



MATERIAL SAFETY DATA SHEET

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 CHEMTREC (Emergency Only)
 Poison Center

SECTION 1: Product Identification

Chemical Name: Bis(cyclopentadienyl)nickel, 99% (Nickelocene)
Product Number: 28-1301
CAS Registry Number: 1271-28-9
Formula: (C₅H₅)₂Ni
EINECS Number: 215-039-0
Chemical Family: metallocene
Synonym: Nickelocene

SECTION 2: Composition and Information on Ingredients

Ingredient	CAS Number	Percent	ACGIH (TWA)	OSHA (PEL)
Title Compound	1271-28-9	100	0.2mg/m ³ (as Ni)	1mg/m ³ (as Ni)

SECTION 3: Hazards Identification

Emergency Overview: Irritating to skin, eyes and respiratory tract. May cause sensitization by inhalation and skin contact, Harmful by inhalation and if swallowed. May cause cancer.

Primary Routes of Exposure: Ingestion, inhalation of dust

Eye Contact: Causes irritation of the eyes, redness and pain.

Skin Contact: Causes irritation of the skin with redness or rash. Prolonged contact with nickel salts may lead to dermatitis.

Inhalation: Dust is irritating to the nose, mucous membranes and respiratory tract. May cause sensitization by inhalation.

Ingestion: Harmful if swallowed. Ingestion may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

Acute Health Effects: Nickel salts may be irritating to skin, eyes and respiratory tract, causing intestinal disorders, convulsions, asphyxia, sensitization dermatitis, allergic asthma, and pneumonitis

Chronic Health Effects: Prolonged exposure to nickel and nickel compounds may lead to skin irritation and dermatitis. May cause cancer.

NTP: Yes
IARC: Yes
OSHA: No

SECTION 4: First Aid Measures

Eye Exposure:

Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.

Skin Exposure:

Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

Inhalation:

Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

Ingestion:

Seek medical attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5: Fire Fighting Measures
Flash Point: not applicable
Autoignition Temperature: none
Explosion Limits: none
Extinguishing Medium: carbon dioxide, foam or dry powder
Special Fire Fighting Procedures: If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
Hazardous Combustion and Decomposition Products: If involved in a fire this material may emit toxic fumes.
Unusual Fire or Explosion Hazards: Flammable solid. Dust may form explosive mixtures with air.

SECTION 6: Accidental Release Measures
Spill and Leak Procedures: Small spills can be mixed with vermiculite, sodium carbonate or other suitable non combustible adsorbent and swept up.

SECTION 7: Handling and Storage
Handling and Storage: Keep material in a tightly sealed container. Store cold. Prolonged exposure to the air will result in degradation of the product. Handle and store material under an inert atmosphere of nitrogen or argon.

SECTION 8: Exposure Controls and Personal Protection
Eye Protection: Always wear approved safety glasses when handling a chemical substance in the laboratory.
Skin Protection: Wear protective clothing and gloves.
Ventilation: Material may form a fine dust. If possible, handle the material in an efficient fume hood.
Respirator: If ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 1910.134.
Additional Protection: No additional protection required.

SECTION 9: Physical and Chemical Properties
Color and Form: dark green xtl.
Molecular Weight: 188.9
Melting Point: 173-174°C
Boiling Point: no data
Vapor Pressure: no data
Specific Gravity: no data
Odor: none

Solubility in Water: insoluble

SECTION 10: Stability and Reactivity
Stability: air sensitive, (store cold)
Hazardous Polymerization: no hazardous polymerization
Conditions to Avoid: Air and moisture. Keep away from ignition sources.
Incompatibility: oxygen, oxidizing agents and halogens
Decomposition Products: carbon dioxide, carbon monoxide, organic fumes, and nickel oxide.

SECTION 11: Toxicological Information

RTECS Data:
Oral (rat); LD50: 490 mg/kg. Intraperitoneal (rat); LD50: 50 mg/kg.
Intramuscular (rat); LD50: 82 mg/kg. Oral (mouse); LD50: 600 mg/kg.
Intraperitoneal (mouse); LD50: 86 mg/kg. Intramuscular (rat); TDLo: 600 mg/kg/52W-1. Intramuscular (hamster); TDLo: 200 mg/kg. Intramuscular (rat); TD: 600 mg/kg.47W-1. Intramuscular (rat); TD: 650 mg/kg/1Y-1. Intramuscular (rat); TD: 1260 mg/kg/56W-1. Intramuscular (rat); TD: 50 mg/kg.

Carcinogenic Effects: Tumorigen

Mutagenic Effects: No data

Tetragenic Effects: No data

SECTION 12: Ecological Information

Ecological Information: No information available

SECTION 13: Disposal Considerations

Disposal: Dispose of according to local, state and federal regulations.

SECTION 14: Transportation

Shipping Name (CFR): Flammable solids, Organic, N.O.S.

Hazard Class (CFR): 4.1

Additional Hazard Class (CFR): none

Packaging Group (CFR): II

UN ID Number (CFR): UN# 1325

Shipping Name (IATA): Flammable solid, Organic, N.O.S.

Hazard Class (IATA): 4.1

Additional Hazard Class (IATA): none

Packaging Group (IATA): II

UN ID Number (IATA): UN# 1325

SECTION 15: Regulatory Information

TSCA: Listed in the TSCA inventory.

SARA (Title 313): Title compound: See category code N495 for reporting.

Second Ingredient: None

Third Ingredient: None

SECTION 16: Other Information

Disclaimer:

The information herein is believed to be accurate and reliable as of the date compiled. However, Strem Chemicals, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information contained in this document or any use of the product based on this information.

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