

SECTION 1. Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:**

3-(Benzyldimethylammonio)propanesulfonate

Synonyms:

3-(N-Phenylmethyl-N,N-dimethylammonio)propanesulfonate

PDA

NDSB-256

CAS Number:

81239-45-4

Registration number:

None

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

Laboratory chemicals

Manufacture of substances

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

TAIWAN HOPAX CHEMS. MFG. CO., LTD

No. 28, Huadong Road, Daliao District, Kaohsiung City 83162

TAIWAN R.O.C.

Further information obtainable from:

samantha@hopax.com.tw

Telephone : +886-788-7600 Ext 314

Fax : +886-788-2892

1.4 Emergency telephone number:

Manufacturer: HOPAX: +886-788-7600 Ext 314

SECTION 2. Hazards Identification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

2.1 Chemicals Classification

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Symbols/Pictograms: Not classified

Signal word: Not classified

Hazard statement: Not classified

Precautionary Statements - Prevention

Do not eat, drink or use tobacco when using this product.
Wear respiratory protection, protective gloves and eye/face protection.
Use only in a well-ventilated area.
Wash thoroughly after handling.

Precautionary Statements - Response

If exposed or concerned, get medical advice/attention

2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and/or toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

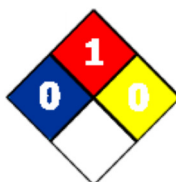
2.4 Hazards not otherwise classified (HNOC)

None identified.

2.5 Other Information

NFPA

Health hazards	0
Flammability	1
Stability	0
Physical and chemical properties	–



HMIS

Health hazards	2
Flammability	1
Physical hazards	0
Personal protection	E

SECTION 3. Composition / Information on ingredients

3.1 Substances

Chinese and English name:

3-(苄基二甲基氨基)丙磺酸鹽/3-(Benzyldimethylammonio)propanesulfonate

Formula: C₁₂H₁₉NO₃S

Molecular weight: 257.35 g/mol

Chemical Abstract Service No. (CAS No.): 81239-45-4

Ingredient (% of the content): ≥ 99.0 % (dried basis)

No components need to be disclosed according to the applicable regulations.

SECTION 4. FIRST AID MEASURES

4.1 Description of first-aid measures

General advice:

If symptoms persist, call a physician.

If inhaled:

Remove victim to fresh air, keep at rest in a position comfortable for breathing and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Get medical advice/attention if you feel unwell.

In case of skin contact:

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash contaminated clothing before reuse. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

In case of eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

If swallowed:

Rinse mouth. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider:

Use personal protective equipment as required.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance.

Note to physicians: Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents:

Suitable extinguishing media:

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

Unsuitable extinguishing media:

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x)

Sulfur oxides

Fire may cause evolution of:

Development of hazardous combustion and irritating gases, vapours or toxic fumes possible in the event of fire.

5.3 Advice for firefighters

Fire-extinguishing work is done from the windward, and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place.

In case of fire in the surroundings: Remove movable containers if safe to do so.

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

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions:**

Avoid dust formation.

Avoid breathing vapors, mist or gas.

Protective equipment:

Evacuate the danger area, observe emergency procedures, and consult an expert.

Do not take action without suitable protective clothing - see section 8 of SDS.

Emergency procedures:

Keep people away from and windward of spill/leak.

Evacuate the danger area, observe emergency procedures, and consult an expert.

Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.2 Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

Do not flush into surface water or sanitary sewer system.

Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains.

See Section 12 for additional Ecological Information.

6.3 Methods and material for containment and cleaning up**Methods for containment:**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up:

Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Clean up mechanically, placing in appropriate containers for disposal. Avoid creating dust.

Clean contaminated surface thoroughly. Soak up with inert absorbent material. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

6.4 Reference to other sections

Reference to other sections: For disposal see section 13.

SECTION 7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Ensure adequate ventilation, especially in confined areas.

Use with local exhaust ventilation or in a chemical fume hood, with air supplied by an independent system.

Use personal protective equipment/face protection as required.
Avoid ingestion and inhalation dust/fume/gas/mist/vapors/spray.
Avoid the formation of dust and aerosols.
Avoid contact with skin, eyes or clothing.
Keep away from sources of ignition.
Avoid prolonged or repeated exposure.
Wash hands and face thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities**Storage Conditions:**

Storage Conditions

Keep out of the reach of children.

Keep containers tightly closed in a dry, cool, dark and well-ventilated place.

Keep away from direct sunlight.

Keep container tightly sealed until ready for use.

Keep in properly labeled containers.

Recommended storage temperature:

Store at room temperature.

Incompatible materials:

Store away from incompatible materials such as oxidizing agents.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters**

Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls**Appropriate engineering controls:**

General industrial hygiene practice.

Install a closed system local exhaust or fume hood as possible so that workers should not be exposed directly.

Engineering Controls Safety Showers

Eye wash stations

8.3 Personal protective equipment**Eye/Face protection:**

Use equipment for eye/face protection tested and approved under appropriate government standards such as NIOSH (US) , EN 166 (EU) or OSHA's eye and face protection regulations in 29 CFR 910.133.

Skin and body protection:

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use.

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003).

Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Wear appropriate protective clothing and protective boots, if the situation requires.

Respiratory protection:

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN

14387 and other accompanying standards relating to the used respiratory protection system.
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations.
Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures and considerations:

Handle in accordance with good industrial hygiene and safety practice.
When using do not eat, drink or smoke. Wash contaminated clothing before reuse.
Regular cleaning of equipment, work area and clothing is recommended.

Control of environmental exposure:

Do not let product enter drains.

SECTION 9. PHYSICAL/CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information:

Appearance:

Form: Solid
Color: White

Odor: No data available

Odor Threshold: No data available

pH-value: No data available

Change in condition

Melting point: 245.0 – 250.0 °C

Freezing point: No data available

Boiling point: 551.06 °C

Initial boiling point and boiling range: No data available

Flash point: No data available

Flammability (solid, gas): No data available

Upper/Lower flammability or Explosive limits: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density: No data available

Water solubility: 10 g/l (at 20 °C)

Partition coefficient: n-octanol/water No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity:

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Density: No data available

Partition coefficient: -3.46

9.2 Other information

Not applicable

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

The following applies in general to flammable organic substances and mixtures:
In correspondingly fine distribution, a dust explosion potential may generally be assumed when whirled up.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents
None under normal processing.

10.4 Conditions to avoid

Avoid dust formation.
Incompatible products.
Conditions to avoid Extremes of temperature and direct sunlight.
Heat, moisture.

10.5 Incompatible materials

Strong acids/alkalis, strong oxidizing/reducing agents.

10.6 Hazardous decomposition products

In combustion may emit toxic fumes.
Hazardous decomposition products formed under fire conditions. Avoid exposure to Carbon oxides, Nitrogen oxides (NO_x), Sulfur oxides.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity:**

No data available

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

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Chronic Toxicity: Avoid repeated exposure.

Irritation: May cause irritation

Sensitization: No information available

Carcinogenicity:

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

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:

RTECS : No data available

Exposure may cause irritation of eyes, mucous membranes, upper respiratory tract and skin.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. ECOLOGICAL INFORMATION**12.1 Toxicity****Toxicity to daphnia and other aquatic invertebrates:**

No data available

Toxicity to algae static test:

No data available

Static test NOEC

No data available

12.2 Persistence and degradability**Biodegradability:**

No data available

12.3 Bio-accumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and/or toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Ecotoxicity

Do not empty into drains.

May cause long lasting harmful effects to aquatic life

12.7 Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product:**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging:

Do not reuse container.
Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with all federal, state and local regulations.

Recommendation:

Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID and IATA.

14.1 UN-Number

ADR/RID: Not listed
IMDG/IMO: Not listed
ICAO/IATA: Not listed

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG/IMO: Not dangerous goods
ICAO/IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: Does not correspond to the classification standard of the United Nations
IMDG/IMO: Does not correspond to the classification standard of the United Nations
ICAO/IATA: Does not correspond to the classification standard of the United Nations

14.4 Packing group

ADR/RID: Does not meet the criteria for classification as hazardous for transport.
IMDG/IMO: Does not meet the criteria for classification as hazardous for transport.
ICAO/IATA: Does not meet the criteria for classification as hazardous for transport.

14.5 Environmental hazards

This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a marine pollutant according to the IMDG Code.

ADR/RID: No
IMDG Marine pollutant/IMO: No
ICAO/IATA: No

14.6 Special precautions for user**Further information:**

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

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

This material safety data sheet complies with the requirements of Regulation (EC) No.1907/2006.

U.S. Federal Regulations

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories:


Acute health hazard: Yes
 Chronic Health Hazard: No
 Fire hazard: No
 Sudden release of pressure hazard: No
 Reactive hazard: No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

U.S. California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):

 **WARNING:** This product can expose you to chemicals including 1,3-PS (CAS No.: 1120-71-4), which is known to the State of California to cause cancer. For more information, go to www.P65Warning.ca.gov.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16. OTHER INFORMATION

Organization that prepared the MSDS	Name : TAIWAN HOPAX CHEMICALS MFG. CO., LTD.
	Address/telephone number: No. 28, Huadong Road, Daliao District, Kaohsiung 83162 Taiwan R.O.C. TEL.: +886-7-7887600
Creation date	2021/06/29
Revision Date	2021/06/29
Version:	1

Disclaimer

This SDS was prepared sincerely on the basis of the information we could obtain. However, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information, but also the laws and regulations of the organization, area and country where the product is to be used, which shall be given the first priority.

The product is supposed to be used promptly after purchase in consideration of safety. Some new information or

amendments may be added hereafter. If the product is to be used beyond the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The product must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set upon each user's own responsibility.

End of Safety Data Sheet