

# SAFETY DATA SHEET

## 1. PRODUCT & MANUFACTURER IDENTIFICATION

**Trade Name** VESTACID SA  
**Chemical name** Linear Alkyl Benzene Sulphonic Acid  
**Chemical Formula** R.C6H4.SO3.H  
**Product Code** AB 101  
**Chemical Class** Alkyl Benzene Sulphonic acid  
**Recommended use** Surfactant

### Kayo Fine Chemicals

Vat. No: 4190233827  
Tel. No: 0118933876  
Plot 24 Pulp Road  
Klippoortjie Agricultural Lots  
Germiston

## 2. HAZARDS IDENTIFICATION

**Physical hazards** Not classified  
**Health hazards** Acute toxicity, oral Category 4  
Skin corrosion/irritation Category 1  
Serious eye damage/eye irritation Category 1  
**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 2  
Hazardous to the aquatic environment, Long-term hazard Category 3  
**OSHA defined hazards** Not classified  
**Label elements**



**Signal word** Danger

**Hazard statement** Harmful if swallowed. Causes severe skin burns and eye damage. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

**Precautionary statement**

# SAFETY DATA SHEET

**Prevention** Avoid breathing mist/aerosol. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/eye protection/face protection.

**Response** IF SWALLOWED: Rinse mouth. Do not induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF ON SKIN: Wash with plenty of soap and water

**Storage** Store in a well ventilated place. Keep cool.

**Disposal** of content/container in accordance to the local or national regulations

**Hazard(s) not otherwise Classified (HNOC)** Not known

**Supplementary information:** None

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS #	Percent
Alkyl benzenesulphonic acid (C <sub>10</sub> -C <sub>16</sub> )	85536-14-7	>90 - 98
Alkyl Benzene (C <sub>10</sub> -C <sub>16</sub> )	67774-74-7	2 - < 3
Sulfuric acid	7664-93-9	1 - < 3

### 4. FIRST AID MEASURES

**Inhalation** Move patient to fresh air. If symptoms persist, get medical attention. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen and get medical attention immediately.

**Skin Contact** Flush with large amounts of water. If irritation develops or persists, immediately take off contaminated clothing. Wash contaminated clothing separately before reuse.

**Eye Contact** Flush with plenty of water or for 10-15 minutes. Get medical attention immediately.

**Ingestion** Rinse mouth. If symptoms occur, contact a physician immediately. Do not induce vomiting without a physician's advice.

**Most Important symptoms/effects' Acute and delayed** Symptoms may include stinging, redness, tearing, swelling and blurred vision. Skin irritation may cause redness and pain.

**Indication of immediate medical Attention and special treatment Needed** Thermal burns: Flush with water immediately while removing clothing if safe to do so. Call on ambulance. Keep victim under observation.

# SAFETY DATA SHEET

## General information

Take off all contaminated clothing immediately. Ensure medical personnel are aware of the nature of material involved. Wash contaminated clothing before reuse.

## 5. FIRE FIGHTING MEASURES

### Suitable Extinguishing Media

Water fog. Foam. Dry chemical powder. Use water to cool fire-exposed containers and to protect personnel.

### Unsuitable extinguishing media

Water. Do not use water jet as an extinguisher as this will spread the fire.

### Hazardous combustion products

Material is not flammable but if involved in a fire could give off toxic fumes such as sulphur trioxide and carbon monoxide. Use self-contained breathing apparatus. Use any suitable firefighting medium.

### Special protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and full protective gear.

### General fire hazards

No extraordinary fire or explosion hazards noted.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Isolate area. Ventilate closed space before entering. Keep unnecessary personnel away. Stay upwind and keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapours.

### Environmental precautions

Prevent any further leakage and contamination of soil and water or if safe to do so.

### Method for containment

Prevent further entry into waterways, sewers, basements or confined space. Avoid release to the environment. Contact local authorities in case of spillages to drain and or aquatic environment.

### Methods for cleaning up

Wear appropriate protective equipment and clothing during clean-up.

Small Spills: Use a non-combustible material like vermiculite, sand or earth to soak up product and place into a container for later disposal.

Large Spills: Stop the material from flowing if this is without any possible risk. Dike far ahead of liquid spill for later disposal. Absorb in vermiculite, dry sand or earth.

## 7. HANDLING and STORAGE

### Precautions for safe handling Protective measures

Wear appropriate personal protective equipment. Avoid skin and eye contact. Do not breathe vapour or mist. Wash thoroughly after handling. Avoid mild steel storage. Avoid extremes of temperature (above 45°C). Keep container in a well-ventilated place.

### Fire preventions

Special protective measures against fire are not required.

Doc.No.: SDS-001	Rev. No.: 9	Code: AB101 Page 3 of 8	Approved by: W. Mokhabuki	Date Approved: 28/04/2022
------------------	-------------	----------------------------	---------------------------	---------------------------

# SAFETY DATA SHEET

**Environmental precautions** Prevent contamination of soil and water.  
**Conditions for safe storage and packaging** Stainless steel, Polyester. Recommended storage temperature: 30°C  
**Including any incompatibilities** Carbon steel, Zinc and natural rubber

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Biological limit values** No biological exposure limits noted for the ingredient.

**Appropriate engineering controls** Use general ventilation. Local exhaust is suggested for use where possible in enclosed or confined space. Eye wash facilities and emergency shower must be available when handling product.

**Personal protective equipment**  
**General** Eye wash fountain and emergency showers are recommended.  
**Eye/face protection** Wear chemical goggles or face shield.  
**Skin protection** Wear suitable protective clothing. Wear impervious gloves.

**Respiratory protection** Handle product in closed vessels. If ventilation is insufficient to effectively prevent build-up of aerosols or vapours, appropriate respiratory protection must be provided.

**General hygiene considerations** **Do not eat, drink or smoke. Always observe good personal hygiene measures such as washing after handling material and before eating, drinking. Routinely wash PPE to remove contaminants.**

## 9. PHYSICAL and CHEMICAL PROPERTIES

**Appearance** Liquid  
 Physical state Liquid at 25°C  
 Form Not available  
 Colour Brown

**Odour** Not available  
**Odour threshold** Not available  
**pH** Not available  
**Melting /freezing point** 6.35 °C  
**Initial boiling point and boiling range** 189°C  
**Flash point** 196.9 to 206.9°C Pensky-Martens Closed Cup

**Evaporation rate** Not available  
**Flammability(solid, gas)** Not available  
**Upper/lower flammability or explosive limits**  
 Flammability limit-lower Not available  
 Flammability limit-upper Not available  
 Explosive limit-lower (%) Not available

# SAFETY DATA SHEET

Explosive limit-upper (%)	Not available
<b>Vapour pressure</b>	Not available
<b>Vapour density</b>	Estimated lighter than air
<b>Relative density</b>	Not available
<b>Solubility</b>	Miscible (>16g/100g)
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Viscosity</b>	1200 Cp @ 25°C
<b>Other information</b>	
Density	1.04g/cm <sup>3</sup>

## 10. STABILITY and REACTIVITY

<b>Reactivity</b>	Stable under normal conditions of use, storage and transportation.
<b>Chemical Stability</b>	Material is stable under normal conditions
<b>Possibility of hazardous reactions</b>	No dangerous reaction is known under normal condition of use.
<b>Conditions to avoid</b>	Avoid heat, sparks and other ignition sources. Avoid temperatures exceeding 25° C. Contact with incompatible materials.
<b>Incompatible materials</b>	Reactive with metals, oxides and carbonates. Generate hazardous reaction with hydroxides (bases).
<b>Hazardous decomposition products</b>	Generally SO <sub>2</sub> is present and in some circumstances can form H <sub>2</sub> S. Generates heat on dilution with water.

## 11. TOXICOLOGICAL INFORMATION

<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Prolonged inhalation may be harmful
<b>Skin Contact</b>	Causes severe skin burns. May be harmful in contact with skin
<b>Eye Contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns. Harmful if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Burning skin. Severe skin damage/pain. Causes serious eye damage. Permanent eye damage including blindness could result
<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	Harmful if swallowed. May be harmful in contact with skin.

Doc.No.: SDS-001	Rev. No.: 9	Code: AB101	Approved by: W. Mokhabuki	Date Approved: 28/04/2022
		Page 5 of 8		

# SAFETY DATA SHEET

<u>Product</u>	<u>Species</u>	<u>Test results</u>
<b>VESTACID SA</b>	Acute	
Dermal LD <sub>50</sub>	Rat:	> 2000mg/kg
Oral LD <sub>50</sub>	Rat	> 1470mg/kg
<b>Skin corrosion/irritation</b>	Highly irritating, not fully resolved in 14 days.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage	
<b>Respiratory or skin sensitization</b>	Not a respiratory sensitizer	
<b>Respiratory sensitization</b>	Not expected to cause skin sensitization	
<b>Skin sensitization</b>	No data available to indicate product or any of its components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Germ cell mutagenicity</b>		
<b>Carcinogenicity</b>	Product not considered to be a carcinogenic	
<b>Reproductive toxicity</b>	Product contain no ingredients listed as toxic to reproduction.	
<b>Specific target organ toxicity single exposure</b>	Not applicable	
<b>Specific target organ toxicity repeated exposure</b>	Not applicable	
<b>Aspiration hazard</b>	Not applicable	

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Toxic to aquatic life. Harmful to aquatic life with long lasting effects	
<b>Product</b>	<b>Species</b>	<b>Test Results</b>
<b>Vestacid SA</b>		
<b>Aquatic</b>		
Algae	EC50	Algae 47.3mg/l, 72 hours
Crustacea	EC50	Daphnia 2.4mg/l, 48 hours
Bluegill sunfish	LC50	Fish 1.67mg/l, 96 hours
<b>Persistence and degradability</b>	Readily biodegradable in water, sediment and soil. Half-life in sediments and soil is between <b>7</b> and <b>22</b> days.	
<b>Bioaccumulation potential</b>	No specific data available for bioaccumulation in terrestrial organisms but based on low bioaccumulation potential of Vestacid SA, in aquatic organisms, bioaccumulation is not expected.	
<b>Mobility in soil</b>	Product has low volatility due to its low vapour pressure.	
<b>Other adverse effects</b>	No other environmental effects are expected from this product.	

# SAFETY DATA SHEET

## 13. DISPOSAL CONSIDERATIONS

### Disposal Instructions

Disposal of this product, solution and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional legislation/local authority requirements. The waste code should be assigned in discussion with the user, the producer and waste disposal company.

### Hazardous waste code

### Waste from residues/unused products

Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (See Disposal Instructions)

### Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

### DOT

#### UN number

UN2586

#### UN Proper Shipping Name

Alkylsulphonic acids, liquid

#### Transport Hazard Class(es)

##### Class

8

##### Subsidiary Risk

-

##### Packaging Group

III

##### Environmental Hazards

No

##### Specific Precautions for user

Read safety instructions, SDS and emergency procedures before handling.

### IATA

#### UN number

UN2586

#### UN Proper Shipping Name

Alkylsulphonic acids, liquid

#### Transport Hazard Class(es)

##### Class

8

##### Subsidiary Risk

-

##### Packaging Group

III

##### Environmental Hazards

No

##### Specific Precautions for user

Read safety instructions, SDS and emergency procedures before handling.

### IMDG

#### UN number

UN2586

#### UN Proper Shipping Name

Alkylsulphonic acids, liquid

#### Transport Hazard Class(es)

##### Class

8

##### Subsidiary Risk

-

##### Packaging Group

III

##### Environmental Hazards

No

##### Marine Pollutant

No

##### Special precautions

Not available

##### Transport in bulk and IBC Code

Not available

# SAFETY DATA SHEET

IATA; IMDG



**Special precautions for transport**

Packaging in accordance with SANS 10232/SANS 10232-1/SANS 10232-3

## 15. REGULATORY INFORMATION

Labelling accordance with SANS 10234 latest revision.

**Full text of H statements**

H302 Harmful if swallowed  
H314 Causes severe skin burns and eye damage  
H320 Causes serious eye damage

**Full text of classification (GHS)**

Acute Tox. 4, H302 – ACUTE TOXICITY: ORAL Category 4  
Skin Corr. 1C, H314 – SKIN CORROSION/IRRITATION – Category 1C  
Eye Dam. 1, H318 – SERIOUS EYE DAMAGE/EYE IRRITATION  
Category 1

**Environment Hazards**

H403 Harmful to aquatic life

OHS Act, 1993(Act No. 85 of 1993), Regulation for Hazardous Chemical Agent, 2021

## 16. OTHER INFORMATION

Issue date 19-01-2018  
Revision date 28-04-2022  
Revision Notes GHS: Classification and alignment.

### Disclaimer

The information given in this safety data sheet is based on knowledge available at the time of compilation and is intended to describe the product only in terms of health and safety requirements. There is no warranty, expressed or implied as to the accuracy, completeness or adequacy of the information contained herein, and neither the manufacturer or distributors and agents including company officials or employees are liable for any damages arising in connection with the accuracy, adequacy of the information contained herein.

Doc.No.: SDS-001	Rev. No.: 9	Code: AB101	Approved by: W. Mokhabuki	Date Approved: 28/04/2022
			Page 8 of 8	