2020 Edition. ADR 2021: Agreement concerning the International Carriage of Dangerous Goods by Road, ECE/TRANS/300.
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<b>National regulations</b>	Local laws and regulations should be carefully observed.
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15.2. Chemical safety assessment

**Chemical safety assessment**

A chemical safety assessment has been performed for:  
Sulphuric acid  
Ammonium hydrogendifluoride  
Phosphoric acid

## 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.  
EC50: The concentration of a substance that affects 50% of a population over a given period of time.

**References to key literature and data sources**

<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**

Skin Corr. 1A - Skin corrosion, hazard category 1A  
Acute Tox. 3 - oral - Acute toxicity, oral, hazard category 3  
Skin Corr. 1B - Skin corrosion, hazard category 1B  
Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4  
Eye Dam. 1 - Serious eye damage, hazard category 1  
H301 Toxic if swallowed.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.