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: November 14, 2025

Name of the sample	Bis(diethylamino)silane
Applicant	Fujian Wolfa Chemical Technology Co., Ltd.
Supplier	Fujian Wolfa Chemical Technology Co., Ltd.
Composition of the sample	Bis(diethylamino)silane: ≥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	Bis(diethylamino)silane
Synonyms	BDEAS
CAS No.	27804-64-4
EC No.	/
Molecular Formula	$C_8H_{22}N_2Si$

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

Relevant Identified Uses	Can only be used as R&D or semiconductor material.
Uses Advised Against	Cannot be used for pharmaceutical, household, or other purposes.

>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 in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquid	Category 2

Skin corrosion / irritation	Category 1
Serious eye damage / irritation	Category 1
Water-reactive substances and mixtures	Category 1
Acute toxicity (oral)	Category 4
Acute toxicity (dermal)	Category 3
Acute toxicity (inhalation: vapor)	Category 4

>GHS Label Elements

Pictogram



Signal Word Danger

>Hazard Statements

H225	Highly flammable liquids and vapors.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

>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.
P260	Do not breathe 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	
P301+P312	IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P304+P340	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 you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P320	Specific treatment is urgent.
P321	Specific treatment.
P330	Rinse mouth.
P335+P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use … for extinction.
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 approved waste disposal plant.

>Other hazards and risks not included in the hazard and risk classification criteria

Health	1
Fire	4
Reactivity	3

Section 3 Composition/Information on Ingredients

Component	CAS No.	EC No.	Concentration (weight percent, %)
Bis(diethylamino)silane	27804-64-4	/	≥99

Section 4 First Aid Measures

>Description of First Aid Measures

Following Eye Contact	If it gets in your eyes, rinse carefully with water for several minutes. Remove contact lenses if possible. Keep Washing.
Following Skin Contact	Wash contaminated clothing before reuse. For hot substances, soak or flush the affected area with large amounts of cold water to dissipate heat. If you feel uncomfortable, consult a medical institution (doctor). If it gets on your skin (or hair), take off all contaminated clothing. Wash skin with water/shower.
If Inhalation	If exposed to excessive dust or fumes, move with clean air and seek medical attention if coughing or other symptoms occur. Immediately seek medical attention from a medical institution (doctor).
If Swallowed	If you feel discomfort after swallowing, consult a medical institution (doctor). If swallowed, rinse mouth. Don't try to make vomit

>Other doctor's precautions

No data available.

Section 5 Fire Fighting Measures

>Extinguishing Media

When extinguishing fires related to this substance, use alcohol foam or carbon dioxide extinguishing agent.

When extinguishing asphyxiation, use dry sand or soil.

>Specific Hazards Arising from the chemical

May polymerize violently, causing fire and explosion.

Highly flammable liquid and vapor

Generates flammable gas that can spontaneously ignite when in contact with water.

May form explosive mixture at or above the flash point.

Vapors can be transferred to an ignition source and ignite.

During burning, irritating and highly toxic gases may be produced by thermal decomposition or combustion.

>Firefighting Precautions and Protective Measures

Rescuers should wear appropriate protective gear.

Engage in the area and extinguish the fire from a safe distance.

Section 6 Accidental Release Measure

>Personal Precautions, Protective Equipment and Emergency Procedures

Avoid inhalation of (dust, gas, mist, vapor, spray).

A very fine particles can cause fire or explosion, so eliminate all ignition sources.

Wipe up spills immediately and follow precautions in the protective gear section.

>Environmental Precautions

Leakage may cause contamination.

Prevent entry into waterways, sewers, basements, and confined spaces.

>How to purify or remove

Remove airborne dust and do not use water. Absorb with dry inert material.

Collect under dry/inert conditions if possible.

Absorb spill with inert material (e.g. dry sand, earth) and place in a chemical waste container.

Build an embankment and collect water for fire extinguishing.

Absorb liquid and wash contaminated area with detergent and water.

Section 7 Handling and Storage

>Safe Handling Precautions

Avoid inhalation of (dust, fume, gas, mist, vapor, spray).

Open the cap carefully before opening.

Avoid contact with water.

Handle under inert gas and avoid moisture.

Use only tools that do not generate sparks.

Do not pressurize, cut, weld, solder, join, drill, grind, or expose to heat, flame, sparks, static electricity, or other ignition sources.

Handle only outdoors or in a well-ventilated area.

Prevent all MSDS/labels as product residue may remain even after the container is emptied.

Bond or ground the container and receiving equipment.

Do not eat, drink or smoke when using this product.

Avoid prolonged or continuous skin contact.

Take measures to prevent static electricity.

Wash the area thoroughly after handling.

Use with caution when handling/storing.

Use explosion-proof electricity, ventilation, lighting, (...) equipment.

>Storage Conditions

Store in a tightly closed container. Store in a tightly closed container.

Handle under inert gas and protect from moisture.

Drain empty drums completely, seal them properly, and return them to the drum controller immediately or appropriately.

Keep away from heat, sparks, flames, and high temperatures. - No smoking.

Keep the container tightly closed.

Keep away from food and beverages.

Store in a locked storage area.

Store in a well-ventilated place and keep at a low temperature.

Section 8 Exposure Controls/Personal Protection

>Control Parameters

Hazard Composition and Occupational Exposure Limits

No data available

>Engineering management

Use process isolation, local exhaust, or other engineering controls to control air levels below exposure standards.

If dust, fume, or mist is generated during operation, ventilate to keep air pollution below the exposure standard.

Facilities storing or using this material must be equipped with eyewash facilities and safety showers.

>Personal Protective Equipment (PPE)

Respiratory Protection	Wear respiratory protection certified by the Occupational Safety and Health Agency appropriate for the physical and chemical properties of the gas/liquid to which you are exposed. For gaseous/liquid substances, the following respiratory protection is recommended: An isolated full-face respirator (for organic compounds (for acid gases)) or an isolating half-face respirator (for organic compounds (for acid gases)) (for acidic gases)) or direct-type full-face respirator mask(for organic compounds(for acidic gases, in case of acidic gases)) or half-type respirator masks (for organic compounds (for acidic gases, in the case of acidic gases)) or electric respirator masks. If oxygen is insufficient (<19.5%), wear a breathing mask or self-contained breathing apparatus.
Eye Protection	Wear safety glasses or breathable safety glasses to protect your eyes from vaporous organic substances that can cause eye irritation or other health problems. Install emergency washing facilities (shower type) and eyewash facilities in locations easily accessible to workers.
Hand Protection	Wear protective gloves made of appropriate material considering the physical and chemical properties of chemical.
Body Protection	Wear protective clothing made of appropriate material considering the physical and chemical properties of chemical.

Section 9 Physical and Chemical Properties

Appearance: Colorless liquid

Odor: Pungent

Odor Threshold: No information available

pH: No information available

Melting Point/Freezing Point (℃): <-10℃

Initial Boiling Point and Boiling Range (℃): 188℃

Flash Point (℃): No information available

Evaporation Rate: No information available

Flammability (solid, gas): No information available

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

Vapor Pressure (KPa): 30torr @ 70℃

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

Relative Density(Water=1): No information available

Solubility: Reacts violently with water

n-Octanol/Water Partition Coefficient: No information available

Auto-Ignition Temperature(℃): 275 ~ 278℃

Decomposition Temperature (℃): No information available

Specific gravity (density): 0.786 g/cm3 @ 25℃

Particle characteristics: No information available

Critical Temperature(℃): No information available

Section 10 Stability and Reactivity

Chemical stability and potential for hazardous reactions	Highly flammable liquids and vapors. Generates flammable gas that can spontaneously ignite when in contact with water. Avoid contact with water. Violent polymerization may cause fire and explosion. Reacts violently with water to generate explosive flammable gas. May form explosive mixtures at or above the flash point
Conditions to Avoid	Keep away from heat, sparks, open flames, and high temperatures.- No smoking.
Incompatible Materials	Avoid contact with water. Handle under inert gas and avoid moisture.
Hazardous Decomposition Products	Irritating and highly toxic gases may be generated by thermal decomposition or combustion during burning.

Section 11 Toxicological Information

>Acute Toxicity

Oral LD50: 660 mg/kg Rat

Transdermal LD50: 710~770 mg/kg Rabbit

Inhale Steam LC50: 14~21mg/l Other

>Skin Corrosion/Irritation

Causticity.

>Serious Eye Damage/Irritation

Causes serious eye irritation.

>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

No information available .

Section 12 Ecological Information

>Ecotoxicity

No information available

>Persistence and Degradability

No information available

>Bioaccumulation or Bioaccumulation Potential

No information available

>Mobility in Soil

No information available

>PBT and vPvB Assessment Results

No information available

>Endocrine disrupting properties

No information available

>Other environmentally hazardous effects

No information available

Section 13 Disposal Considerations

>Disposal method

Treat by neutralization, hydrolysis, oxidation, and reduction.

Incinerate at high temperature or melt at high temperature.

Treat for solidification.

>Precautions for disposal

Dispose of the contents of the container (according to the contents specified in relevant laws and regulations).

Section 14 Transport Information

Transporting Label



Marine Pollutants	No
UN Dangerous Goods Number (UN No.)	UN3399
UN Proper Shipping Name	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE
Transport Hazard Class	4.3
Packing Group	I

Section15 Regulatory Information

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECL	AIIC	ENCS
Bis(diethylamino)silane	×	×	×	×	×	×	√	×	√

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 Toxic Substances Control Act Inventory (United States)

【DSL】 Domestic Substances List (Canada)

【IECSC】 Inventory of Existing Chemical Substances in China

【NZIoC】 New Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECL】 Korean Existing Chemicals List

【AIIC】 Australian Inventory of Industrial Chemicals

【ENCS】 Existing and New Chemical Substances (Japan)

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	Nov. 14, 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.

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