



MSDS REPORT

Sample Description: 2-Acrylamido-2-Methylpropanesulfonic Acid

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Material Safety Data Sheet
According to Regulation (EC) No 1907/2006

2-Acrylamido-2-Methylpropanesulfonic Acid

Version 1.0

Issue date: 20/09/2017

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

Identification on the label/Trade name: 2-Acrylamido-2-Methylpropanesulfonic Acid

Additional identification: Not available

Identification of the product: CAS#15214-89-8 EC#239-268-0

Index Number: Not available

REACH registration No.: 01-2119496238-26-0020

1.2 Relevant identified uses of the substance and uses advised against:**1.2.1 Identified uses:**

Water treatment, Oilfield, spin, papermaking, synthetic fiber, plastic etc.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier (Only representative): -

Supplier (Manufacturer): SHANDONG LONGMAI CHEMICAL CO., LTD.

Address: 3 Donghai Road, Bohai Industrial Park, Yangkou Town, Shouguang City, Shandong Province of China

Contact person (E-mail): daniel@longmaichemical.com

Telephone: +86-536-5455658

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1.4 Emergency telephone Number:

+86-536-5455658

Section 2 Hazards Identification**2.1 Classification of the substance/mixture:****2.1.1 Classification:**

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Acute Tox. 4	H302
Eye Dam. 1	H318
Acute Tox. 4	H332
STOT SE 3	H335

For full text of H- phrases: see section 2.2.

2.2 label elements:

Hazard Pictograms:



Signal Word(S):

Danger

Hazard Statement:

H302: Harmful if swallowed

H318: Causes serious eye damage

H332: Harmful if inhaled

H335: May cause respiratory irritation

Precautionary statement:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor. P330: Rinse mouth.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local regulation.

2.3 Other hazards:

Not applicable.

Section 3 Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
2-Acrylamido -2-Methylpropanesulfonic Acid	01-2119496238-26-0020	15214-89-8	239-268-0	≥99%

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Get immediate medical attention.

4.1.2 In case of skin contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used. Cover irritated skin with an emollient. Get medical attention in case of persistent irritation. Wash clothing before reuse. Thoroughly clean shoes before reuse.

4.1.3 In case of eyes contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

4.1.4 In case of ingestion:

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed:

Harmful if swallowed. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Flood with water.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Dust from this product is explosive. In case of fire, the following can be released: Carbon oxides, Sulphur oxides, Nitrogen oxides.

5.3 Advice for firefighters:

Firefighters must wear fire resistant protective equipment. Wear approved respirator and protective gloves.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Keep persons away and upwind from spill. Remove ignition sources. Provide adequate ventilation. Avoid inhalation dust. Avoid skin and eye contact. For personal protection see Section 8.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental Precautions:

Prevent entry into sewers and waterways.

6.3 Methods for Containment and Cleaning up:

Pick up free solid for recycle and/or disposal. Use appropriate tools to place the spilled solid in a convenient waste disposal container. Avoid raising dust.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Open container in a well-ventilated area. Avoid creating or breathing dusts. Wear full PPE to avoid getting in eyes, on skin or on clothing. Maintain good housekeeping practices. Wash thoroughly after handling.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Keep away from moisture and incompatible material such as alkalis.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure Controls/Personal Protection**8.1 Control parameters:****8.1.1 Occupational exposure limits:**

Not available.

8.1.2 Additional exposure limits under the conditions of use:

Not available.

8.1.3 DNEL/DMEL and PNEC-Values:Workers - Hazard via inhalation route-Systemic effects -Long term exposure-DNEL (Derived No Effect Level): 1 mg/m³Workers - Hazard via inhalation route-Systemic effects- Acute/short term exposure-DNEL (Derived No Effect Level): 2.9 mg/m³

Workers - Hazard via dermal route-Systemic effects -Long term exposure-DNEL (Derived No Effect Level): 5.6 mg/kg bw/day

Workers - Hazard via dermal route-Systemic effects- Acute/short term exposure-DNEL (Derived No Effect Level): 40 mg/kg bw/day

PNEC aqua (freshwater): 130 µg/L PNEC STP: 100 mg/L

8.2 Exposure controls:**8.2.1 Appropriate engineering controls:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures, such as personal protective equipment:**Eye/face protection:**

Splash goggles.

Hand protection:

Chemical resistant gloves

Body protection:

Protective arm sleeves, aprons, full body coveralls, boots, and head coverings.

Respiratory protection:

Dust respirator

Thermal hazards:

Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties**9.1 Information on basic physical and chemical properties:****Appearance:**

Solid, powder or granular

Color:

White

Odour:

Not Available

Odour Threshold:

Not available

pH:

Not available

Melting point/range (°C):

ca. 190 °C

Boiling point/range (°C):

Not available

Flash point (°C):

Not available

Evaporation rate:

Not available

Flammability limit - lower (%):

Not available

Flammability (solid, gas):

Non flammable

Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (25°C):	4.4 x 10 ⁻⁷ Pa
Vapour density:	Not available
Relative Density:	1.36 g/cm ³
Bulk density (kg/m ³):	Not available
Water solubility (g/l):	> 500 g/L
n-Octanol/Water (log Po/w):	-3.7
Auto-ignition temperature:	> 400 °C
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	ATBS was concluded not to be explosive.
Oxidising properties:	No oxidising properties
Molecular Formula:	C ₇ H ₁₃ NO ₄ S
Molecular Weight:	207.25

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	ATBS was found to be unstable in both methanol and ethanol.
Surface tension:	70.5 mN/m
Dissociation constant in water(pKa):	2.4
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials.
10.5 Incompatible materials:	Oxidizing agents and alkalis.
10.6 Hazardous decomposition products:	Carbon oxides, Sulphur oxides, Nitrogen oxides.

Section 11 Toxicological information**11.1 Information on toxicological effects:**

Acute toxicity:	
LD50(Oral, Rat):	1830 mg/kg bw male
LD50(Dermal, Rabbit):	Not available
LC50(Inhalation, Rat):	Not available
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Causes serious eye damage.
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified

Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	May cause respiratory irritation.
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

Section 12 Ecological information

12.1 Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

12.2 Persistence and degradability: The test substance showed a low biodegradation rate of less than 10% after 44 days. ATBS was not considered to be readily biodegradable.

12.3 Bioaccumulative potential: Not available.

12.4 Mobility in soil: Not available.

12.5 Results of PBT&vPvB assessment: The substance is not PBT / vPvB.

12.6 Other adverse effects: Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: Due to the high risk of contamination recycling/recovery is not recommended. Waste disposal in accordance with regulations (most probably controlled incineration).

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not regulated	Not regulated	Not regulated
UN Proper shipping name	Not regulated	Not regulated	Not regulated
Transport hazard Class	Not regulated	Not regulated	Not regulated
Packaging group	Not regulated	Not regulated	Not regulated
Environmental hazards	No	No	No
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of Marpol and the IBC Code	Not regulated	Not regulated	Not regulated

Section 15 Regulation information

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

Relevant information regarding authorization: Not applicable. Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment has been carried out? Yes ☒ NO ☒

Section 16 Other information

16.1 Indication of changes: Version 1.0 Amended by (EU) 2015/830

16.2 Training instructions: Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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