# SDS

# SAFETY DATA SHEET

# Oakwood Products, Inc 730 Columbia HWY N Estill, SC 29918

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Phone Numbers:

Product Information 803-739-8800 Transportation Emergency 800-451-8346 Outside the USA 760-602-8700

#### **MATERIAL IDENTIFICATION**

NAME: Cyclohexane-1,3-diyldimethanamine

CAS#: [2579-20-6] CAT#: 242584 For R&D use only.

#### HAZARDS IDENTIFICATION

#### **GHS Classification**

Acute toxicity, oral (Category 4)
Acute toxicity, dermal (Category 4)
Skin corrosion/irritation (Category 1B)
Serious eye damage/eye irritation (Category 1)

# GHS Label elements, including precautionary statements

**Pictograms** 



Signal Word Danger

Hazard Statement(s)

H302 Harmful if swallowed

H312 Harmful in contact with skin

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

Precautionary Statement(s)

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

P301 + P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you

feel unwell.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position

comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

#### **COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms: 1,3-Bis(aminomethyl)cyclohexane

Formula : C8H18N2 Molecular Weight : 142.25 g/mol

CAS	Description	Concentration
2579-20-6	Cyclohexane-1,3-diyldimethanamine	95+%

#### **FIRST AID MEASURES**

#### In case of eye contact

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

#### In case of skin contact

Wash thoroughly with soap and plenty of water. Seek medical attention.

#### If inhaled

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

#### If swallowed

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

# **FIRE-FIGHTING MEASURES**

#### Suitable extinguishing media

Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

# Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### Unusual fire and explosion hazards/decomposition of product

emits toxic fumes under fire conditions.

#### **ACCIDENTAL RELEASE MEASURES**

# Personal precautions

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

#### **Environmental precautions**

Prevent further leakage if safe to do so.

# Methods and materials for containment and clean up

Absorb spills on sand or vermiculite and place in closed container for disposal.

#### **HANDLING AND STORAGE**

#### Precautions for safe handling

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.

# Precautions for safe storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

Air sensitive

#### **EXPOSURE CONTROL/PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

# Personal protective equipment

# Eye/face protection

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

#### Hand/skin protection

Avoid all direct contact with product.

Wear chemical-resistant gloves.

Wear protective clothing and boots.

After contact with skin, wash immediately.

#### Respiratory protection

Odour

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

no data available

# PHYSICAL AND CHEMICAL PROPERTIES

Appearance Liquid

Odour Threshold no data available Melting point/Freezing Point no data available **Boiling Point** no data available Flash Point 116°C-closed cup **Evaporation Rate** no data available Flammability (solid, gas) no data available Upper/Lower Flammability or Explosive limits no data available Vapour pressure no data available

Relative Density 0.945

Solubility(ies) 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

Refractive Index 1.493

#### STABILITY AND REACTIVITY

# **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

no data available

#### Conditions to avoid

Air.

#### Incompatible materials

Strong oxidizing agents, strong acids, acid chlorides, and acid anhydrides.

# **Hazardous decomposition products**

May evolve carbon monoxide, carbon dioxide, and nitrogen oxides.

#### TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

#### Oral LD50

Rat - female - > 300 - 2,000 mg/kg

# Other information on acute toxicity

Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 60 mg/kg - Lowest observed adverse effect level - 300 mg/kg

#### Skin corrosion/irritation

Rabbit - Causes severe burns - 3min

# Serious eye damage/eye irritation

Causes serious eye damage

# Respiratory or skin sensitization

Maximisation Test - guinea pig

Result: Does not cause skin sensitisation.

# Germ cell mutagenicity

Ames test S. typhimurium Result: negative

Mutagenicity (micronucleus test)

mouse - male and female

Result: negative

# Carcinogenicity

no data available

# Reproductive toxicity

no data available

#### STOT-single exposure

no data available

# STOT-repeated exposure

no data available

# **Aspiration hazard**

no data available

#### **Exposure Routes**

Causes burns.

May have harmful effects if inhaled or swallowed.

# Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Symptoms include spasm, inflammation and edema of the larynx,inflammation of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea

#### **Additional Information**

RTECS: GU7000000

To the best of our knowledge, the health hazards of this material have not been fully investigated.

#### **ECOLOGICAL INFORMATION**

#### **Toxicity**

Toxicity to fish:

semi-static test LC50 - Leuciscus idus (Golden orfe) - 130 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:

static test EC50 - Daphnia magna (Water flea) - 33.1 mg/l - 48 h

Toxicity to algae:

static test EC50 - Pseudokirchneriella subcapitata (green algae) - 56.7 mg/l -

72 h

Toxicity to bacteria:

Growth inhibition EC50 - Sludge Treatment - > 1,000 mg/l - 3 h

# Persistence and degradability

no data available

# Bioaccumulative potential

no data available

# Mobility in soil

no data available

#### PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

#### **DISPOSAL CONSIDERATIONS**

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

#### TRANSPORT INFORMATION

DOT

Amines, liquid, corrosive, n.o.s.

8

UN2735 I

#### **IMDG**

Amines, liquid, corrosive, n.o.s.

8

UN2735 I

EMS-No: F-A, S-B Marine Pollutant: No

#### IATA

Amines, liquid, corrosive, n.o.s.

8

UN2735 I

# **REGULATORY INFORMATION**

#### **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: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

# **New Jersey Right to Know Components**

This product may contain a chemical on the New Jersey Right to Know Components List.

CAS

Cyclohexane-1,3-diyldimethanamine

2579-20-6

# California Prop. 65 Components

This product may contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

# OTHER INFORMATION

Version: 1.2

Revision Date: 7/21/2015

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.