

Safety Data Sheet SND4320
Date of issue: 07/11/2016 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Physical state : Solid

Substance name : DINEOPHYLDICHLOROTIN

Product code : SND4320
Formula : C20H26Cl2Sn

Synonyms : BIS(2-METHYL-2-PHENYLPROPYL)DICHLOROTIN; DINEOPHYLTINDICHLORIDE;

DINEOPHYLDICHLOROSTANNANÉ

Chemical family : ORGANOTIN

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Chemical intermediate For research use only

1.3. Details of the supplier of the safety data sheet

GELEST, INC.

11 East Steel Road Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 3 (Oral)
Acute Tox. 3 (Dermal)
Acute Tox. 3 (Inhalation:dust,mist)
Skin Irrit. 2
Eye Irrit. 2A
H319
Full text of H statements: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)





GHS06

GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation

Precautionary statements (GHS-US) : P280 - Wear protective gloves/protective clothing/eye protection/face protection

P312 - Call a doctor if you feel unwell

P261 - Avoid breathing dust

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

P330 - Rinse mouth

P301+P310 - If swallowed: Immediately call a doctor P302+P352 - If on skin: Wash with plenty of soap and water P332+P313 - If skin irritation occurs: Get medical advice/attention

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing P337+P313 - If eye irritation persists: Get medical advice/attention P321 - Specific treatment (see first aid instructions on this label)

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P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to licensed waste disposal facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substance

Substance type : Multi-constituent

Name : DINEOPHYLDICHLOROTIN

CAS No : 14208-42-5

Name	Product identifier	%	GHS-US classification
Dineophyldichlorotin	(CAS No) 14208-42-5	95 - 100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Other Organotins		0 - 5	Not classified

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

- : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.
- First-aid measures after inhalation
- : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
- First-aid measures after skin contact
- : Wash with plenty of soap and water. Get medical advice/attention.
- First-aid measures after eye contact
- : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- First-aid measures after ingestion
- : Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

- : Toxic if inhaled. May cause irritation to the respiratory tract.
- Symptoms/injuries after skin contact
- : Toxic in contact with skin. Causes skin irritation. Organotins may be absorbed through the skin.
- Symptoms/injuries after eye contact
- : Causes serious eye irritation.
- Symptoms/injuries after ingestion
- : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health
- hazard.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physician: Application of corticosteroid creams has been effective in treating severe skin irritation. If blisters develop, they may require abrasion to promote healing.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : Do not use straight streams.

5.2. Special hazards arising from the substance or mixture

Fire hazard

: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

5.3. Advice for firefighters

Firefighting instructions

- : Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.
- Protection during firefighting
- : Do not enter fire area without proper protective equipment, including respiratory protection.

Avoid contact with skin and eyes. Do not breathe dust.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with

proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Use only outdoors

or in a well-ventilated area.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Keep out of reach of children. Store locked up.

Incompatible materials : Acids. Oxidizing agent. Direct sunlight.

Storage area : Store in a well-ventilated place. Store away from heat.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Organotins			
USA ACGIH	ACGIH TWA (mg/m³)		0.1 mg/m³ as tin
USA OSHA	OSHA PEL (TWA) (mg/m³)		0.1 mg/m³ as tin
Dineophyldichlorotin (14208-42-5)			
USA ACGIH	ACGIH TWA (mg/m³)		0.1 mg/m ³ as tin

8.2. Exposure controls

USA OSHA

Appropriate engineering controls : Handle in an enclosing hood with exhaust ventilation.

OSHA PEL (TWA) (mg/m3)

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of any potential exposure.

Hand protection : Neoprene or nitrile rubber gloves.

Eye protection : Chemical goggles. Contact lenses should not be worn.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. NIOSH-certified combination organic vapor/acid gas (yellow cartridge)

0.1 mg/m3 as tin

respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Solid.
Molecular mass : 456.02 g/mol
Color : White.

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Odor : Characteristic.

Odor threshold : No data available
Refractive index : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 50 - 52 °C
Freezing point : No data available

Boiling point : > 250 °C decomposes

Flash point : $> 150 \, ^{\circ}\text{C}$

Auto-ignition temperature : No data available Decomposition temperature : No data available : No data available Flammability (solid, gas) Vapor pressure No data available Relative vapor density at 20 °C No data available Relative density : No data available Solubility Insoluble in water. Log Pow No data available No data available Log Kow Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties No data available : No data available Oxidizing properties **Explosion limits** : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Direct sunlight causes slow degradation to an inorganic tin salt.

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Acids. Oxidizing agent. Direct sunlight.

10.6. Hazardous decomposition products

Organic acid vapors. Tin oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation:dust,mist: Toxic if inhaled.

DINEOPHYLDICHLOROTIN (14208-42-5)		
ATE US (oral)	100.000 mg/kg body weight	
ATE US (dermal)	300.000 mg/kg body weight	
ATE US (dust, mist)	0.500 mg/l/4h	
Dineophyldichlorotin (14208-42-5)		
ATE US (oral)	100.000 mg/kg body weight	
ATE US (dermal)	300.000 mg/kg body weight	
ATE US (gases)	700.000 ppmV/4h	
ATE US (vapors)	3.000 mg/l/4h	
ATE US (dust, mist)	0.500 mg/l/4h	

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

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Respiratory or skin sensitization : Not classified Germ cell mutagenicity Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated

exposure)

Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : Toxic if inhaled. May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact Toxic in contact with skin. Causes skin irritation. Organotins may be absorbed through the skin.

Symptoms/injuries after eye contact Causes serious eye irritation.

Symptoms/injuries after ingestion Toxic if swallowed. Swallowing a small quantity of this material will result in serious health

hazard.

Reason for classification : Expert judgment

SECTION 12: Ecological information

Toxicity

No additional information available

Persistence and degradability

No additional information available

12.3. **Bioaccumulative potential**

No additional information available

Mobility in soil

No additional information available

Other adverse effects

This substance may be hazardous to the environment. Other adverse effects

Effect on ozone layer No additional information available Effect on the global warming No known effects from this product.

SECTION 13: Disposal considerations

Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to licensed waste disposal facility.

: Avoid release to the environment. Ecology - waste materials

SECTION 14: Transport information

14.1. **UN** number

UN-No.(DOT) : 2786 DOT NA no. UN2786

14.2. **UN** proper shipping name

Proper Shipping Name (DOT) : Organotin pesticides, solid, toxic

(DINEOPHYLDICHLOROTIN)

Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

Hazard labels (DOT) 6.1 - Poison



Packing group (DOT) : III - Minor Danger

DOT Packaging Exceptions (49 CFR 173.xxx) : 153 DOT Packaging Non Bulk (49 CFR 173.xxx) : 213 DOT Packaging Bulk (49 CFR 173.xxx) : 240

14.3. Additional information

Emergency Response Guide (ERG) Number : 153

Other information : No supplementary information available.

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Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 100 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 200 kg

CFR 175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations

DINEOPHYLDICHLOROTIN (14208-42-5)	
TSCA Exemption/Exclusion	CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States

Dineophyldichlorotin (14208-42-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

DINEOPHYLDICHLOROTIN(14208-42-5)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	001
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	

Other	Organ	otins
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U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	

Dineophyldichlorotin (14208-42-5)

U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	

SECTION 16: Other information

Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

Full text of H-phrases::

H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation

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H319	Causes serious eye irritation
H331	Toxic if inhaled

HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 1 Slight Hazard
Physical : 1 Slight Hazard

Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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