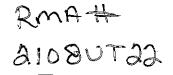


SAFETY DATA SHEET



1. Identification

Product identifier

MDEA 80% DEA 85% 20%

Other means of identification

None.

Recommended use

ALL PROPER AND LEGAL PURPOSES

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Brenntag / Coastal Chemical Co., LLC

Address

3520 Veterans Memorial Drive

Abbeville, LA 70510

Telephone

337-893-3862

E-mail

Not available.

Emergency phone number

800-424-9300

CHEMTREC

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Skin corrosion/irritation

Category 1

Serious eye damage/eye irritation

Category 1

Carcinogenicity

Category 2

Specific target organ toxicity, single exposure

Category 1

Specific target organ toxicity, repeated

Category 2

exposure

Environmental hazards

OSHA defined hazards

Not classified.

Not classified.

Label elements



Signal word

Danger

Hazard statement

Causes severe skin burns and eye damage. Causes serious eye damage. Suspected of causing cancer. Causes damage to organs. May cause damage to organs through prolonged or repeated

ехроѕиге.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face

protection.

Response

If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, Immediately call a poison

center/doctor. Wash contaminated clothing 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.

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. Do not get in eyes, on skin, or on clothing. When using, do not eat, drink or smoke. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Should be handled in closed systems, if possible. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US.	ACGIL	Thre	shold	Limit	Values
	7000		211010		. Tajuca

Components	Туре	Value	Form
ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)	TWA	1 mg/m3	Inhalable fraction and vapor.
US. NIOSH: Pocket Guide to Chemical Hazards Components Type		Value	
ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)	TWA	15 mg/m3	
,		2 nnm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

ETHANOL, 2.2'-IMINOBIS- (CAS 111-42-2)

Can be absorbed through the skin.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Physical and chemical properties

Appearance

Physical state

Liquid.

Form

Liquid.

Color

COLORLESS TO LIGHT YELLOW

Odor

NOT LISTED

Odor threshold

Not available.

рH

Not available.

Melting point/freezing point

-4 °F (-20 °C)

Material name: MDEA 80% DEA 85% 20%

416761 Version #: 03 Revision date: 11-01-2016 Issue date: 03-28-2015

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)

28 Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ

Causes damage to organs.

toxicity - single exposure

Specific target organ toxicity - repeated

May cause damage to organs through prolonged or repeated exposure.

exposure

Aspiration hazard

Not an aspiration hazard.

Species

Chronic effects

May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may

be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)

Aquatic

Crustacea

EC50

Water flea (Ceriodaphnia dubia)

61.8 - 86.04 mg/l, 48 hours

Test Results

Fish

LC50

Fathead minnow (Pimephales promelas) 100 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ETHANOL, 2,2'-IMINOBIS-

-1.43

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused

products

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

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Material name: MDEA 80% DEA 85% 20%

SDS US 5/7

^{*} Estimates for product may be based on additional component data not shown.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)

US. Massachusetts RTK - Substance List

ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)

US. New Jersey Worker and Community Right-to-Know Act

ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)

US. Pennsylvania Worker and Community Right-to-Know Law

ETHANOL, 2,2'-IMINOBIS- (CAS 111-42-2)

US. Rhode Island RTK

ETHANOL, 2,2'-!MINOBIS- (CAS 111-42-2)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

DIETHANOLAMINE (CAS 111-42-2)

Listed: June 22, 2012

international Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A "Yes" indicates that all comes		res

indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date

03-28-2015

Revision date Version #

11-01-2016 n3

HMIS® ratings

Health: 4* Flammability: 0

Physical hazard: 0

NFPA ratings

Health: 2 Flammability: 1 Instability: 0

Disclaimer

While Brenntag believes the information contained herein to be accurate, Brenntag makes no representation or warranty, express or implied, regarding, and assumes no liability for, the accuracy or completeness of the information. The Buyer assumes all responsibility for handling, using and/or reselling the Product in accordance with applicable federal, state, and local law. This SDS shall not in any way limit or preclude the operation and effect of any of the provisions of

Brenntag's terms and conditions of sale.

Revision information

Hazard(s) identification: Hazard statement

Composition/information on ingredients: Component information

Accidental release measures: Methods and materials for containment and cleaning up

Handling and storage: Precautions for safe handling

Handling and storage: Conditions for safe storage, including any incompatibilities

Exposure controls/personal protection: Generalized Statements

Toxicological information: Inhalation

Toxicological information: Specific target organ toxicity - single exposure

Material name: MDEA 80% DEA 85% 20%

SDS US