

SAFETY DATA SHEET

Mass Corporation
SDS Number : 301
Date: May 1, 2015
Product Name: Denatonium Benzoate

Section 1- Company and Product Identification

Supplier Details: Mass Corporation
4521 WolfCreek Pkwy
Louisville, Ky 40241
Tel: 1-859-246-1668
Emergency Phone Number : 1-800-424-9300
Non Emergency Phone Number : (859) 246-1668

Mass Corporation urges the customer receiving this Safety Data Sheet (SDS) to study it carefully to become aware of hazards, if any of the product involved.

Product Name: Denatonium Benzoate

Synonyms: N-[2-[(2,6-Dimethylphenyl)amino]-2 oxoethyl]-N,N-diethylbenzenemethanaminium benzoate; Benzenemethanaminium, N-(2-[(2,6-dimethylphenyl)amino]-2-oxoethyl)-N,N-diethyl-, benzoate

Other means of identification: CAS No. 3734-33-6 EINECS No. 223-095-2

Country of origin: India

Recommended use of the chemical and restrictions on use: Commonly used for its extremely bitter taste in child safety application.

Section 2 – Hazardous Identification

OSHA HAZARDS:

Harmful by ingestion; Irritant



SIGNAL WORD: WARNING !

Eye Contact: Eye irritant

Skin Contact: Harmful if absorbed through the skin

Ingestion: OSHA Hazards :Harmful if ingested in a large amount

Inhalation: Can be harmful if inhaled. Can be irritating to the respiratory tract.

Hazard statement(s)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/fumes/gas/mist/vapors.

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

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GHS Classification(s)

Acute toxicity, Oral (Category 4)

Eye irritation (Category 2A)

Skin irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Section 3- Composition Information on Ingredients

Chemical Identity: Denatonium Benzoate,

Common name / Synonym: N-[2-[(2,6-Dimethylphenyl)amino]-2 oxoethyl]-N,N-diethylbenzenemethanaminium benzoate; Benzenemethanaminium, N-(2-((2,6-dimethylphenyl)amino)-2-oxoethyl)-N,N-diethyl-, benzoate

% content: >99.5%

CAS No: 3734-33-6

Classification: Xn Harmful

EINECS: 223-095-2

Section 4- First Aid Measures

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Wash skin with soap and copious amounts of water. Seek medical attention.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes

Flush eyes with water as a precaution.

Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

Section 5- Fire Fighting Measures

Suitable (and unsuitable) extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products): Carbon oxides and nitrogen oxides expected to be the primary hazardous combustion products.

Special protective equipment and precautions for firefighters: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

Section 6- Accidental Release Measures

PERSONAL PRECAUTIONS IN SPILL: Wear disposable gloves and overalls. Boots, Air Hood/Respirator is required.

PRECAUTIONS TO PROTECT ENVIRONMENT: Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

SPILL CLEANUP METHODS: Granules should be dealt with in such a way as to prevent particles being spread in the air causing an unpleasant taste.

Section 7- Handling and Storage

USAGE PRECAUTIONS: **Must train the operator how to handle the material safely.** While handling manually avoid contact with skin, eyes and clothing. Handle using techniques to minimize dust. The required amount of the material, if inserted **INSIDE** the solvent/product (before stirring/mixing) could prevent airborne particles.

Extremely bitter material. If happened to experience taste in the mouth, gargle several times with water to get rid of the the bitter taste before eating or drinking.

STORAGE PRECAUTIONS: **Close container tightly closed.** Keep dry, ventilated storage. Keep separate from food, feed- stuffs, fertilizers, and other sensitive materials.

STORAGE CRITERIA: Keep in cool dry place.

Section 8- Exposure Control/Personal Protection

Component	Source	Type	Value	Note
Denatonium Benzoate			No exposure limit	

Appropriate engineering controls: General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Individual protection measures, such as personal protective equipment:

Respiratory protection: Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

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

Section 9- Physical/Chemical Properties

APPEARANCE: Crystalline powder

COLOR: White granules

ODOR/TASTE: Odorless, bitter taste

BOILING POINT (□C, Interval): N/A **Pressure:** N/A

DENSITY/SPECIFIC GRAVITY (g/ml): N/A **Temperature (□C):** N/A

VAPOR PRESSURE: N/A **Temperature (□C):** N/A

SOLUBILITY DESCRIPTION: 1:20 @ 20 □C

FLASH POINT (□C): N/A **Method:** CC (Closed cup)

AUTO IGNITION TEMPERATURE (□C): N/A

FLAMMABILITY LIMIT – LOWER (%): N/A

FLAMMABILITY LIMIT – UPPER (%): N/A

Section 10- Stability and Reactivity

STABILITY: Product stable up to 140□C

CONDITIONS TO AVOID: None known

MATERIALS TO AVOID: Certain strong oxidizing agents such as Sodium Hypochlorite and Hydrogen Peroxide

HAZARDOUS DECOMP PRODUCTS: Nitrogen oxides are formed when denatonium benzoate decomposes on heating or when involved in fire

Section 11- Toxicological Information

Toxicity Data:

Oral LD50 (Female Rat) 584 mg/kg

Oral LD50 (Male Rat) 640 mg/kg

Oral LD50 (Rat) >2000 mg/kg

INHALATION: Only one known case of toxic effect in man from denatonium benzoate causing asthmatic persons who are allergic to Lignocaine or some similar anesthetics may also react to denatonium benzoate and should therefore avoid contact with the material.

INGESTION: Bitterest substance know to man. No information on adverse effects.

SKIN: Low skin sensitivity potential and therefore may be mildly irritating to skin.

EYES: No information available

Section 12- Ecological Information

Ecotoxicity (aquatic and terrestrial, where available):

Acute Fish Toxicity (DENATONIUM BENZOATE) LC50 / 96 hours Rainbow Trout >1000 mg/L

Persistence and degradability: No data available

Bioaccumulative potential: Biaccumulation is unlikely

Other adverse effects: No data available

Section 13- Disposal Consideration

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Section 14- Transportation Information

Description of waste residues and information on their safe handling and methods of disposal:

UN Number	Not a dangerous good
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IMDG

UN-Number: Not a dangerous good.

Marine pollutant: No

IATA

UN-Number: Not a dangerous good.

Section 15- Regulatory Information

Safety, health and environmental regulations specific for the product in question:

OSHA Hazards

Harmful by ingestion, Irritant

All ingredients are on the following inventories or are exempted from listing

Country	Notification
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

SARA 302 Components SARA 302:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Acute Health Hazard

CERCLA : No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components: Denatonium Benzoate CAS-No. 3734-33-6

New Jersey Right To Know Components: Denatonium benzoate CAS-No. 3734-33-6

Section 16-Additional Information

SDS Revision updated to GHS standard.

Date: 05/01/15

Prepared by QA Dept. of Mass Corp.

This information is provided for documentation purposes only. Sincere efforts made to include most available data. The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions maybe necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.