Tetrakis(2,4-pentanedionato)titanium(IV) (ca. 63% in Isopropyl Alcohol)

Revision number: 1

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SAFETY DATA SHEET

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

Product name: Tetrakis(2,4-pentanedionato)titanium(IV) (ca. 63% in Isopropyl Alcohol)

Product code: T2610

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

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

Category 2

Responsible Department: Sales Department

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Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS PHYSICAL HAZARDS Flammable liquids HEALTH HAZARDS

Acute toxicity (Oral)Category 5Acute toxicity (Dermal)Category 5Skin corrosion/irritationCategory 2Serious eye damage/eye irritationCategory 2AReproductive toxicityCategory 2

Specific target organ toxicity

- Single exposure [Category 1] Specific target organ toxicity

- Single exposure [Category 3]

Specific target organ toxicity

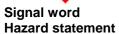
- Repeated exposure [Category 2]

- Repeated exposure [Cate Aspiration hazard

ENVIRONMENTAL HAZARDS GHS label elements

Pictograms or hazard symbols









Danger

Category 2

Not classified

Highly flammable liquid and vapour

kidney, total organs, central nervous system

Respiratory tract irritation, Narcotic effects

liver, spleen, blood vessels

May be harmful in contact with skin and if swallowed

Causes skin irritation

Causes serious eye irritation

Suspected of damaging fertility or the unborn child

Causes damage to organs: kidney organs central nervous

system

May cause damage to organs through prolonged or

exposure: liver spleen blood vessels

May be harmful if swallowed and enters airways

Precautionary statements

2. HAZARDS IDENTIFICATION

[Prevention] Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary

measures against ignition by the static discharge and the spark.

Do not breathe.

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/eye protection/face protection.

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

breathing.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT

induce vomiting.

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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

IF exposed or concerned: Get medical advice/attention.

[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: Mixture

Component(s): Tetrakis(2,4-pentanedionato)titanium(IV) (ca. 63% in Isopropyl Alcohol)

Percent: ...

CAS Number: 17501-79-0

Synonyms: Acetylacetone Titanium(IV) Salt (ca. 63% in Isopropyl Alcohol), Titanium(IV)

Acetylacetonate (ca. 63% in Isopropyl Alcohol)

Chemical Formula: $C_{20}H_{28}O_8Ti$

4. FIRST AID MEASURES

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

Get medical advice/attention.

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

soap and water. Get medical advice/attention.

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

and easy to do. Get medical advice/attention.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT

induce vomiting.

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

tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing

Dry chemical, foam, water in large amounts, carbon dioxide.

media:

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

generate poisonous fume.

5. FIRE-FIGHTING MEASURES

Specific methods: 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: Keep containers cool by

spraying with water. Eliminate all ignition sources if safe to do so.

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

Special protective equipment for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use extra personal protective equipment and people away from and upwind of spill/emergency procedures:

Environmental precautions: Prevent product from entering drains.

Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Methods and materials for containment and cleaning

Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with

up:

appropriate laws and regulations.

Prevention of secondary hazards:

Remove all sources of ignition. Fire-extinguishing devices should be prepared in

case of a fire. Use spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

Handling

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

Prevent generation of vapor or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after

handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol

will be generated.

Advice on safe handling: Avoid all contact!

Storage

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

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.

Exposure limits: (IPA)

ACGIH TLV(TWA):200 ppm ACGIH TLV(STEL):400 ppm OSHA PEL(TWA):400 ppm

Personal protective equipment

Respiratory protection: Half or full facepiece 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): Liquid clear

Color: Yellow - Reddish yellow
Odor: No data available
pH: No data available
Melting point/freezing point: No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

(IPA) -90°C

Boiling Point/Range: No data available

(IPA) 82°C

Flash Point: No data available

(IPA) 15°C

Explosive limits

Lower: No data available
Upper: No data available
Density: No data available
Solubility: No data available
log Pow = (IPA) 0.05

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.

Reactivity: No special reactivity has been reported.

Incompartible materials: oxidizing agents

Hazardous Decomposition Carbon monoxide, Carbon dioxide, Titanium oxides

Products:

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available

(IPA)

orl-hmn LDLo:3570 mg/kg orl-rat LD50:5000 mg/kg skn-rbt LD50:12800 mg/kg ihl-rat LC50:72600 mg/m³

Skin corrosion/irritation: No data available

(IPA)

skn-rbt 500 mg MLD No data available

Serious eye damage/irritation:

(IPA)

eye-rbt 100 mg/24H MOD

Germ cell mutagenicity: No data available

(IPA)

cyt-rat-ihl 1030 ug/m³/16W-l

Carcinogenicity:

IARC = No data available
NTP = No data available

(IPA) IARC = 3

Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish:
Crustacea:
Algae:
No data available

potential(BCF): Mobillity in soil

log 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 burn in a chemical incinerator equipped with an afterburner and scrubber system but exert extra care in igniting as this material is highly flammable. Observe all federal, state and local regulations when disposing of the substance

14. TRANSPORT INFORMATION

Hazards Class: 3: Flammable liquid.

UN-No: 1219

Proper shipping name: Isopropyl alcohol solution

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.

16. OTHER INFORMATION

The reference company name of written contents

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

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

Department: R&D (Information Management) Department

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