

DSL Chemicals (Shanghai) Co., Ltd.

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MATERIAL SAFETY DATA SHEET

Version 2.0

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Section 1 - Product and Company Information

Product Name: Phenothiazine Product Number: C001962

Company: DSL Chemicals (Shanghai) Co., Ltd.

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Section 2 - Composition, Information on Ingredients

Substance Name CAS # Phenothiazine 92-84-2

Formula: C₁₂H₉NS

Molecular Weight: 199.27g/mol

Section 3 - Hazards Identification

Emergency Overview OSHA Hazards

Target Organ Effect, Skin sensitiser

Target Organs Liver, Blood, Kidney HMIS Classification Health hazard:

Health hazard: 2 Chronic Health Hazard: *

Flammability: 0
Physical hazards: 0
NFPA Rating
Health hazard: 2
Fire: 0

Potential Health Effects

Reactivity Hazard:

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

0

Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

Section 4 - First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

Section 5 - Fire Fighting Measures

Flammable properties

Flash point no data available Ignition temperature 470 °C (878 °F) -

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 - Accidental Release Measures

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

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

Section 8 - Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 - Physical and Chemical Properties

Appearance

Form crystalline powder

Colour light yellow

Safety data

pH 7 at 10 g/l at 20 °C (68 °F)

Melting point 183°C min

Boiling point 371 °C (700 °F) - lit. Flash point no data available Ignition temperature 470 °C (878 °F) - Lower explosion limit no data available Upper explosion limit no data available

Vapour pressure 53 hPa (40 mmHg) at 290 °C (554 °F) Water solubility 0.00051 g/l at 20 °C (68 °F) - insoluble

Partition coefficient: log Pow: 4.15

n-octanol/water

Section 10 - Stability and Reactivity

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

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

Thermal decomposition > 250 °C (> 482 °F)

Section 11 - Toxicological Information

Acute toxicity

LD50 Oral - rat - > 2,000 mg/kg

Irritation and corrosion

Skin - rabbit - No skin irritation - OECD Test Guideline 404 Eyes - rabbit - No eye irritation - OECD Test Guideline 405

Sensitisation

May cause allergic skin reaction.

Causes photosensitivity. Exposure to light can result in allergic reactions resulting in dermatologic lesions, which can vary from sunburn like responses to edematous, vesiculated lesions, or bullae

Chronic exposure

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.

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

identified as a carcinogen or potential carcinogen by ACGIH.

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

identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity - rat - Oral

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Signs and Symptoms of Exposure anemia, Discoloration of the skin.

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.
Target Organs Liver, Blood, Kidney.

Additional Information RTECS: SN5075000

Section 12 - Ecological Information

Elimination information (persistence and degradability)

Biodegradability aerobic

Bioaccumulation Cyprinus carpio (Carp) - 56 d at 25 °C

Bioconcentration factor (BCF): 127 - 660

Ecotoxicity effects

Toxicity to fish LC0 - Brachydanio rerio (zebra fish) - > 0.02 mg/l - 96 h

Method: OECD Test Guideline 203

NOEC - Brachydanio rerio (zebra fish) - > 0.02 mg/l - 96 h

Method: OECD Test Guideline 203

Further information on ecology Dissolved organic 8 mg/g

carbon (DOC)

Chemical Oxygen 2,337 mg/g

Demand (COD)

Section 13 - Disposal Considerations

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15 - Regulatory Information

OSHA Hazards

Target Organ Effect, Skin sensitiser

DSL Status

All components of this product are on the Canadian DSL list.

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: 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

Phenothiazine

CAS-No.

92-84-2

Revision Date

1994-04-01

Pennsylvania Right To Know Components

Phenothiazine

CAS-No.

92-84-2

Revision Date

1994-04-01

New Jersey Right To Know Components

Phenothiazine

CAS-No.

92-84-2

Revision Date

1994-04-01

California Prop. 65 Components

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

Section 16 - Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.