

Revision Date: 02/03/2023

This is a kit that contains the following components:

TREMCO Sealer 300 Hardener B

TREMCO Sealer 300 Base A



Revision Date: 02/03/2023

# SAFETY DATA SHEET

#### 1. Identification

Product identifier: TREMCO Sealer 300 Hardener B

**Product Code: 802300C 800** 

Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco CPG Inc. - U.S. Sealants 3735 Green Road Beachwood OH 44122

US

**Contact person:** EH&S Department **Telephone:** 216-292-5000

**Emergency telephone number:** 1-800-424-9300 (US): 1-613-996-6666 (Canada)

# 2. Hazard(s) identification

## **Hazard Classification**

#### **Health Hazards**

Acute toxicity (Inhalation - dust and Category 4

mist)

Skin Corrosion/Irritation Category 2
Respiratory sensitizer Category 1
Skin sensitizer Category 1
Specific Target Organ Toxicity - Category 3<sup>1</sup>

Single Exposure

# **Target Organs**

1. Respiratory tract irritation.

# **Unknown toxicity - Health**

Acute toxicity, inhalation, vapor 100 %

#### **Label Elements**

# **Hazard Symbol:**





Revision Date: 02/03/2023

Signal Word: Danger

Hazard Statement: Harmful if inhaled.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction. May cause respiratory irritation.

Precautionary Statements

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and

any exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of

the workplace. Wear protective gloves/protective clothing/eye protection/face protection. [In case of inadequate ventilation] wear

respiratory protection.

Response: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated

clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked

up.

**Disposal:** Dispose of contents/ container to an approved facility in accordance with

local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC):

None.

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Homopolymer of HDI	28182-81-2	50 - <100%
Hexamethylene diisocyanate (HDI)	822-06-0	0.5 - <1%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

#### **Description of necessary first-aid measures**

**Inhalation:** Call a physician or poison control center immediately. If breathing

stops, provide artificial respiration. Move to fresh air. If breathing is

difficult, give oxygen.



Revision Date: 02/03/2023

**Skin Contact:** Get medical attention. Destroy or thoroughly clean contaminated

shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic

skin reaction develops, get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy

to do, remove contact lenses. Get medical attention.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First-

aid Responders:

Self-contained breathing apparatus and full protective clothing must

be worn in case of fire.

Most important symptoms/effects, acute and delayed

**Symptoms:** Prolonged or repeated contact with skin may cause redness, itching,

irritation and eczema/chapping. Respiratory tract irritation.

**Hazards:** No data available.

Indication of immediate medical attention and special treatment needed

**Treatment:** Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire-fighters

Special fire-fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

# 6. Accidental release measures



Revision Date: 02/03/2023

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. Do not touch damaged containers or spilled

material unless wearing appropriate protective clothing.

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.

# 7. Handling and storage

#### Handling

Technical measures (e.g. Local and general ventilation):

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

**Safe handling advice:** Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin.

Wash hands thoroughly after handling. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective

equipment. Observe good industrial hygiene practices.

**Contact avoidance measures:** No data available.

**Hygiene measures:** Observe good industrial hygiene practices. Wash contaminated clothing

before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should

not be allowed out of the workplace.

**Storage** 

Safe storage conditions: Store away from incompatible materials. Store in original tightly closed

container.

Safe packaging materials: No data available.

#### 8. Exposure controls/personal protection

#### **Control Parameters**

#### **Occupational Exposure Limits**

Chemical Identity	Туре	Exposure Limit Values	Source
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	US. ACGIH Threshold Limit Values, as amended (2008)



Revision Date: 02/03/2023

**Biological Limit Values** 

Chemical Identity	Exposure Limit Values	Source
Hexamethylene diisocyanate (HDI)	15 μg/g (Creatinine in urine)	ACGIH BEI (03 2015)
(Hexamethylenediamine		
(with hydrolysis): Sampling time: End of shift.)		

Appropriate Engineering

Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection** 

**Hand Protection:** Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:** Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below

recommended exposure limits (where applicable) or to an acceptable level

(in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an

appropriate, government approved (where applicable), air-purifying filter,

cartridge or canister. Contact health and safety professional or

manufacturer for specific information.

**Hygiene measures:** Observe good industrial hygiene practices. Wash contaminated clothing

before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should

not be allowed out of the workplace.

#### 9. Physical and chemical properties

#### **Appearance**

Physical state: liquid

Form: Viscous Liquid

Color: Clear Odor: Mild

Odor threshold:

pH:

No data available.

158 °C 316 °F



Revision Date: 02/03/2023

**Evaporation rate:** Slower than Ether

Flammability (solid, gas): No Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper:

Explosive limit - lower:

No data available.

No data available.

No data available.

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.1504

Solubility(ies)

Solubility in water:
Solubility (other):
Partition coefficient (n-octanol/water):
No data available.
No data available.
No data available.
No data available.
Viscosity:
No data available.
No data available.

# 10. Stability and reactivity

**Reactivity:** No data available.

**Chemical Stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

**Conditions to avoid:** Avoid heat or contamination.

**Incompatible Materials:** Alcohols. Amines. Strong acids. Strong bases. Water, moisture.

**Hazardous Decomposition** 

**Products:** 

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

# 11. Toxicological information

# Information on likely routes of exposure

**Inhalation:** In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

**Skin Contact:** Causes skin irritation. May cause an allergic skin reaction.

**Eye contact:** Eye contact is possible and should be avoided.

**Ingestion:** May be ingested by accident. Ingestion may cause irritation and malaise.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** No data available.



Revision Date: 02/03/2023

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Ingestion:** No data available.

# Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

**Product:** Not classified for acute toxicity based on available data.

Specified substance(s):

Homopolymer of HDI LD 50 (Rat): > 5,000 mg/kg

Hexamethylene

diisocyanate (HDI)

LD 50 (Rat): 746 mg/kg

**Dermal** 

**Product:** Not classified for acute toxicity based on available data.

Specified substance(s):

Homopolymer of HDI LD 50 (Rat): > 2,000 mg/kg

Hexamethylene

diisocyanate (HDI)

LD 50 (Rat): > 7,000 mg/kg

Inhalation

**Product:** ATEmix: 1.51 mg/l

Repeated dose toxicity

**Product:** No data available.

Skin Corrosion/Irritation

**Product:** No data available.

Specified substance(s):

Homopolymer of HDI in vivo (Rabbit): Irritating , 24 - 72 h

Hexamethylene

diisocyanate (HDI)

in vivo (Rabbit): Corrosive, 4 - 72 h

Serious Eye Damage/Eye Irritation

**Product:** No data available.

Specified substance(s):

Homopolymer of HDI Rabbit, 24 - 72 h: Not irritant



Revision Date: 02/03/2023

Respiratory or Skin Sensitization

**Product:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause sensitization by inhalation.

Carcinogenicity

**Product:** No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:** 

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

**Germ Cell Mutagenicity** 

In vitro

**Product:** No data available.

In vivo

**Product:** No data available.

Reproductive toxicity

**Product:** No data available.

Specific Target Organ Toxicity - Single Exposure
Product:
No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product:
No data available.

**Target Organs** 

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.

**Aspiration Hazard** 

**Product:** No data available.

Other effects: No data available.

# 12. Ecological information

#### **Ecotoxicity:**

Acute hazards to the aquatic environment:



Revision Date: 02/03/2023

**Fish** 

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

Specified substance(s):

Homopolymer of HDI EC 50 (Daphnia sp., 24 h): >= 100 mg/l experimental result Experimental

result, Supporting study

Chronic hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

**Toxicity to Aquatic Plants** 

**Product:** No data available.

**Persistence and Degradability** 

**Biodegradation** 

**Product:** No data available.

Specified substance(s):

Homopolymer of HDI 1 % (28 d) Detected in water. Experimental result, Key study

Hexamethylene

diisocyanate (HDI)

42 % (28 d) Detected in water. Experimental result, Key study

**BOD/COD Ratio** 

**Product:** No data available.

**Bioaccumulative potential** 

**Bioconcentration Factor (BCF)** 

**Product:** No data available.

Specified substance(s):

Hexamethylene Bioconcentration Factor (BCF): 57.63 Aquatic sediment Estimated by

diisocyanate (HDI) calculation, Key study

Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

Specified substance(s):

Hexamethylene L

diisocyanate (HDI)

Log Kow: 3.20



Revision Date: 02/03/2023

Mobility in soil: No data available.

Other adverse effects: No data available.

#### 13. Disposal considerations

**Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

# 14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

# 15. Regulatory information

#### **US Federal Regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

# US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

100 lbs.

#### **CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u> <u>Reportable quantity</u>

Hexamethylene diisocyanate (HDI)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

## **Hazard categories**

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard Acute toxicity (any route or exposure)



Revision Date: 02/03/2023

Skin Corrosion or Irritation
Respiratory or Skin Sensitization
Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Not regulated.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

Chemical Identity % by weight

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

**US State Regulations** 

**US. California Proposition 65** 

No ingredient requiring a warning under CA Prop 65.

# International regulations

# **Montreal protocol**

Not applicable

#### Stockholm convention

Not applicable

#### **Rotterdam convention**

Not applicable

# **Kyoto protocol**

Not applicable

VOC:

Regulatory VOC (less water and : 6 g/l

exempt solvent)

VOC Method 310 : 0.50 %



Revision Date: 02/03/2023

**Inventory Status:** 

Australia Industrial Chem. Act (AIIC): One or more components in this

product are not listed on or exempt

from the Inventory.

Canada DSL Inventory List: All components in this product are

listed on or exempt from the

Inventory.

Canada NDSL Inventory: One or more components in this

product are not listed on or exempt

from the Inventory.

Ontario Inventory:

One or more components in this

product are not listed on or exempt

from the Inventory.

China Inv. Existing Chemical

Substances:

All components in this product are

listed on or exempt from the

Inventory.

Japan (ENCS) List:

One or more components in this

product are not listed on or exempt

from the Inventory.

Japan ISHL Listing: One or more components in this

product are not listed on or exempt

from the Inventory.

Japan Pharmacopoeia Listing: One or more components in this

product are not listed on or exempt

from the Inventory.

Korea Existing Chemicals Inv. (KECI): All components in this product are

listed on or exempt from the

Inventory.

Mexico INSQ: One or more components in this

product are not listed on or exempt

from the Inventory.

New Zealand Inventory of Chemicals: All components in this product are

listed on or exempt from the

Inventory.

Philippines PICCS: All components in this product are

listed on or exempt from the

Inventory.

Taiwan Chemical Substance Inventory: One or more components in this



Revision Date: 02/03/2023

product are not listed on or exempt

from the Inventory.

US TSCA Inventory: All components in this product are

listed on or exempt from the

Inventory.

Switzerland New Subs Notified/Registered:

One or more components in this product are not listed on or exempt

from the Inventory.

Thailand DIW Existing Chemical Inv.

List:

One or more components in this product are not listed on or exempt

from the Inventory.

Vietnam National Chemical Inventory: One or more components in this

product are not listed on or exempt

from the Inventory.

EINECS, ELINCS or NLP: All components in this product are

listed on or exempt from the

Inventory.

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

**Revision Date:** 02/03/2023

Version #: 1.0

Further Information: No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.



Revision Date: 02/03/2023

# SAFETY DATA SHEET

#### 1. Identification

Product identifier: TREMCO Sealer 300 Base A

**Product Code: 802300C 800** 

Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco CPG Inc. - U.S. Sealants 3735 Green Road Beachwood OH 44122

US

**Contact person:** EH&S Department **Telephone:** 216-292-5000

**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

# 2. Hazard(s) identification

## **Hazard Classification**

## **Health Hazards**

Skin sensitizer Category 1

#### **Unknown toxicity - Health**

Acute toxicity, oral 65 %
Acute toxicity, dermal 65 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust 100 %

or mist

#### **Environmental Hazards**

Acute hazards to the aquatic Category 3

environment

Chronic hazards to the aquatic Category 3

environment

#### **Unknown toxicity - Environment**

Acute hazards to the aquatic 65 %

environment

Chronic hazards to the aquatic 65 %

environment

#### **Label Elements**



Revision Date: 02/03/2023

#### **Hazard Symbol:**



Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

Precautionary Statements

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work

clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face

protection.

**Response:** IF ON SKIN: Wash with plenty of soap and water. Wash contaminated

clothing before reuse. If skin irritation or rash occurs: Get medical

advice/attention. Specific treatment (see supplemental first aid instructions

on this label).

**Disposal:** Dispose of contents/ container to an approved facility in accordance with

local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC):

None.

#### 3. Composition/information on ingredients

#### **Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Aspartic acid,N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, 1,1',4,4'-tetraethylester	136210-30-5	25 - <50%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# 4. First-aid measures

#### Description of necessary first-aid measures

**Inhalation:** Move to fresh air.

**Skin Contact:** Get medical attention if symptoms occur. Destroy or thoroughly clean

contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or

an allergic skin reaction develops, get medical attention.



Revision Date: 02/03/2023

**Eye contact:** Any material that contacts the eye should be washed out immediately

with water. If easy to do, remove contact lenses. If eye irritation

persists: Get medical advice/attention.

**Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First-

aid Responders:

Self-contained breathing apparatus and full protective clothing must

be worn in case of fire.

Most important symptoms/effects, acute and delayed

**Symptoms:** May cause skin and eye irritation.

**Hazards:** No data available.

Indication of immediate medical attention and special treatment needed

**Treatment:** Symptoms may be delayed.

#### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire-fighters

Special fire-fighting

procedures:

No data available.

**Special protective equipment** 

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch

damaged containers or spilled material unless wearing appropriate

**emergency procedures:** protective clothing. Keep unauthorized personnel away.

Accidental release measures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.



Revision Date: 02/03/2023

Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so. Avoid release to the environment.

# 7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Safe handling advice: Wash hands thoroughly after handling. Avoid contact with eyes, skin, and

clothing. Provide adequate ventilation. Wear appropriate personal protective

equipment. Observe good industrial hygiene practices.

Contact avoidance measures: No data available.

**Hygiene measures:** Observe good industrial hygiene practices. Contaminated work clothing

should not be allowed out of the workplace. Avoid contact with skin.

Storage

Safe storage conditions: Store away from incompatible materials. Store in original tightly closed

container.

Safe packaging materials: No data available.

#### 8. Exposure controls/personal protection

#### **Control Parameters**

**Occupational Exposure Limits** 

None of the components have assigned exposure limits.

Appropriate Engineering

Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical

ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

Skin Protection

**Hand Protection:** Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:** Wear suitable protective clothing. Wear chemical-resistant gloves,

footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific

information.



Revision Date: 02/03/2023

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. Contaminated work clothing

should not be allowed out of the workplace. Avoid contact with skin.

#### 9. Physical and chemical properties

**Appearance** 

Physical state: liquid

Form: Viscous Liquid

Color: variable
Odor: Mild

Odor threshold:

pH:

No data available.

No data available.

Melting point/freezing point:

No data available.

Initial boiling point and boiling range:

Flash Point:

Evaporation rate:

No data available.

No data available.

Slower than Ether

Flammability (solid, gas): No Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper:

Explosive limit - lower:

No data available.

No data available.

No data available.

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.0564

Solubility(ies)

Solubility in water:
Solubility (other):
No data available.
Partition coefficient (n-octanol/water):
No data available.
Auto-ignition temperature:
No data available.
Decomposition temperature:
No data available.
Viscosity:
No data available.

# 10. Stability and reactivity

**Reactivity:** No data available.

**Chemical Stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

**Conditions to avoid:** Avoid heat or contamination.



Revision Date: 02/03/2023

Incompatible Materials: Alcohols. Amines. Strong acids. Strong bases. Water, moisture.

**Hazardous Decomposition** 

**Products:** 

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

# 11. Toxicological information

# Information on likely routes of exposure

**In high concentrations**, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

**Skin Contact:** May be harmful in contact with skin. May cause an allergic skin reaction.

**Eye contact:** Eye contact is possible and should be avoided.

**Ingestion:** May be harmful if swallowed.

## Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Ingestion:** No data available.

# Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

Oral

**Product:** ATEmix: 2,000 mg/kg

**Dermal** 

**Product:** ATEmix: 2,000 mg/kg

Inhalation Product:

Specified substance(s):

Aspartic acid,N,N'-(methylenedi-4,1cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester LC 50 (Rat): > 4,224 mg/m3

Repeated dose toxicity

**Product:** No data available.

Skin Corrosion/Irritation

**Product:** No data available.



Revision Date: 02/03/2023

Serious Eye Damage/Eye Irritation

**Product:** No data available.

**Respiratory or Skin Sensitization** 

**Product:** No data available.

Carcinogenicity

**Product:** No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:** 

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

**Germ Cell Mutagenicity** 

In vitro

**Product:** No data available.

In vivo

**Product:** No data available.

Reproductive toxicity

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure** 

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure** 

**Product:** No data available.

**Aspiration Hazard** 

**Product:** No data available.

Other effects: No data available.



Revision Date: 02/03/2023

# 12. Ecological information

#### **Ecotoxicity:**

# Acute hazards to the aquatic environment:

Fish

**Product:** No data available.

Specified substance(s):

Aspartic acid,N,N'-(methylenedi-4,1cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester LC 50 (Danio rerio, 96 h): 66 mg/l Read-across from supporting substance

(structural analogue or surrogate), Key study

**Aquatic Invertebrates** 

**Product:** No data available.

Specified substance(s):

Aspartic acid,N,N'-(methylenedi-4,1cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester EC 50 (Daphnia magna, 48 h): 88.6 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting

substance (structural analogue or surrogate), Key study

#### Chronic hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

Specified substance(s):

Aspartic acid,N,N'-(methylenedi-4,1cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester NOAEL (Daphnia magna): 0.013 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting

substance (structural analogue or surrogate), Key study

**Toxicity to Aquatic Plants** 

**Product:** No data available.

# Persistence and Degradability

Biodegradation

**Product:** No data available.

Specified substance(s):

Aspartic acid,N,N'-(methylenedi-4,1cyclohexanediyl)bis-, 1,1',4,4'-tetraethyl ester 16.1 % Detected in water. Experimental result, Key study

**BOD/COD Ratio** 

**Product:** No data available.



Revision Date: 02/03/2023

#### **Bioaccumulative potential**

**Bioconcentration Factor (BCF)** 

**Product:** No data available.

Specified substance(s):

Aspartic acid,N,N'-(methylenedi-4,1cyclohexanediyl)bis-,

1,1',4,4'-tetraethyl ester

Bioconcentration Factor (BCF): 1,872 Aquatic sediment Estimated by

calculation, Supporting study

Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

Mobility in soil: No data available.

Other adverse effects: Harmful to aquatic life with long lasting effects.

# 13. Disposal considerations

**Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

#### 14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

# 15. Regulatory information

# **US Federal Regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.



Revision Date: 02/03/2023

# US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

# US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

#### **CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate (Acute) Health Hazards Respiratory or Skin Sensitization

# US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Not regulated.

# US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

<u>Chemical Identity</u> <u>% by weight</u>

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities.

#### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

# **US State Regulations**

# **US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

## International regulations

# **Montreal protocol**

Not applicable

#### Stockholm convention

Not applicable

#### **Rotterdam convention**

Not applicable

# **Kyoto protocol**

Not applicable

#### VOC:

Regulatory VOC (less water and exempt solvent)

: 0 g/l



Revision Date: 02/03/2023

VOC Method 310 : 0.00 %



Revision Date: 02/03/2023

**Inventory Status:** 

Australia Industrial Chem. Act (AIIC): One or more components in this

product are not listed on or exempt

from the Inventory.

Canada DSL Inventory List:

One or more components in this

product are not listed on or exempt

from the Inventory.

Canada NDSL Inventory: One or more components in this

product are not listed on or exempt

from the Inventory.

Ontario Inventory: One or more components in this

product are not listed on or exempt

from the Inventory.

China Inv. Existing Chemical

Substances:

One or more components in this product are not listed on or exempt

from the Inventory.

Japan (ENCS) List: One or more components in this

product are not listed on or exempt

from the Inventory.

Japan ISHL Listing: One or more components in this

product are not listed on or exempt

from the Inventory.

Japan Pharmacopoeia Listing: One or more components in this

product are not listed on or exempt

from the Inventory.

Korea Existing Chemicals Inv. (KECI): One or more components in this

product are not listed on or exempt

from the Inventory.

Mexico INSQ: One or more components in this

product are not listed on or exempt

from the Inventory.

New Zealand Inventory of Chemicals: One or more components in this

product are not listed on or exempt

from the Inventory.

Philippines PICCS: One or more components in this

product are not listed on or exempt

from the Inventory.

Taiwan Chemical Substance Inventory: One or more components in this



Revision Date: 02/03/2023

product are not listed on or exempt

from the Inventory.

US TSCA Inventory: One or more components in this

product are not listed on or exempt

from the Inventory.

Switzerland New Subs Notified/Registered:

One or more components in this product are not listed on or exempt

from the Inventory.

Thailand DIW Existing Chemical Inv.

List:

One or more components in this product are not listed on or exempt

from the Inventory.

Vietnam National Chemical Inventory: One or more components in this

product are not listed on or exempt

from the Inventory.

EINECS, ELINCS or NLP: One or more components in this

product are not listed on or exempt

from the Inventory.

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

**Revision Date:** 02/03/2023

Version #: 1.0

Further Information: No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.