Product name: 2-Acrylamido-2-Methylpropane Sulfonic Acid Sodium Salt

Report ID： GPIMJPBT664495U3

Revised time:

PONY

Pony Testing International Group

Report No.：GPIMJPBT664495U3

MSDS Report

Sample Description 2-Acrylamido-2-Methylpropane Sulfonic Acid Sodium Salt

Applicant Chemball (Hangzhou) Chemicals Co., Ltd.

Product name: 2-Acrylamido-2-Methylpropane Sulfonic Acid Sodium Salt

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声　明
Statement

1. 本证明/报告的结论仅对委托方所送样品负责。

The conclusion of the certificate/report is responsible for the provided sample only.

2. 委托方必须如实提供样品，申报和声明资料，并保证与实际相符，否则由委托方承担由此导致的全部后果和责任。

The applicant shall provide accurately and truly the description and statement of the sample, shall guarantee to match the sample and real situation which they provided and declared. Otherwise the application shall bear any relevant consequences and responsibility.

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▲防伪说明：

(1)报告编号是唯一的；

(2)报告采用特制防伪纸张印制，纸张表面带有"PONY"防伪纹路，该防伪纹路不支持复印，即复制件不会带有"PONY"防伪纹路；

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Material Safety Data Sheet

According to: ST/SG/AC.10/30/Rev.8 (GHS)

2-Acrylamido-2-Methylpropane Sulfonic Acid Sodium Salt

Section 1 - Identification of the substance/preparation and of the company/undertaking

Product Identifier

Product name: 2-Acrylamido-2-Methylpropane Sulfonic Acid Sodium Salt

Trade name: AMPS.NA

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Manufacturing

Details of the supplier of the safety data sheet

Applicant: Chemball (Hangzhou) Chemicals Co., Ltd.

Supplier: Chemball (Hangzhou) Chemicals Co., Ltd.

Address: No.970, Gaojiao Road, Hangzhou City, Zhejiang Province 311122, PR China

TEL: +86-571-8627 3270 **Emergency Phone:** +86-15381053599

E-**mail:** service@chemball.com

Section 2 - Hazards Identification

Classification of the substance or mixture

Classification according to GHS

Eye irritation (Category 2) Skin irritation (Category 2)

GHS label elements:

Pictogram

Signal word Warning

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Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position 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.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Physical and chemical hazards: See Section 10

Human health hazards: See Section 11

Environmental hazards: See Section 12

Section 3 - Composition/Information on Ingredient

Chemical composition

Component	CAS No.	Molecular Formula	Molecular Weight	Composition	EC No.	GHS CLASS
2-Acrylamido-2-Methylpropane Sulfonic Acid Sodium Salt	5165-97-9	$C_7H_{12}NNaO_4S$	229.23	50%	225-948-4	Skin Irrit. 2 Eye Irrit. 2 STOT SE 3 H315 H319 H335
Water	7732-18-5	H_2O	18.02	50%	231-79-2	/

For the full text of H-Statements mentioned in this Section, see Section 16.

Section 4-First Aid Measures

Description of first aid measures

Eye Contact: Check for and remove any contact lenses. Flush eyes with plenty of water for at least 15 minutes. Occasionally lifting the upper and lower eyelids. Get medical attention if irritation occurs.

Skin Contact: Immediately wash skin with soap and copious amounts of water while removing contaminated clothing and shoes. Be particularly careful to clean folds, crevices, creases and groin. If irritation develops, use mild skin cream. If irritation develops and persists, seek medical attention.

Ingestion: Wash out mouth with water. 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 medical attention if symptoms appear.

Inhalation: Evacuate the victim from exposure to fresh air as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If irritation develops or persists, seek medical attention.

Personal protective equipment for first-aid responders:

No further relevant information available.

Most important symptoms/effects, acute and delayed:

No further relevant information available.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

Section 5 - Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Special Protective Equipment and Precautions for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (aproved or equivalent) and full protective gear.

Section 6- Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

If packages rupture, ensure adequate ventilation. Use personal protective equipment. Keep people away from and up wind of spill/leak. Evacuate personnel to safe areas. Spilled or released at long industrial condition: Remove ignition sources, keep away from heat and flame, evacuate area. Avoid breathing vapor, mist or gas. Shut off source of the leak only if it is easy to do so. Slipping hazard; Do not walk through spilled material.

Environmental precautions

Take precautions to ensure product does not contaminate the ground or enter the drainage system, surface water, sanitary sewer or ground water system.

Methods and materials for containment and cleaning up

Contain spillage, and the collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in suitable containers for recycle or disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

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 disposal information.

Section 7 - Handling and Storage

Precautions for safe handling

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing vapor, mist or gas. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Avoid prolonged or repeated exposure. Avoid physical damage to the container. Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Ground and bond containers when transferring material. Take necessary action to avoid static electricity discharge. Do not eat, drink or smoke while handling the product at workplace.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated away from incompatible substances and foodstuff containers. Store in a tightly closed container. Do not store at elevated temperatures. Keep away from sources ofignition. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid storing product in direct sunlight for extended periods of time. Keep out of the reach of children.

Specific end uses

No data available

Section 8- Exposure Controls/Personal Protection

Control parameters

Exposure limits No data available

Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimize release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal Protective Equipment

Eyes Protection: Wear appropriate safety goggles.

Skin Protection: Wear appropriate protective gloves.

Body Protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respirators Protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Other Protection: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. To maintain good health habits.

Section 9 - Physical and Chemical Properties

Physical State	Liquid
Colour	Colorless or light yellow
Odour	With slight odour
PH	8-11
Melting point/freezing point	No data available
Boiling point or initial boiling point and boiling range	No data available
Flash point	Not applicable
Flammability (solid, gas)	No data available
Lower and upper explosion limit/ flammability limit	No data available
Vapour pressure	No data available
Relative vapour density	No data available
Density/Relative density	No data available
Solubility	Soluble
Partition coefficient: n-octanol/water	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Particle characteristics	No data available

Section 10 - Stability and Reactivity

Reactivity No data available
Chemical stability Stable under normal conditions.
Possibility of hazardous reactions
Hazardous Polymerization Will not occur.
Hazardous Reactions None under normal processing.
Conditions to avoid Incompatible material. Excess heat. Source of ignition .
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products Under fire conditions, may produce irritating and toxic fumes and gases. Carbon oxides, nitrogen oxides (NOx), sulfur oxides (SOx).

Section 11 - Toxicological Information

Information on toxicological effects
Acute toxicity:
CAS# 5165-97-9:
Oral, rat: LD50 > 5000 mg/kg;
Skin, rabbit: LD50 > 2000 mg/kg;
Skin corrosion/irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
Germ cell mutagenicity No data available
Carcinogenicity No data available
2-Acrylamido-2-Methylpropane Sulfonic Acid Sodium Salt - IARC: No component of this product present atlevels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Water- Not listed as a carcinogen by ACGIH, IARC, NTP OR CA Prop 65.
Reproductive toxicity No data available
Specific target organ toxicity - single exposure No data available
Specific target organ toxicity - repeated exposure No data available
Aspiration hazard No data available
Potential Health Effects
Eye: May cause eye irritation. May cause redness and pain.
Skin: May be harmful if absorbed through the skin. May cause skin irritation. May cause localized irritation, reddening or swelling. The material can cause inflammation of the skin on repeated contact in some person. The material may accentuate any pre-existing dermatitis condition.
Ingestion: May be harmful if swallowed. May cause irritation of mucous membranes in the mouth and digestive tract. Symptoms may include nausea, vomiting and diarrhea.
Inhalation: May be harmful if inhaled. Inhalation of vapor may be irritating to mucous membranes and upper respiration tract. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache.
Signs and Symptoms of Exposure

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS#: CAS#5165-97-9: Unlisted

CAS# 7732-18-5: ZC0110000

Section 12 - Ecological Information

Toxicity

CAS# 5165-97-9: Fish: Lepomis macrochirus (Bluegill): LC50 > 1000 mg/L/96 h;

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Results of PBT and vPvB assessment No data available

Other adverse effects Do not empty into drains.

Section 13- Disposal Consideration

Waste treatment methods

Waste from Residues / Unused Products: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Contaminated packaging: Contaminated packaging material should **be** treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

Section 14- Transport Information

	IATA/DGR	IMDG/IMO	RID/ADR
Proper shipping name	Not regulated	Not regulated	Not regulated
Hazard class	/	/	/
Un number	/	/	/
Packing group	/	/	/

Section 15- Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture Regulatory information: Reference to the local, national, US, EU, CA and international

Canada

All chemicals in this product are listed on Canada's DSL List.

US Federal

Toxic Substance Control Act (TSCA)

All chemicals in this product are listed on the TSCA Inventory.

China

Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)

All chemicals in this product are listed on the IECSC Inventory.

Section 16 - Additional Information

MSDS Creation Date: Sept. 14, 2021

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
Text of H-code(s) mentioned in Section 3

Skin Irrit.2: Skin irritation (Category 2)

Eye Irrit. 2: Eye irritation (Category 2)

STOT SE 3: Specific target organ toxicity - single exposure (Category 3)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Other Information:

ACGIH:(American Conference of Governmental Industrial Hygienists); CAS: (Chemical Abstracts Service); DSL: (the Domestic Substances List of Canada) ; EC: (European Commission) ; IARC: (International Agency for Research on Cancer) ;IATA: (International Air Transport Association) ; IMDG: (International Maritime Dangerous Goods) ;ADR: (European Agreement Concerning the International Carriage of Dangerous Goods by Road);RID: (Regulations Concerning the International Carriage of Dangerous Goods by Rail); LD50:(Lethal dose, 50 percent kill) ; NDSL: (the Non-domestic Substances List of Canada) ;

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NIOSH: (US National Institute for Occupational Safety and Health) ;NTP: (US National Toxicology Program) ;OSHA: (US Occupational Safety and Health) ; PEL: (Permissible Exposure Level); REL: (Recommended Exposure Limit) ; RTECS: (Registry of Toxic Effects of Chemical Substances) ; STEL: (Short Term Exposure Limit) ;TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations) ; TSCA: (Toxic Substances Control Act of USA) ;IECSC: (Inventory of Existing Chemical Substances Produced or Imported in China);TWA:(Time Weighted Average); TLV:(Threshold Limit Value)