SECTION 1  PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:  Iridium (IV) Chloride Hydrate
PRODUCT NUMBER:  2034
CAS NUMBER:  207399-11-9
SYNONYMS:  Iridium tetrachloride hydrate
MANUFACTURER:
Prochem, Inc.
826 Roosevelt Road
Rockford, IL 61109
PHONE:  815-398-1788
FAX:  815-398-1810
TOLL FREE:  800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2  HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram

Signal Word
Warning

Hazard Statements

H302  Harmful if swallowed.
H315  Causes skin irritation.
H319  Causes serious eye irritation.
H335  May cause respiratory irritation.

Precautionary Phrases

P261  Avoid breathing dust/fume/gas/mist/vapors/spray.
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.
P301+P312  IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352  IF ON SKIN: Wash with plenty of soap and water.
P304+P340  IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P362  Take off contaminated clothing and wash before reuse.
P403+P233  Store in a well-ventilated place. Keep container tightly closed.
SECTION 2  HAZARDS IDENTIFICATION (Cont.)

HMIS CLASSIFICATION:
Health: 2  Fire: 0  Reactivity Hazard: 0

NFPA RATING:
Health: 2  Flammability: 0  Reactivity Hazard: 0

EYE CONTACT: Causes mild irritation of the eyes.
SKIN CONTACT: Causes slight irritation of the skin.
INHALATION: Inhalation of dust leads to irritation of the respiratory tract.
INGESTION: Harmful if swallowed.

SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: IrCl₄ • XH₂O

Molecular Weight: 334.03 (anhy.)

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
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<tr>
<td>Iridium (IV) chloride Hydrate</td>
<td>207399-11-9</td>
<td>100</td>
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SECTION 4  FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.
SKIN EXPOSURE: Wash affected area with plenty of water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.
INHALATION: Remove to fresh air and keep at rest. 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 assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5  FIREFIGHTING MEASURES

FLASH POINT: Product is not flammable
AUTO IGNITION TEMPERATURE: Not available
EXPLOSION LIMITS: Not available
EXTINGUISHING MEDIUM: Use fire fighting measures that suit the surrounding fire.
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Hydrogen chloride gas and iridium oxides

SECTION 6  ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust.
ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing to be released into the environment.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Mix spills with diatomaceous earth, sand, vermiculite, or other suitable inert materials. Sweep up and place in suitable container for proper disposal.

SECTION 7  HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Avoid formation of dusts and aerosols. Handle under dry protective gas
CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Store under dry inert gas. Protect from humidity and water. Store away from water, moisture, strong bases, and oxidizing agents.
SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limit values.
EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.
SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.
VENTILATION: Provide local exhaust, preferably mechanical.
RESPIRATOR: Use an approved respirator.
ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Black solid
ODOR: None
MOLECULAR WEIGHT: 334.03 (anhy.)
BOILING POINT: No data available
MELTING POINT: >350°C (dec.)
SPECIFIC GRAVITY: 5.300 gm/m
SOLUBILITY: Very soluble

SECTION 10  STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Avoid moisture and heat
INCOMPATIBILITY: Oxidizing agents, alkalines, alkali metal salts, copper, cyanides, zinc/zinc oxides, carbon monoxide, bases, and active metals.
DECOMPOSITION PRODUCTS: Hydrogen chloride and iridium oxides

SECTION 11  TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – rat – 1560mg/kg.
CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.
MUTAGENIC EFFECTS: Not available
TETRATOGENIC EFFECTS: Not available
RTECS: NO3610000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12  ECOLOGICAL DATA

No data available.

SECTION 13  DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14  TRANSPORTATION DATA

Not a dangerous good.
SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory
SARA 302/304: Not Listed
SARA 311/312: Acute Health Hazard
SARA (TITLE 313): Not Listed
CALIFORNIA PROP. 65: Not Listed
WHMIS CANADA: Not Listed
MASSACHUSETTS RIGHT TO KNOW COMPONENTS: Iridium tetrachloride hydrate
NEW JERSEY RIGHT TO KNOW COMPONENTS: Iridium tetrachloride hydrate
PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Iridium tetrachloride hydrate

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.
DATE PREPARED: 01/15
SDS DEPT.