

MATERIAL SAFETY DATA SHEET

(MSDS)

Phenyl ether

Section 1 - Chemical Product and Company Identification

MSDS Name: Phenyl ether

Catalog Numbers: 13060-0000, 13060-0010, 13060-1000, 13060-5000, 22050-1000

Synonyms: Diphenyl ether; Diphenyl oxide

Company Identification: Shanghai Sunivo Supply Chain Management Co., Ltd.

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Section 2 - Composition, Information on Ingredients

CAS# Chemical Name: % EINECS#

101-84-8 Phenyl ether 99% 202-981-2

Hazard Symbols: Xi N

Risk Phrases: 36/37/38 51/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Wash mouth out with water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Cover with sand, dry lime

or soda ash and place in a closed container for disposal. Provide ventilation.

Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 101-84-8: United Kingdom, WEL - TWA: 1 ppm TWA (vapor); 7.1 mg/m³ TWA (vapor) United Kingdom, WEL - STEL: 3 ppm STEL (vapor); 21.3 mg/m³ STEL (vapor)

United States OSHA: 1 ppm TWA (vapor); 7 mg/m³ TWA (vapor)

Belgium - TWA: 1 ppm VLE (vapor); 7 mg/m³ VLE (vapor) Belgium - STEL: 2 ppm VLE (vapor); 14 mg/m³ VLE (vapor)

France - VME: 1 ppm VME; 7 mg/m³ VME

Germany: 1 ppm TWA (steam); 7.1 mg/m³ TWA (steam)

Malaysia: 1 ppm TWA; 7 mg/m³ TWA

Russia: 5 mg/m³ TWA (vapour)

Spain: 1 ppm VLA-ED (vapor); 7.1 mg/m³ VLA-ED (vapor) Spain: 2 ppm VLA-EC (vapor); 14.2 mg/m³ VLA-EC (vapor)

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: after melting, clear slightly yellow - after melting, clear colorless

Odor: geranium odor - unpleasant odor

pH: Not available

Vapor Pressure: 0.02 mmHg @ 25 deg C

Viscosity: 3.4909 mPa/s @ 28 deg C

Boiling Point: 259 deg C @ 760 mmHg (498.20°F)

Freezing/Melting Point: 26 - 30 deg C

Autoignition Temperature: 618 deg C (1,144.40 deg F)

Flash Point: 115 deg C (239.00 deg F)

Explosion Limits: Lower: 0.8 Vol %

Explosion Limits: Upper: 1.5 Vol %

Decomposition Temperature: Not available

Solubility in water: Insoluble

Specific Gravity/Density: 1.073

Molecular Formula: C₁₂H₁₀O

Molecular Weight: 170.21

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. May form explosive peroxides on prolonged storage.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials Strong oxidizing agents, chlorosulfonic acid.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide.

Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 101-84-8: KN8970000

LD50/LC50: RTECS:

CAS# 101-84-8: Draize test, rabbit, eye: 10 ppm/140H;

Draize test, rabbit, skin: 500 mg/24H Mild;

Oral, rat: LD50 = 2450 mg/kg;

Oral, rat: LD50 = 4000 mg/kg;

Skin, rabbit: LD50 = >7940 mg/kg;

Other:

Carcinogenicity: Phenyl ether - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

Ecotoxicity: Fish: Pimephals prome: 4.0 mg/l; 96H: LC50

Other: Avoid entering into waters or underground water. Biodegradable.

logPOW: 4.2

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA IMO RID/ADR

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class: 9 9 9

UN Number: 3077 3077 3077

Packing Group: III III III

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Xi N

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

S 57 Use appropriate containment to avoid environmental contamination.

S 60 This material and its container must be disposed of as hazardous waste.

WGK (Water Danger/Protection)

CAS# 101-84-8: 2

Canada

CAS# 101-84-8 is listed on Canada's DSL List

US Federal

TSCA

CAS# 101-84-8 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 7/16/1996

Revision #3 Date 12/20/2007

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