

## MATERIAL SAFETY DATA SHEET

Document drafted on: 2005-05-10  
Document up-dated on: 2005-10-03

# ABS Acid

### 1. Identification of the substance and of the company

**Product name**

Trade name: ABS Acid, Alkylbenzenesulphonic acid

**Application**

Anionic surfactant used as a component of liquid and powder washing and cleaning agents.

**Producer**

**PCC Rokita SA**, ul. Sienkiewicza 4, 56-120 Brzeg Dolny, Poland

**Specialty Chemicals Business Unit**

Telephone: (+4871) 319 24 32 or 319 26 97; Fax: (+4871) 319 28 02 or 319 25 50

**Emergency telephone number:**

Telephone: (+4871) 319 25 55, 319 24 41 or 319 26 90 (fax) at PCC Rokita SA or the closest local Fire Brigade

### 2. Composition / information on ingredients

**Chemical name:** Alkylbenzenesulphonic acid  
**Chemical formula:**  $R-C_6H_4-SO_3H$ ;  $R = C_nH_{2n+1}$ ;  $n = 10-13$   
**Component names:** Alkylbenzenesulphonic acid  
**Hazard symbol:** C; R34, Xn; R22  
**Index number:** –  
**CAS number(s):** 27176-87-0  
**EC Number (EINECS):** 248-289-4  
**Additional information:** Concentration:  $\geq 96\%$   
INCI name: Dodecylbenzene Sulfonic Acid

### 3. Hazards identification

Corrosive (C)  
Harmful (Xn)

Harmful if swallowed (R 22)  
Causes burns (R 34)

### 4. First aid measures

**Inhalation**

Allow adequate ventilation. Seek medical attention.

**Skin contact**

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water.

**Eye contact**

Irrigate copiously with fresh water for at least 15 minutes with eyelids rolled up. Immediately seek ophthalmologist attention.

**Ingestion**

Do not give anything to drink. Do not induce vomiting (risk of perforation!). Immediately seek medical attention.

## 5. Fire fighting measures

### Suitable extinguishing media

Foam, dry powder, carbon-dioxide and water (water spray).

### Extinguishing media which must not be used for safety reasons

Not known.

### Special hazards

In case of fire, hazardous decomposition products may be formed. In case of fire, sulphur dioxide may be formed. Cool drums or containers exposed to fire or high temperature with water spray. If possible, remove containers from the hazardous area.

### Special protective equipment for fire-fighters

In case of sulphur dioxide formation, use appropriate protective clothing and respiratory protective equipment.

### Additional information

Non-flammable, flammable after evaporation of water. Sulphur dioxide formed should be absorbed using water spray.

---

## 6. Accidental release measures

### Personal precautions

Do not inhale fumes. Avoid contact with the substance.

### Environmental precautions

Prevent penetration of large product volumes into drains or sewage systems, ground or surface water and soil. Notify relevant authorities in case of environmental pollution.

### Methods for cleaning / disposal

If possible, eliminate the spill. Contain the spreading of the spill by bunding. Soak up the spill with absorbent material (e.g. earth, sand), collect into a closed container and recycle or neutralize in compliance with the regulations in force (see sec. 13). Alkylbenzenesulphonic acid can be neutralized with alkalis (e.g. sodium carbonate, sodium hydroxide). Wash the contaminated area thoroughly with water.

---

## 7. Handling and storage

### Handling

Handle in compliance with general safety and industrial hygiene standards. Prevent access of unauthorised persons.

### Storage

Store in closed containers made of acid resistant steel or other corrosion-resistant material fitted with heating elements and mixers or a circulating pump or store in closed polyolefin containers. Maximum storage temperature of 50<sup>0</sup>C.

### Specific applications

Substance with broad application.

---

## 8. Exposure controls/personal protection

### Exposure control parameters

MAC (TWA): not specified.

### Personal protective equipment:

#### Respiratory protection

Not required in normal use. Required in case of higher temperature if fumes are formed.

#### Eye and face protection

Required – wear tightly fitting safety goggles if there is a risk of direct contact.

**Hand protection**

Required – protective gloves.

**Skin protection**

Acid resistant protective clothing.

**Hygiene measures**

Take off immediately all contaminated clothing. Wash hands and face after use. When using do not eat or drink.

---

**9. Physical and chemical properties**

<b>Appearance:</b>	liquid
<b>Colour:</b>	dark brown
<b>Odour:</b>	sulphur dioxide
<b>pH:</b>	approx. 1 (at 20 <sup>0</sup> C for 30 g/l H <sub>2</sub> O)
<b>Temperature</b>	
<b>melting:</b>	below -5 <sup>0</sup> C
<b>boiling:</b>	no data available
<b>flash-point:</b>	approx. 200 <sup>0</sup> C
<b>self-ignition:</b>	approx. 300 <sup>0</sup> C
<b>Flammability:</b>	non-flammable
<b>Explosive properties</b>	
<b>upper and lower explosion limit:</b>	no data available
<b>Oxidizing properties:</b>	not present
<b>Vapour pressure:</b>	no data available
<b>Relative density:</b>	approx. 1.06 g/cm <sup>3</sup> at 20 <sup>0</sup> C
<b>Solubility</b>	
<b>in water:</b>	complete below 40% of active substance, 40-90% concentration forms gel
<b>in organic solvents:</b>	alkaline liquids (hydroxides, ethanolamines)
<b>Partition coefficient: n-octanol/water:</b>	no data available
<b>Other properties:</b>	viscosity at 25 <sup>0</sup> C: approx. 1400 mPa·s

---

**10. Stability and reactivity**

<b>Stability</b>	Product stable under normal conditions.
<b>Conditions to avoid</b>	Do not heat above 50 <sup>0</sup> C
<b>Materials to avoid</b>	Strong bases and amines
<b>Hazardous decomposition products</b>	Decomposition causes sulphur dioxide formation
<b>Additional information</b>	Mixing alkylbenzenesulphonic acid with concentrated alkali and amine solutions may lead to hazardous exothermic reaction Heating to a temperature of approx. 200 <sup>0</sup> C causes decomposition

---

**11. Toxicological information**

<b>Acute oral toxicity</b>	LD <sub>50</sub> (rat) of 1,000 mg/kg
<b>Inhalation toxicity</b>	Under normal conditions does not emit hazardous fumes
<b>Skin contact</b>	Strong irritant, causes burns
<b>Eye contact</b>	Strong irritant, causes burns
<b>Ingestion</b>	Irritation of oral mucosa, pharynx, oesophagus and digestive system mucous membranes

**Additional information**

Other hazardous properties can not be ruled out  
Take necessary precautions when mixing the product with other alkalis

---

**12. Ecological information****Ecotoxicity**

Toxicity to aquatic organisms  
(reference data)

EC<sub>50</sub> (48 h) = 0.7-7.7 mg/l (fish)  
EC<sub>50</sub> (48 h) = 1.2-11.2 mg/l (*Daphnia Magna*)  
IC<sub>50</sub> (48 h) = 4.3-29 mg/l (*Algae*)

**Mobility**

After dissolving in water may penetrate to groundwater

**Persistence and degradability**

Persistence

Biodegradation potential of 97.2%, specified in compliance with 82/243/EEC

Degradability

Ultimate aerobic biodegradation specified using the closed bottle method as per Directive 67/548/EEC, Annex V.C.4-E equals 77.0%

**Bioaccumulation potential**

Does not bioaccumulate, BCF < 100 (reference data)

**Other adverse effects**

No data available

---

**13. Disposal Considerations****Product**

Do not dispose of to drains or sewage system. Prevent penetration into ground or surface water. Do not landfill inert waste. Waste product should be recycled or neutralized in compliance with the regulations in force (Waste Act) in facilities or equipment that meet relevant requirements (authorized plants or producer).

**Packaging**

Empty packaging should be treated as hazardous waste. Packaging can be re-used if thoroughly washed with water or treated using an equivalent cleaning procedure. Best results are obtained by washing immediately after emptying the packaging. Recycling or neutralization of the packaging should comply with the regulations in force (Packaging and Packaging Waste Act).

---

**14. Transport information****Road transport ADR/RID**

ADR – Transport name:  
UN 2586 ALKYL SULPHONIC ACIDS, LIQUID  
(Alkylbenzenesulphonic acid), 8, III  
RID – Transport name:  
80 UN 2586 ALKYL SULPHONIC ACIDS, LIQUID  
(Alkylbenzenesulphonic acid), 8, III

Class: 8; Classification code: C3; Packing group: III;  
Labels: 8; Special provisions: 274;  
Limited quantity: LQ19;  
Packaging: Packing instructions: P001, IBC03, LP01, R001;  
Special packing provisions: none; Mixed packing: MP15;  
Portable tank: Instructions: T4; Special provisions: TP1;  
ADR/RID tank: Tank code: L4BN; Special provisions: none;  
ADR vehicle category: AT; Transport category: 3;  
Special transport provisions: Shipping units: none; Carriage in bulk: forbidden; Loading, unloading, handling: none;  
Procedure (ADR): none;  
Hazard identification code: 80

**Sea transport IMDG**

Transport name:  
UN 2586 ALKYL SULPHONIC ACIDS, LIQUID

Class: 8; Packing group: III;  
Labels: 8; Special provisions: none;  
Limited quantity: 5l;  
Packaging: Packing instructions: P001, IBC03, LP01;  
Tank instructions: IMO: none; UN: T4;  
Special provisions: TP1;  
EmS: F-A, S-B;  
Loading, segregation: Category B

**Air transport ICAO-TI and IATA-DGR**

No data available

**15. Regulatory information**

This Material Safety Data Sheet has been drafted in compliance with the Act on Chemical Substances and Preparations of 11 January 2001 (*Official Journal Dziennik Ustaw* 2001, No. 11, item 84), as amended.

Template for the Material Safety Data Sheet has been taken from the Regulation of the Minister of Health on Safety Data Sheets for Hazardous Substances and Preparations of 3 July 2002 (*Official Journal Dziennik Ustaw* 2002, No. 140, item 1171) as amended.

Additional regulations:

**Packaging labelling** – as per the Regulation of the Minister of Health on Hazardous Substance and Preparation Labelling of 2 September 2003 (*Official Journal Dziennik Ustaw* 2003, No. 173, item 1679), as amended.



Corrosive (C)



Harmful (Xn).

**R-phrases**

R 22 Harmful if swallowed  
R 34 Causes burns

**S-phrases**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S 28 After contact with skin, wash immediately with plenty of water  
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection

**16. Other information**

<b>List of R-phrases</b>	R 22 Harmful if swallowed R 34 Causes burns
<b>Training required</b>	Customers applying ABS Acid should carefully read this Material Safety Data Sheet
<b>Recommended application restrictions</b>	Not known
<b>Further information can be obtained from</b>	Producer
<b>Source of information</b>	Own research and Internet databases
<b>Modifications in the sheet</b>	Section 12 (degradability)
<b>Additional information</b>	Information given herein refers solely to the technical product and ceases to be valid after its processing

MSDS version: 2

Information presented herein is given based on our most contemporary knowledge and it describes the product in terms of health care, environment protection and safe handling requirements. It shall not be understood as a guarantee of specific properties of the product.