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: Aug.19,2025

Name of the sample	TETRAKIS (DIMETHYLAMIDO) TIN(IV)
Applicant	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier	Fujian Wolfa Chemical Technology Co., Ltd.
Composition of the sample	TETRAKIS (DIMETHYLAMIDO) TIN(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 (DIMETHYLAMIDO) TIN(IV)
Synonyms	——
CAS No.	1066-77-9
EC No.	——
Molecular Formula	$C_8H_{24}N_4Sn$

> 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	+86-17854166533
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	+86-17854166533
Supplier Fax	——
Supplier E-mail	——

> Emergency Phone Number

Emergency Phone Number	+86-17854166533

Section 2 Hazards Identification

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

> GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids	Category 2
Substances and mixtures,	Category 2

which in contact with water, emit flammable gases	
Acute Toxicity – Oral	Category 4
Acute Toxicity – Dermal	Category 4
Acute Toxicity –Inhalation	Category 4
Skin Corrosion/Irritation	Category 1
Serious eye Damage/Irritation	Category 2BCauses eye irritation

> GHS Label Elements

Pictogram



Signal Word Danger

> Hazard Statements

H225	Highly flammable liquid and vapour
H261	In contact with water releases flammable gas
H302	Harmful if swallowed
H312	Harmful in contact with skin
H332	Harmful if inhaled
H314	Causes severe skin burns and eye damage
H320	Causes eye irritation

> Precautionary Statements

Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P303+P361+P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing.

	Rinse SKIN with water/shower.
P370+P378	In case of fire: Use a fire extinguisher to put out the fire.
P301+P312	IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
P330	Rinse mouth.
P302+P352	IF ON SKIN: wash with plenty of soap and water.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P362+P364	Take off contaminated clothing and wash before reuse.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
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.
P310	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.
Storage	
P405	Store locked up.
P403+P235	Store in a well-ventilated place. Keep cool.
Disposal	
P501	The disposal of contents/containers shall comply with the requirements of local/regional/national/international regulations.

Section 3 Composition/Information on Ingredients

Component	CAS No.	EC No.	Concentration (weight percent, %)
TETRAKIS (DIMETHYLAMIDO) TIN(IV)	1066-77-9	——	≥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	Separate the eyelids and rinse with running water or physiological saline. Seek medical attention immediately. Remove contact lenses.
Following skin contact	Immediately wash with water and soap and rinse thoroughly.Seek immediate medical advice.
If swallowed	Rinse mouth.Do NOT induce vomiting.Immediately call a POISON CENTER or doctor/physician.Do not attempt to neutralize.
If inhalation	If inhaled, move the patient to fresh air. Seek medical attention immediately. If breathing stops: perform artificial respiration immediately and use oxygen if necessary.

Protection for First Responders	Ensure that medical personnel are aware of the hazardous characteristics of the product and take personal protective measures to protect themselves and prevent the spread of contamination.

> Most Important Symptoms and Effects, both Acute and Delayed

The most important known symptoms and effects have been described on the label (see section 2) and/or in section 11.

> Indication of Any Immediate Medical Attention and Special Treatment Needed

No data available.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable extinguishing media： Extinguish with water spray, dry powder, foam or carbon dioxide fire extinguishing agents.

For safety reasons unsuitable extinguishing agents： Avoid using direct water jets for firefighting, as they may cause splashing of flammable liquids and spread the fire.

> Specific Hazards Arising from the chemical

1. Carbon oxides
2. Nitrogen oxides
3. Tin/tin oxides
4. Flammable
5. Danger of flashback
6. Vapors heavier than air - may spread along the ground
7. May release hazardous gases or vapors when burning
8. Forms explosive mixtures with air at moderate temperatures

> Special protective actions for fire-fighters

Firefighters must wear self-contained breathing apparatus and full protective firefighting gear, and attack fires from upwind positions.

If possible, move containers away from the fire area to an open space.

Immediately evacuate if containers in the fire zone show discoloration or audible venting from pressure relief devices.

Isolate the incident area and restrict unauthorized entry.

Contain and treat firefighting water runoff to prevent environmental contamination.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

Emergency responders are advised to wear self-contained breathing apparatus, anti-static clothing, and oil-resistant rubber gloves.

Avoid contact with or stepping over the spilled material.

All equipment used during operations must be properly grounded.

Stop the leak if possible without risk. Eliminate all ignition sources.

Establish exclusion zones based on spill migration patterns (liquid flow/vapor/dust dispersion). Evacuate non-essential personnel upwind/sidewind to safe areas.

> Environmental Precautions

1. Contain the spill to prevent environmental contamination.
2. Prevent the spilled material from entering sewers, surface water, or groundwater.

> Methods and Materials for Containment and Cleaning Up

Minor Leakage: Collect leakage in sealable containers whenever possible.Absorb with sand, activated carbon, or other inert materials and transfer to a safe location.Prohibited: Flushing into drains or sewers.

Major Leakage: Construct dikes or containment pits to confine the spill.Seal drainage systems to prevent spread

Apply foam cover to suppress vaporization.Transfer using explosion-proof pumps to tank trucks or specialized collectors for recovery or disposal at designated waste treatment facilities.

Section 7 Handling and Storage

> Precautions for Handling

Operators should undergo specialized training and strictly follow the operating procedures.

Operations should be carried out in locations equipped with local or general ventilation systems.

Avoid contact with eyes and skin, and avoid inhaling vapors.

Personal protective measures are outlined in Section 8.

Keep away from fire sources and heat, and smoking is strictly prohibited in the workplace.

Use explosion-proof ventilation systems and equipment.

If filling into containers is required, control the flow rate, and ensure grounding devices are in place to prevent static buildup.

Avoid contact with incompatible materials such as oxidizers (see Section 10 for incompatible materials).

When handling, use light lifting and unloading to prevent damage to packaging and containers.

Empty containers may still contain harmful residues.

Wash hands after use, and do not eat or drink in the workplace.

Provide appropriate types and quantities of fire-fighting equipment and leak emergency response equipment.

> Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated warehouse.

Keep separate from oxidizers and food-grade chemicals, and avoid mixed storage (for incompatible materials, refer to Section 10).

Keep containers sealed.

Keep away from fire sources and heat.

The warehouse must be equipped with lightning protection devices.

The exhaust system should be equipped with grounding devices to eliminate static electricity.

Use explosion-proof lighting and ventilation systems.

Do not use equipment and tools that may generate sparks.

The storage area should be equipped with leak emergency response equipment and suitable containment materials.

Section 8 Exposure Controls/Personal Protection

> Control Parameters

Occupational Exposure Limit Values

No information available

Biological Limit Values

No information available

Monitoring Method

EN 14042 Workplace air - Guidelines for procedures used to assess exposure to chemical or biological reagents.

GBZ/T 160.1~GBZ/T 160.81-2004 Occupational Exposure Limits for Toxic Substances in Workplace Air (Series of Valid Standards).

> Engineering Controls

It is recommended to separate the work area from other work areas.

Use sealed operations to prevent leaks.

Enhance ventilation.

Install automatic alarm systems and emergency ventilation facilities.

Set up emergency evacuation routes and necessary hazard zones.

Mark the red zone with warning lines, warning signs, and Chinese warning instructions, and set up communication and alarm systems.

Provide safety shower and eye wash facilities.

> Personal Protection Equipment

Eye protection	Wear chemical safety goggles (conforming to EU EN 166 or US NIOSH standards).
Hand protection	Wear rubber oil-resistant gloves.
Skin and Body protection	Wear protective clothing resistant to toxic substance permeation.
Respiratory protection	When the concentration in the air exceeds the limit, wear a filter-type respirator (half-mask). In emergency rescue or evacuation situations, a self-contained breathing apparatus should be worn.

Section 9 Physical and Chemical Properties

Appearance: Colorless to pale yellow liquid

Odor: No information available

Odor Threshold: No information available

pH: No information available

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

Initial Boiling Point and Boiling Range (℃): 53-55℃(0.1mmHg)

Flash Point (℃): -8 ℃

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): 1.17

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	It is stable under correct usage and storage conditions.
Possibility of Hazardous Reactions	No data available.
Conditions to Avoid	Static discharge, heat, humidity, etc.
Incompatible Materials	No data available.
Hazardous Decomposition Products	No data available.

Section 11 Toxicological Information

> Acute Toxicity

Oral: Harmful if swallowed.

Dermal: Harmful in contact with skin.

Inhalation: Harmful if inhaled.

> Skin Corrosion/Irritation

Causes serious skin burns and eye damage

> Serious Eye Damage/Irritation

Causes eye irritation.

> Respiratory or skin Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

No information available

> Reproductive Toxicity

No information available

> STOT-single exposure

No information available

> Aspiration hazard

No information available

Section 12 Ecological Information

> Toxicity

No information available

> Others

Persistence and degradability	No information available.
Bioaccumulative potential	No information available.
Mobility in soil	No information available.
Other adverse effects	No information available.

Section 13 Disposal Considerations

> Waste treatment methods

Waste Chemicals	Recycle whenever possible.If recycling is not possible, dispose of by incineration.Do not dispose of this product by discharging it into the sewer system.
Contaminated Packaging	Return containers to the manufacturer or dispose of them according to national and local regulations.
Disposal Precautions	Refer to relevant national and local regulations before disposal.

Section 14 Transport Information

Transporting Label



Marine pollutant	NONE
UN Number	3399
UN Proper Shipping Name	ORGANOMETALLIC SUBSTANCE，LIQUID，WATER- REACTIVE，FLAMMABLE
Primary transport hazard class	4.3
Secondary transport hazard class	3
Packaging group	II

Section15 Regulatory Information

> Regulatory Information

Name	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECL	AICS	ENCS
TETRAKIS (DIMETHYLAMIDO) TIN(IV)	×	×	×	×	×	×	×	×	×

【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 Feb .1,2024

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.