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SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: 2,3-Dicyanohydroquinone

Product code: D1610

TCI (Shanghai) DEVELOPMENT CO., LTD. Company:

Address: No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China

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Revision number:

2. HAZARDS IDENTIFICATION

Classification of the GHS **PHYSICAL HAZARDS**

Not classified **HEALTH HAZARDS**

Acute toxicity (Oral) Category 3 **Acute toxicity (Dermal)** Category 3 Acute toxicity (Inhalation) Category 3 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Not classified **ENVIRONMENTAL HAZARDS**

GHS label elements

Pictograms or hazard symbols



Signal word

Hazard statement Toxic by inhalation, in contact with skin and if swallowed

> Causes skin irritation Causes serious eye irritation

Precautionary statements

[Prevention] Avoid breathing.

Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Wear protective gloves and eye/face protection.

[Response] IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing, Call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention. IF ON SKIN: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Remove/Take off immediately all contaminated clothing.

Wash contaminated clothing before reuse.

Call a POISON CENTER or doctor/physician if you feel unwell.

2. HAZARDS IDENTIFICATION

[Storage] Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

[Disposal] Dispose of contents/container through a waste management company authorized by

the local government

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Component(s): 2,3-Dicyanohydroquinone

Percent: >97.0%(GC)(T) **CAS Number:** 4733-50-0

Synonyms: 3,6-Dihydroxyphthalonitrile

Chemical Formula: $C_8H_4N_2O_2$

4. FIRST AID MEASURES

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

Call a POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of

soap and water. Call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-

tight goggles.

5. FIRE-FIGHTING MEASURES

Specific hazards:

Specific methods:

Suitable extinguishing

media:

Dry chemical, foam, water spray, carbon dioxide.

Take care as it may decompose upon combustion or in high temperatures to

generate poisonous fume.

Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable

containers if safe to do so.

Special protective

When extinguishing fire, be sure to wear personal protective equipment.

equipment for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and

Use extra personal protective equipment (P3 filter respirator for toxic particles). Keep people away from and upwind of spill/leak. Entry to non-involved personnel should

emergency procedures: be controlled around the leakage area by roping off, etc.

Methods and materials for

Environmental precautions: Prevent product from entering drains.

containment and cleaning

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with

appropriate laws and regulations.

7. HANDLING AND STORAGE

Handling

up:

Technical measures: Handling is performed in a well ventilated place. Wear suitable protective equipment.

Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be

generated.

Advice on safe handling: Avoid contact with skin, eyes and clothing.

Storage

Storage conditions: Keep container tightly closed. Store in a cool, dark and well-ventilated place.

7. HANDLING AND STORAGE

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator,

etc. Use respirators approved under appropriate government standards and follow

local and national regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: crystal - powder

Color: Pale yellow - Greyish reddish yellow

Odor:

pH:

No data available

No data available

Melting point/freezing point: No data available

Boiling Point/Range:

No data available

Flash Point:

No data available

Explosive limits

Lower:No data availableUpper:No data availableDensity:No data available

Solubility: Soluble in : Alkali Ethanol Acetone

Slightly soluble in: Water Methanol Benzene Chloroform

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.

Reactivity: No special reactivity has been reported.

Incompartible materials: oxidizing agents, strong acids, strong bases, reducing agents **Hazardous Decomposition** Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

Products:

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Skin corrosion/irritation:
No data available
No data available
No data available

damage/irritation:

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available
NTP = No data available
Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish:
Crustacea:
Algae:
No data available
No data available
No data available
Persistence / degradability:
No data available

12. ECOLOGICAL INFORMATION

Bioaccumulative No data available

potential(BCF): Mobillity in soil

Iog Pow:No data availableSoil adsorption (Koc):No data availableHenry's LawNo data available

constant(PaM³/mol):

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class: 6.1: Toxic substance.

UN-No: 2811

Proper shipping name: Toxic solid, organic, n.o.s.

Packing group:

15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

The list of a dangerous chemical(2002)/CN-No.: 61643

16. OTHER INFORMATION

The reference company name of written contents

Company: TCI (Shanghai) DEVELOPMENT CO., LTD.

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