

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: RHODIUM TRICHLORIDE Trihydrate (For Synthesis) (40% Rh)

CAS#: - 13569-65-8

C.I. No.:

Not
available.

Synonym:

Not
available.

Chemical Name: Not available.

Chemical Formula: $\text{RhCl}_3 \cdot x\text{H}_2\text{O}$

Composition and Information on Ingredients

Name	S.K.U	% by Weight
RHODIUM TRICHLORIDE Trihydrate	GCS-7134	100

Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.
TERATOGENIC

EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

First Aid Measures

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention. Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation: Not available.

Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV.

Check TLV on the MSDS and with local authorities.

Handling and Storage

Precautions:

Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage:

No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 1 (mg/m³) from ACGIH Consult local authorities for acceptable exposure limits.

Physical and Chemical Properties

Physical state and appearance

: Solid.

Odor

: Not available.

Taste

: Not available.

Molecular Weight

: 209.26 g/mole

Color

: Not available.

pH (1% soln/water)

: Not available.

Boiling Point

: Decomposes.

Melting Point

: 187°C (368.6°F)

Critical Temperature

: Not available.

Specific Gravity

: Not available.

Vapor Pressure

: Not applicable.
Vapor Density
: Not available.
Volatility
: Not available.
Odor Threshold
: Not available.
Water/Oil Dist. Coeff.
: Not available.
Ionicity (in Water)
: Not available.
Dispersion Properties
: Not available.
Solubility : Not available.

Stability and Reactivity Data

Stability: The product is stable.
Instability Temperature: Not available.
Conditions of
Instability: Not
available.
Incompatibility with various substances: Not available.
Corrosivity: Non-corrosive in
presence of glass.
Special Remarks on
Reactivity: Not available.
Special Remarks on
Corrosivity: Not available.
Polymerization: No.

Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.
Toxicity to Animals: Acute oral toxicity (LD50): 1302 mg/kg [Rat].
Chronic Effects on Humans: Not available.
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion,
of inhalation. Slightly hazardous in case of skin contact (permeator).
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Not available.

Ecological Information

Ecotoxicity: Not available.
 BOD5 and COD: Not available.
 Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
 Toxicity of the Products of Biodegradation: The products of degradation are more toxic.
 Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste Disposal:

Transformation Information

Land transport (ADR-RID)

Proper shipping name : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
 UN N° 3260

H.I. nr 80

ADR – Class 8

Labelling – Transport : 8 : Corrosive substance.
 ADR – Group III

Sea transport (IMDG) [English only]

Proper shipping name : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
 UN N° 3260

IMO-IMDG - Class or division : 8 : Corrosive substance.

IMO-IMDG - Packing group III

Air transport (ICAO-IATA) [English only]

Proper shipping name : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
 UN N° 3260

IATA - Class or division : 8 : Corrosive substance.

IATA - Packing group III

Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Rhodium trichloride hydrate

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): R22- Harmful if swallowed. R36/38- Irritating to eyes and skin.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

 **makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which**

the information refers. Accordingly,  will not be responsible for damages resulting from use of or reliance upon this information.