# SAFETY DATA SHEET

Version 5.6 Revision Date 02/02/2018 Print Date 11/08/2018

# 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : 3-Maleimidobenzoic acid *N*-hydroxysuccinimide

ester

Product Number : M2786 Brand : Sigma

CAS-No. : 58626-38-3

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

# 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

# 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : MBS

Formula :  $C_{15}H_{10}N_2O_6$ Molecular weight : 314.25 g/mol CAS-No. : 58626-38-3

**Hazardous components** 

Component	Classification	Concentration
Diethyl ether		
	Flam. Liq. 1; Acute Tox. 4; STOT SE 3; H224, H302, H336	1 - 5 %

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

Sigma - M2786 Page 1 of 7

## 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

#### General advice

Move out of dangerous area.

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### In case of skin contact

Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 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

No data available

# 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

# Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# 5.2 Special hazards arising from the substance or mixture

No data available

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# 5.4 Further information

No data available

# **6. ACCIDENTAL RELEASE MEASURES**

## 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

## 6.2 Environmental precautions

No special environmental precautions required.

# 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature -20 °C

Sigma - M2786 Page 2 of 7

Light sensitive. Moisture sensitive.

Storage class (TRGS 510): 13: Non Combustible Solids

# 7.3 Specific end use(s)

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

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis	
Diethyl ether	60-29-7	TWA	400.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)	
	Remarks	Central Nervous System impairment Upper Respiratory Tract irritation			
		STEL	500.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)	
		Central Nervous System impairment Upper Respiratory Tract irritation			
		See Appendix D - Substances with No Established RELs			
		TWA	400.000000 ppm 1,200.000000 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	
		The value in mg/m3 is approximate.			
		TWA	400 ppm	USA. ACGIH Threshold Limit Values (TLV)	
		Central Nervous System impairment Upper Respiratory Tract irritation			
		STEL	500 ppm	USA. ACGIH Threshold Limit Values (TLV)	
		Central Nervous System impairment Upper Respiratory Tract irritation			
		See Appendix D - Substances with No Established RELs			
		TWA	400 ppm 1,200 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	
		The value in mg/m3 is approximate.			
		TWA	400 ppm 1,200 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000	
		STEL	500 ppm 1,500 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000	
		PEL	400 ppm 1,200 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
		STEL	500 ppm 1,500 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)	

# 8.2 Exposure controls

# Appropriate engineering controls

General industrial hygiene practice.

# Personal protective equipment

# Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Sigma - M2786 Page 3 of 7

#### Skin 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.

## **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Melting point/range: 175 - 177 °C (347 - 351 °F) - lit.

## Control of environmental exposure

No special environmental precautions required.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Form: crystalline a) Appearance

Colour: beige

b) Odour No data available c) Odour Threshold No data available d) pH No data available

Melting point/freezing e)

point

Initial boiling point and

boiling range

No data available

g) Flash point No data available h) Evaporation rate No data available Flammability (solid, gas) No data available i)

Upper/lower flammability or explosive limits No data available

No data available Vapour pressure Vapour density No data available m) Relative density No data available n) Water solubility No data available No data available

o) Partition coefficient: noctanol/water

p) Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

Viscosity No data available r) Explosive properties No data available

Oxidizing properties

No data available

#### 9.2 Other safety information

No data available

Sigma - M2786 Page 4 of 7

# 10. STABILITY AND REACTIVITY

## 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

No data available

## 10.4 Conditions to avoid

No data available

# 10.5 Incompatible materials

Strong oxidizing agents

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

# **Acute toxicity**

No data available

Inhalation: No data available Dermal: No data available

No data available

#### Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitisation

No data available

# Germ cell mutagenicity

No data available

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's

list of regulated carcinogens.

# Reproductive toxicity

No data available

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

Sigma - M2786 Page 5 of 7

## **Additional Information**

RTECS: Not available

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

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Liver - Ingestion may provoke the following symptoms:, Irregularities - Based on Human Evidence

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## 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available

## 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

# Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

#### DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

# **IATA**

Not dangerous goods

# 15. REGULATORY INFORMATION

# **SARA 302 Components**

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

#### **SARA 313 Components**

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, Chronic Health Hazard

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know Components

CAS-No. Revision Date

Sigma - M2786 Page 6 of 7

1-[3-[[(2,5-Dioxopyrrolidinyl)oxy]carbonyl]phenyl]-1H-pyrrole- 58626-38-3

2,5-dione

Diethyl ether 60-29-7 1993-04-24

**New Jersey Right To Know Components** 

CAS-No. Revision Date

1-[3-[[(2,5-Dioxopyrrolidinyl)oxy]carbonyl]phenyl]-1H-pyrrole- 58626-38-3

2,5-dione

Diethyl ether 60-29-7 1993-04-24

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **16. OTHER INFORMATION**

## Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity
Flam. Liq. Flammable liquids

H224 Extremely flammable liquid and vapour.

H302 Harmful if swallowed.

H336 May cause drowsiness or dizziness.

STOT SE Specific target organ toxicity - single exposure

## **HMIS Rating**

Health hazard: 1
Chronic Health Hazard: \*
Flammability: 0
Physical Hazard 0

## NFPA Rating

Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0

# **Further information**

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# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

Version: 5.6 Revision Date: 02/02/2018 Print Date: 11/08/2018

Sigma - M2786 Page 7 of 7