

Material Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade Name: Fatty Acid Diethanolamide

CAS Number: 68603-42-9

Use of the substance/preparation

Ingredient in Personal and Home Care products

Details of the supplier of the safety data sheet

Zhejiang Zanyu New Material Co., Ltd.

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China

Manufacturer/Supplier: Zip Code 322200

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2. Hazards Identification

Classification of the substance or mixture

Physical hazards Not classified.

Acute toxicity - oral Category 4 (H302)

Health hazards Skin Irritation Category 2 (H315)

Serious Eye Damage Category 2A (H319)

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 2 (H401)

Hazardous to the aquatic environment, long-term hazard Category 3 (H402)

OSHA defined hazards Not classified.

Label elements

Hazard label for supply/use required.



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Signal word:	Warning
Hazard statements	H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye damage. H412: Harmful to aquatic life with long lasting effects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. P260: Do not breathe mist or vapor. P273: Avoid release to the environment.
Precautionary statements	P264: Wash thoroughly after handling. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P350: If on skin: Wash with plenty of water. P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If exposed or concerned: Get medical advice/attention.
Response	P362+P364: Take off contaminated clothing and wash before reuse. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/ Information on Ingredients

Mixtures

Name	CAS-No.	Percent [%]
Fatty Acid Diethanolamide (Alternative CAS: 68155-07-7)	68603-42-9	80 ~90
Glycerin	56-81-5	< 10
Diethanolamine	111-42-2	< 5
Free oil	8001-31-8	< 5

4. First Aid Measures

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In case of inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
After skin contact:	Immediately flush with plenty of water. Remove contaminated clothing and wash clothing separately before reuse. If irritation persists get medical attention.
After eye contact:	Immediately flush eyes with running water for at least 15 minutes. Get medical attention.
After Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Firefighting Measures

Suitable extinguishing media:	Water fog. Foam. Dry chemical powder. CO ₂ .
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Extinguishing media which must not be used for safety reasons:	High power water jet.
Special hazards arising from the substance or mixture	In case of fire may be liberated: nitrogen dioxide and nitrogen monoxide, carbon monoxide and carbon monoxide and carbon dioxide.
Advice for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods General fire hazards	Use standard firefighting procedures and consider the hazards of other involved materials. No unusual fire or explosion hazards noted.

6. Accidental Release Measures

Personal precautions, protective equipment	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during
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and emergency procedures	clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
Environmental precaution	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.
Methods for containment	Prevent entry into waterways, sewers, basements or confined areas. Wear appropriate protective equipment and clothing during clean-up. Eliminate ignition sources including sources including sources of electrical, static or frictional sparks.
Methods for cleaning up	Small Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Large Spills: Dike far ahead of liquid spill for later disposal.
Reference to other sections	Refer additionally to chapter 8 and 13.

7. Handling and Storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.
Conditions for safe storage, including any incompatibilities	Requirements for storeroom and containers: Protect from frost. In case the product becomes cloudy, thicker or frozen by cooling, defrost it at room temperature and stir it. Hints on joint storage: No information is available.

8. Exposure Controls/ Personal Protection

Engineering controls	Use general ventilation. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.
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General	Eye wash fountain and emergency shower are recommended
Eye/face protection	Wear chemical goggles. Face-shield.
Skin protection	Wear suitable protective clothing. Use impervious gloves.
Respiratory protection	If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate respiratory protection must be provided.

9. Physical & Chemical Properties

Appearance	Viscous liquid
Odour	Characteristic odour
Molecular Formula	$C_{11}H_{23}CON(CH_2CH_2OH)_2$
Molecular Weight	287
pH(25 °C)	10.5 @10% Alcohol Solution
Freezing point	8-12 °C
Relative density	0.99g/mL (water=1)
Boiling point	> 150°C
Flash point	> 93°C
Vapor density	Not available
Solubility	Easily soluble in water
Main application	Used in shampoo, detergent, soap etc.

10. Stability & Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Incompatible materials	Strong acids and oxidizing agents. Peroxides. Phenols.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Possibility of Polymerization	Will not occur
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological Information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful. May cause damage to organs by inhalation.

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Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Acute Oral	Acute oral toxicity (LD50): > 5000 mg/kg [Rat.]
Sub-acute and Chronic Toxicity	Not list as toxicity according to the test of rat.
Irritation	Moderately irritating to eyes, slight or no irritation to skin.
Carcinogenicity	Suspected of causing cancer.
Teratogenicity	Not available
Mutagenicity	Testing has shown this product to be non-mutagenic when make the rats expose in 100mg/ml products for 24h.

12. Ecological Information

Eco-toxicity	Harmful to aquatic, may cause long-term adverse effect in the aquatic environment. Algae toxicity: EC50 <i>Desmodesmus subspicatus</i> (green algae): < 10 mg/L/72h. Daphnia toxicity: EC50 <i>Daphnia magna</i> (daphnia): < 10 mg/L/48h (OECD 202). Fish toxicity: LC50 (fish): < 10 mg/L/96h (OECD 203).
Persistence and degradability	This product is readily biodegradable.
Bioaccumulative potential	No data available.
Mobility	The product will dissolve in water.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the

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Waste from residues / unused products	producer and the waste disposal company. Dispose of 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. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

According to ADN/ADR/RID/IMDG/IATA not classified as dangerous goods.
This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

UN number	Not available
UN proper shipping name	ADR/RID, IMDG, IATA: Not restricted
Transport hazard class(es)	Not available
Packing group	Not available
Environment hazards	Marine pollutant No
Special precautions for user	See sections 6 to 8 of this Safety Data Sheet.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC-Code	No transport as bulk according IBC-Code

15. Regulatory Information

Environmental Protection Law of The People's Republic of China	
Regulations on the Safety Administration of Dangerous Chemicals	The State Council issued, Jan.26,2002
Implementing Regulations on Safety Management of Hazardous Chemicals	NO.677, Department of Labor and Chemical Industry issued, 1992
Workplace Provision on Safety Use of Chemicals	NO.423, Department of Labor issued, 1996
Classification and Labels of Dangerous Chemical Substances Commonly used	GB 13690-2009
Rule for Storage of Chemical Dangers	GB15603-1995
Packing Symbol of Dangerous Goods	GB 190-2009
General Specifications for Transport Packages of	GB 12463-2009

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16. Other Information

Guidance Department	R&D department
Created	06-30-2010
Last Updated	11-04-2018