According to Globally Harmonized System Of Classification And Labelling Of Chemicals (GHS)

Version: 2.0/ENRevision date: 05/01/2022Product name: HARTCURE 30Printing date: 05/01/2022

SECTION 1: Identification of the substance/mixture and of the supplier

GHS product identifier

Product name: HARTCURE 30

Synonym: DMTDA

Chemical name: Di-methylthio diamino tholuene

Recommended use of the chemical and restrictions on use

Relevant identified uses: Curing agents

Uses advised against: No information available.

Details of the supplier of the product

Company name: Johnson Fine Chemical Co., Ltd.

Address: No. 14, 33 Rd., Taichung Industrial Park, Taichung, Taiwan (Zip code: 407021)

E-mail: jfchem@johnson-fine.com

Telephone: +886-4-23502588 Fax: +886-4-23598551

Emergency telephone number

+886-4-23502588

SECTION 2: Hazards identification

GHS classification of the chemical

Acute oral toxicity, Category 4; H302 Skin sensitisation, Category 1; H317

Hazardous to the aquatic environment, Acute category 1; H400 Hazardous to the aquatic environment, Chronic category 1; H410

GHS label elements

Hazard pictogram(s):





Signal word: Warning

Hazard statements: H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention: P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves.

P273: Avoid release to the environment.

Response: P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P301 + P312: IF SWALLOWED: Call a POISON Center or doctor/physician if you feel

unwell.

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Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Ingredients information

Substance name: 6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine Synonyms: 2-methyl-4,6-bis(methylsulfanyl)benzene-1,3-diamine;

1,3-Benzenediamine, 2(or 4)-methyl-4,6(or 2,6)-bis(methylthio)-; A mixture of 3,5-dimethylthio-2,4-toluenediamine and 3,5-dimethylthio-2,6-toluenediamine

CAS No.: 106264-79-3 EC No.: 403-240-8 EU Index No.: 612-113-00-8

Purity: 100% Molecular formula: $C_9H_{14}N_2S_2$

Components: CAS# 102093-68-5: 1,3-Benzenediamine, 4-methyl-2,6-bis-(methylthio)-

CAS# 104983-85-9: 1,3-Benzenediamine, 2-methyl-4,6-bis-(methylthio)-

SECTION 4: First aid measures

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a

physician if you feel unwell.

Skin contact: Immediately flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes. Wash contaminated clothing before reuse.

Eye contact: Immediately flush eyes with plenty of water. Call a physician if irritation persists.

Ingestion: Induce vomiting immediately by giving two glasses of water and sticking fingers down to

his throat. Never give anything through mouth to an unconscious person. Get medical

attention.

Most important symptoms/effects, acute and delayed

Swallowed: May cause irritation with effects including: nausea, vomiting.

Eye contact: May cause mild irritation with effects including: tearing, pain, stinging and blurred vision. Skin contact: May cause mild irritation with effects including: redness, itchiness, and possible dermatitis.

May cause sensitization by skin contact.

Inhaled: May cause irritation with effects including: dizziness, headache and loss of co-ordination.

Immediate medical attention and special treatment

No information available.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Chemical dry powder, water spray (fog), foam or carbon dioxide.

Unsuitable extinguishing media: No information available.

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Special hazards arising from the chemical

Thermal decomposition or combustion may produce oxides of carbon, nitrogen and sulfur.

Special protective actions for fire-fighters

Wear appropriate protective clothing with self-contained breathing apparatus. Avoid breathing smoke and vapor. Move containers away from fire areas if it can be done without risk. If impossible to remove containers from fire zone, cool them with water spray.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment. Prevention of skin and eye contact. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Environmental precautions

Used general or local exhaust ventilation. Provide safety showers and eyewashes. Prevent form entering into drains, ditches or rivers. Obey Federal, State or local regulations for health and environment protection to discharge treated water to sea, river or lake etc.

Methods and material for containment and cleaning up

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Take up small spills with chemical dry absorbent. May require excavation of contaminated soil.

Reference to other sections

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Use only in a well ventilated areas, or chemical fume hood. Do not eat, drink or smoke in the workplace. Refer to Section 8 for personal protective equipment.

Conditions for safe storage

Store in well-ventilated, cool, dry area. Store away from sources of heat or ignition. Purge with nitrogen and close container when not in use.

SECTION 8 : Exposure controls/personal protection

Control parameters

Occupational exposure limit values: No limit values established. Biological limit values: No limit values established.

Appropriate engineering controls

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Used general and/or local exhaust ventilation. Provide safety showers and eyewashes.

Individual protection measures - personal protective equipment

Respiratory protection: Filter respirator for dust.

Hand protection: Protective gloves, such as those made from PVC or natural rubber.

Eye/face protection: Chemical goggles or safety glasses.

Skin protection: Protective clothing, such as overalls or lab coat.

Environmental exposure controls

Do not discharge into waterway or sewer systems unless permission has been obtained by the local authority and suitable dilution has been established. Contaminated empty containers must be disposed of as chemical waste. Observe all Federal, State and local laws concerning health and pollution.

SECTION 9: Physical and chemical properties

Appearance:Clear liquidColour:Clear yellowishOdour:Sulfur odor

pH: No data available.Melting point: No data available.

Boiling point: Decomposes at 175°C/455°F

Density: ~1.2 g/ml (10b/gal)

Vapour pressure: 0.89 mmHg at 146°C/379°F

Partition coefficient: No data available.

Solubility(ies) in water: < 1.0%

Flash point: 176°C /457°F (PMCC) **Flammability:** Non flammable.

Auto-ignition temperature: No data available.

Explosive properties: Not predicted to be explosive.

Oxidising properties: Not predicted to have oxidising properties.

Viscosity, centistokes: 690 at 20°C/68°F

SECTION 10: Stability and reactivity

Reactivity:

Stable under recommended storage and handling conditions (see section 7, handling and storage).

Chemical stability:

Stable under normal conditions.

Possibility of hazardous reactions:

None hazardous reactions known.

Conditions to avoid:

High heat and exposure to air.

Incompatible materials:

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Strong acids and oxidizers.

Hazardous decomposition products:

Oxides of carbon, nitrogen and sulfur.

SECTION 11: Toxicological information

Acute toxicity:

Acute oral toxicity: $LD_{50} = 1515 \text{ mg/kg (rat)};$ Acute inhalation toxicity: No data available.

Acute dermal toxicity: $LD_{50} > 2000 \text{ mg/kg (rabbit)};$

Skin corrosion/irritation:

Skin contact: May cause mild irritation with effects including: redness, itchiness, and possible dermatitis.

Serious eye damage/irritation:

Eye contact: May cause mild irritation with effects including: tearing, pain, stinging and blurred vision.

Respiratory or skin sensitization:

May cause an allergic skin reaction.

CMR effects (Carcinogenicity, germ cell mutagenicity and reproductive toxicity):

The substance is not considered to be CMR substance.

STOT-single exposure/repeated exposure:

No information available.

Aspiration hazard:

No information available.

SECTION 12: Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Other adverse effects

Environmentally hazardous substance. This product is very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

Disposal methods

Mix the material with combustible solvent and burn in a chemical incinerator equipped with an afterburner

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and scrubber. Do not discharge into waterway or sewer systems unless permission has been obtained by the local authority and suitable dilution has been established. Contaminated empty containers must be disposed of as chemical waste. Observe all Federal, State and local laws concerning health and pollution.

SECTION 14: Transport information

Land transport

UN-No.: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine)

Class: 9
Packing group: III
Hazard label: 9

Sea transport

UN-No.: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine)

Class: 9
Packing group: III

EmS No.: F-A, S-F Marine pollutant: Yes

Air transport

UN-No.: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine)

Class: 9
Packing group: III

Additional information

Mark(s) for transport:





SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

EU-EINECS/ELINCS: This substance (106264-79-3) is listed in the ELINCS inventory.

USA - TSCA:

Canada - DSL/NDSL:

Australia - AICS:

Korea - ECL:

Japan - ENCS:

This substance (106264-79-3) is listed in the DSL inventory.

This substance (106264-79-3) is listed in the inventory.

This substance (106264-79-3) is listed in the inventory.

This substance (106264-79-3) is listed in the inventory.

This substance (106264-79-3) is not listed in the inventory.

This substance (106264-79-3) is listed in the inventory.

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SECTION 16: Other information

Revision Information

Date of the previous revision: Not applicable. Date of this revision: 28/04/2018

Revision summary: The secondnew SDS

Abbreviations and acronyms

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

TSCA: Toxic Substances Control Act, The American chemical inventory.

DSL: Domestic Substances List, The Canadian chemical inventory.

NDSL: Non-Domestic Substances List, The Canadian chemical inventory.

AICS: The Australian Inventory of Chemical Substances.

ECL: Existing Chemicals List, the Korean chemical inventory.

ENCS: The Japanese list of Existing and New Chemical Substances.

IECSC: Inventory of existing chemical substances in China.

Key literature references and sources for data

ESIS Dataset: European chemical Substances Information System.

Declare to reader

The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

------ End of the SDS ------