福建沃尔法化学科技有限公司
Fujian Wolfa Chemical Technology Co., Ltd

DESIGN REPORT OF SAFETY DATA SHEET

Revision Date: Dec. 18, 2025

Name of the sample	TETRAKIS(DIMETHYLAMINO)TITANIUM(IV)
Applicant	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier	Fujian Wolfa Chemical Technology Co., Ltd.
Composition of the sample	TETRAKIS(DIMETHYLAMINO)TITANIUM(IV): 99%
Warranty of Design	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) Eleventh revised edition
Design Result of SDS please see next page.	

Notes:This SDS is valid before the implementation of the Twelfth revised edition GHS.

Section 1 Product and Company Identification

> Product Identifier

Product Name	TETRAKIS(DIMETHYLAMINO)TITANIUM(IV)
Synonyms	——
CAS No.	3275-24-9
EC No.	221-904-3
Molecular Formula	$C_8H_{24}N_4Ti$

> Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses	Please consult manufacturer.
Uses Advised Against	Please consult manufacturer.

> Details of the Supplier of the Safety Data Sheet

Applicant Name	Fujian Wolfa Chemical Technology Co., Ltd.
Application Address	Room 2620, Building 18, Xingguang Plaza, No.970 Anji South Road, Fengze District, Quanzhou City, Fujian Province
Applicant Post Code	362000
Applicant Telephone	+86 18050950397
Applicant Fax	——
Applicant E-mail	——
Supplier Name	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier Address	Room 2620, Building 18, Xingguang Plaza, No.970 Anji South Road, Fengze District, Quanzhou City, Fujian Province
Supplier Post Code	362000
Supplier Telephone	+86 18050950397
Supplier Fax	——
Supplier E-mail	——

> Emergency Phone Number

Emergency Phone Number	+86 18050950397

Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the Eleventh revised edition):

> GHS Classification

Flammable Liquids	Category 2
Substances and mixtures which in contact with water emit flammable gases	Category 1
Skin corrosion/irritation	Category 1

> GHS Label Elements

Pictogram



Signal Word Danger

> Hazard Statements

H225	Highly flammable liquid and vapour
H260	In contact with water releases flammable gases which may ignite spontaneously
H314	Causes severe skin burns and eye damage

> Precautionary Statements

Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231+P232	Handle under inert gas. Protect from moisture.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/…/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P304+P340+P310	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338+P310	IF IN EYES: Rinse cautiously with water for several minutes.Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use … for extinction.
P302+P335+P334	IF ON SKIN:Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

Storage

P402+P404	Store in a dry place. Store in a closed container.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal

P501	Dispose of contents/container to an appropriate treatment and disposal facility in accordancewith applicable laws and regulations, and product characteristics at time of disposal.

Section 3 Composition/Information on Ingredients

Component	CAS No.	EC No.	Concentration (weight percent, %)
TETRAKIS(DIMETHYLAMINO)TITANIUM(IV)	3275-24-9	221-904-3	99%

Section 4 First Aid Measures

> Description of First Aid Measures

General Advice	Show this safety data sheet to the doctor in attendance.Seek immediate medical advice.
Following Eye Contact	Rinse thoroughly with a large amount of water for at least 15 minutes, seek medical attention immediately. Remove the contact lenses.
Following Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
If Swallowed	Do not induce vomiting, and do not give anything by mouth to an unconscious person. Call a doctor or poison control center immediately.
If Inhalation	Move the person to an area with fresh air. If breathing stops, perform artificial respiration. If the substance has been ingested or inhaled, do not use mouth-to-mouth resuscitation; instead, use a pocket-sized respiratory mask with a one-way valve or other appropriate respiratory medical equipment. Seek immediate medical attention.
Protective Measures for First Responders	Ensure that medical personnel are aware of the product's hazardous characteristics and take appropriate protective measures to safeguard themselves and prevent the spread of contamination.

> Most Important Symptoms and Effects, both Acute and Delayed

All routes of exposure can cause burns. Inhaling high concentrations of vapor may lead to symptoms such as headache, dizziness, drowsiness, nausea, and vomiting. The product is a corrosive substance. Gastric lavage or vomiting is contraindicated. The possibility of gastric or esophageal perforation should be investigated. Ingestion can cause severe swelling, serious damage to delicate tissues, and poses a risk of perforation.

> Indication of Any Immediate Medical Attention and Special Treatment Needed

1 Provide targeted treatment based on the symptoms that appear.

2 Note that symptoms may be delayed.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable extinguishing media： CO_2, extinguishing powder

For safety reasons unsuitable extinguishing agents： Water

> Specific Hazards Arising from the chemical

1 Carbon oxides

2 Nitrogen oxides (NOx)

3 Titanium/titanium oxides

4 Combustible.

5 Pay attention to flashback.

6 Vapors are heavier than air and may spread along floors.

7 May not get in touch with: Water

8 Development of hazardous combustion gases or vapours possible in the event of fire.

9 Forms explosive mixtures with air at ambient temperatures.

> Special protective actions for fire-fighters

1 Personnel without personal respiratory protection devices must not enter the hazardous area.

2 Maintain a safe distance and wear appropriate protective clothing to avoid skin contact.

3 Move the container away from the hazardous area and cool it with water.

4 Use water spray to suppress gas/vapor/mist.

5 Prevent firefighting water from contaminating surface and groundwater systems.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

1 Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.Ensure adequate ventilation.

2 For personal protection see section 8

> Environmental Precautions

1 Do not let product enter drains. Risk of explosion.

> Methods and Materials for Containment and Cleaning Up

1 Cover drains. Collect, bind, and pump off spills.

2 Observe possible material restrictions (see sections 7 and 10).

3 Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area

Section 7 Handling and Storage

> Precautions for Handling

1 Keep the work environment dry. Avoid contact of the product with water.

2 Keep away from open flames, hot surfaces, and ignition sources. Take measures to prevent static discharge.

3 Immediately change contaminated clothing. Use skin protection lotion. Wash hands and face after using this substance. For preventive measures, please refer to Section 2.

4 Operate in a well-ventilated area.

5 Wear appropriate personal protective equipment.

6 Avoid contact with skin and eyes.

> Conditions for safe storage, including any incompatibilities

1 Keep the container tightly closed.

2 Store in a dry, cool, and well-ventilated area.

3 Keep away from heat sources, sparks, open flames, and hot surfaces.

4 Store away from incompatible materials and food containers.

5 Store under inert gas.

6 Water contact is strictly prohibited during storage.

Section 8 Exposure Controls/Personal Protection

> Control Parameters

Occupational Exposure Limit Values

Contains no substances with occupational exposure limit values

> Engineering Controls

1 Install a closed system or local exhaust ventilation system whenever possible.

2 Ensure that eyewash and shower facilities are available near the workplace.

3 Set up emergency evacuation routes and necessary hazard zones.

> Personal Protection Equipment

Eye protection	Please use eye protection equipment that has been tested and approved according to official standards such as NIOSH (USA) or EN 166 (EU). Use close-fitting protective goggles.
Hand protection	Wear chemical protective gloves (e.g., butyl rubber gloves). It is recommended to choose protective gloves that have been tested according to EU EN 374, US F739, or S/NZS 2161.1 standards.
Skin and Body protection	Wear flame-resistant, anti-static protective clothing and anti-static protective boots.
Respiratory protection	When the concentration exceeds the exposure limit, workers must use appropriate respirators. To protect the wearer, respiratory protective equipment must be properly fitted and should be used and maintained correctly.

Section 9 Physical and Chemical Properties

Appearance: Orange-yellow liquid

Odor: Slightly odorous

Odor Threshold: No information available

pH: No information available

Melting Point/Freezing Point (℃): No information available

Initial Boiling Point and Boiling Range (℃): No information available

Flash Point (℃): -30 (closed cup)

Evaporation Rate: No information available

Flammability: No information available

Upper/lower explosive limits[%(v/v)]: Upper limit: No information available; Lower limit: No information available

Vapor Pressure (KPa): No information available

Relative Vapour Density(Air=1): No information available

Relative Density(Water=1): 0.947(20℃)

Solubility: No information available

n-Octanol/Water Partition Coefficient: No information available

Auto-Ignition Temperature(℃): No information available

Decomposition Temperature (℃): No information available

Kinematic Viscosity (mm^2/s): No information available

Particle characteristics: No information available

Critical Temperature(℃): No information available

Section 10 Stability and Reactivity

Reactivity	No data available.
Chemical Stability	Reaction with water
Possibility of Hazardous Reactions	Violent reaction with water
Conditions to Avoid	Exposure to air, contact with moist air or water, flames, or heat sources
Incompatible Materials	Water, strong oxidizers.
Hazardous Decomposition Products	Nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2), metal oxides.

Section 11 Toxicological Information

> Acute Toxicity

No information available

> Skin Corrosion/Irritation

Causes skin burns

> Serious Eye Damage/Irritation

No information available

> Skin Sensitization

No information available

> Respiratory sensitization

No information available

> Germ cell mutagenicity

No information available

> Carcinogenicity

No information available

> Reproductive toxicity

No information available

> Specific target organ toxicity - single exposure

No information available

> Specific target organ toxicity - repeated exposure

No information available

> Inhalation hazard

No information available

> Additional information

This substance causes significant damage to mucous tissues and the upper respiratory tract, eyes, and skin. It can cause spasms, inflammation, sore throat, spasms, inflammation, bronchitis, pneumonia, pulmonary edema, a burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, and nausea.

Section 12 Ecological Information

> Acute aquatic toxicity

No information available

> Chronic aquatic toxicity

No information available

> Others

Persistence and Degradability	No information available.
Bioaccumulation or Bioaccumulation Potential	No information available.
Mobility in Soil	No information available.
PBT and vPvB Assessment Results	The PBT/vPvB assessment is unavailable due to the lack of chemical safety evaluation requirements or implementation.

Section 13 Disposal Considerations

> Waste treatment methods

Waste Chemicals	Refer to national and local regulations before disposal.
Contaminated Packaging	Dispose of in accordance with local and national regulations. Before discarding used containers, thoroughly empty the contents.
Disposal Considerations	Please refer to the Waste Chemicals and Contaminated Packaging sections.

Section 14 Transport Information

Transporting Label



Marine Pollutants	No
UN Dangerous Goods Number (UN No.)	3399
UN Proper Shipping Name	ORGANOMETALLIC SUBSTANCE，LIQUID，WATER- REACTIVE，FLAMMABLE
Primary Transport Hazard Class	4.3
Secondary Transport Hazard Class	3
Packing Group	I

Section15 Regulatory Information

> International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECL	AIIC	ENCS
Tetrakis(dimethylamino) titanium	√	√	×	×	×	×	√	×	×

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】	Toxic Substances Control Act
【DSL】	Domestic Substances List
【IECSC】	Chinese Chemical Inventory of Existing Chemical Substances
【NZIoC】	New Zealand Inventory of Chemicals
【PICCS】	Philippines Inventory of Chemicals and Chemical Substances
【KECL】	Korean Existing Chemicals List
【AICS】	Australian Inventory of Chemical Substances
【ENCS】	Existing Chemicals Substances Inventory

Note

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

Section 16 Additional Information

Preparation Date	Dec.1, 2022
Revision Date	Jun.18, 2025
Revision Reason	SDS Update Section

Disclaimer

The information provided in this Safety Data Sheet is correct based on the latest knowledge, information and concepts available to us. The information provided is intended only as a guide for safe operation, use, processing, storage, transportation, disposal and discharge and is not intended as a guarantee or specification of quality. This information is only used for the specific substance specified and may not be suitable for mixing with any other substance or in all cases, unless otherwise specified in the context.