



SAFETY DATA SHEET

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

Product name: Bis(2,4-pentanedionato)bis(2-propanolato)titanium(IV) (75% in Isopropyl Alcohol)
Product code: B3395
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Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS

PHYSICAL HAZARDS

Flammable liquids

Category 2

HEALTH HAZARDS

Acute toxicity (Oral)

Category 5

Acute toxicity (Dermal)

Category 5

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2A

Reproductive toxicity

Category 2

Specific target organ toxicity

kidney, total organs, central nervous system

- Single exposure [Category 1]

Specific target organ toxicity

Respiratory tract irritation, Narcotic effects

- Single exposure [Category 3]

Specific target organ toxicity

liver, spleen, blood vessels

- Repeated exposure [Category 2]

Aspiration hazard

Category 2

ENVIRONMENTAL HAZARDS

Not classified

GHS label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statement

Highly flammable liquid and vapour
 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.

[Response]

Wear protective gloves/eye protection/face protection.
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): Bis(2,4-pentanedionato)bis(2-propanolato)titanium(IV) (75% in Isopropyl Alcohol)
Percent:
CAS Number: 17927-72-9
Synonyms: Titanium(IV) Diisopropoxide Bis(acetylacetonate) (75% in Isopropyl Alcohol) , Diisopropoxytitanium(IV) Bis(acetylacetonate) (75% in Isopropyl Alcohol)
Chemical Formula: C₁₆H₂₈O₆Ti

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 media: Dry chemical, foam, water spray, carbon dioxide.
Extinguishing media not to be used: Solid streams of water

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.

Special protective equipment for firefighters:

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

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.

Environmental precautions:

Prevent product from entering drains.

Methods and materials for containment and cleaning up:

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 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 under inert gas.

Protect from moisture.

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

Form:

clear

Color:

Yellow - Reddish yellow

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor:	Alcoholic
pH:	No data available
Melting point/freezing point:	No data available (IPA) -90°C
Boiling Point/Range:	No data available (IPA) 82°C
Flash Point:	18°C
Explosive limits	
Lower:	No data available
Upper:	No data available
Density:	1.01
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.
Conditions to avoid:	Moisture-sensitive
Incompatible materials:	oxidizing agents
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	No data available (IPA) ori-hmn LDLo:3570 mg/kg ori-rat LD50:5000 mg/kg skn-rbt LD50:12800 mg/kg ihl-rat LC50:72600 mg/m ³
Skin corrosion/irritation:	No data available (IPA) skn-rbt 500 mg MLD
Serious eye damage/irritation:	No data available (IPA) eye-rbt 100 mg/24H MOD
Germ cell mutagenicity:	No data available (IPA) cyt-rat-ihl 1030 ug/m ³ /16W-l
Carcinogenicity:	
IARC =	No data available
NTP =	No data available (IPA) IARC = 3
Reproductive toxicity:	No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
Persistence / degradability:	No data available
Bioaccumulative potential(BCF):	No data available
Mobility in soil	

12. ECOLOGICAL INFORMATION

log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law constant(PaM³/mol): No data available

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: II

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

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