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 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

MATERIAL SAFETY DATA SHEET (MSDS)

PLATINUM CHLORIDE (40% PT) (CHLORO PLATINIC ACID)

1. Product Identification

Synonyms: platinate (2-), hexachloro-, dihydrogen, hexahydrate, (OC-6-11); chloroplatinic acid;

Hexachloroplatinic acid, hexahydrate

CAS No.: 18497-13-7

Product Coad: P0162300001

Anhydrous; (18497-13-7 Hexahydrate)

Molecular Weight: 517.92

Chemical Formula: H₂PtCl₆ . 6H₂O

2. Composition/Information on Ingredients

| Ingredient | CAS No | Percent | Hazardous |
|---------------------|------------|-----------|-----------|
| Chloroplatinic Acid | 16941-12-1 | 98 - 100% | Yes |

3. Hazards Identification

Emergency Overview **WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE IRRITATION TO EYES, SKIN AND RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY**

Inhalation:Exposure can cause severe allergies affecting the nose, skin and lungs. Irritation and even ulcers can develop in the nose. May cause platinosis. Symptoms include wheezing, coughing, tightness of the chest, shortness of breath, cyanosis, and pronounced asthmatic symptoms.

Ingestion: May cause vomiting and bloody diarrhea.

Skin Contact: May cause platinosis; symptoms may include severe irritation, eczema, urticaria, itching, and dermatitis. May cause skin allergy.**Eye Contact:** May cause irritation, itching, and conjunctival vasodilation.**Chronic Exposure:** Prolonged or repeated exposure can cause allergies of the nose, lungs and skin to develop; once developed, very small future exposures will cause health effects. Skin exposure may cause cracking, bleeding, skin rash and pain in the skin. Inhalation may cause irritation of the throat and nasal passages, including sneezing, nasal ulcers, bronchial irritation, and respiratory distress. Repeated exposures can lead to permanent lung damage (pulmonary fibrosis).**Aggravation of Pre-existing Conditions:** Asthma attacks may occur upon the minutest reexposure to the substance.

4. First Aid Measures

Inhalation:Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.**Ingestion:**Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:Not considered to be a fire hazard.

Explosion:Reacts with steel and many other common metals to produce hydrogen gas - a serious fire and explosion hazard.**Fire Extinguishing Media:**Water spray, carbon dioxide, or dry powder.

Special Information:In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills:Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dustdispersal.

7. Handling and Storage

Keep in a tightly closed light-resistant container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust,solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection**Airborne Exposure Limits:**

For Platinum, soluble salts:

-OSHA Permissible Exposure Limit (PEL):0.002 mg/m3 (TWA) as Pt

-ACGIH Threshold Limit Value (TLV):0.002 mg/m3 (TWA) as Pt

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne

Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details. **Personal Respirators (NIOSH Approved):** If the exposure limit is exceeded and engineering controls are not feasible, a full facepiece respirator with high efficiency particulate filter (NIOSH type N100 filter) may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type Ror P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. **Eye Protection:** Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Brownish-yellow, deliquescent crystalline mass.

Odor: Odorless. **Solubility:** Soluble in water.

Specific Gravity: 2.43

Boiling Point:115C (239F)

Melting Point:60C (140F)

Vapor Density (Air=1):18

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Stability: Stable under ordinary conditions of use and storage. Light sensitive.

Hazardous Decomposition Products: Emits toxic fumes of chlorine when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Bromine Trifluoride, Carbonates, Sulfides and Cyanides.

Conditions to Avoid: Moisture, light, heat and incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure. Anhydrous: Investigated as a mutagen.

---NTP Carcinogen---

Ingredient Known Anticipated IARC Category

Chloroplatinic Acid (16941-12-1) No No None

12. Ecological Information

Environmental Fate: No information found.

Environmental Toxicity: No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with

federal, state and local requirements.

14. Transport Information

Proper Shipping Name: CHLOROPLATINIC ACID, SOLID

Hazard Class: 8

UN/NA: UN2507

Packing Group: III

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15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient TSCA EC Japan Australia

Chloroplatinic Acid (16941-12-1) Yes Yes Yes Yes

-----\Chemical Inventory Status - Part 2\-----

--Canada--

Ingredient Korea DSL NDSL Phil.

Chloroplatinic Acid (16941-12-1) Yes Yes No Yes

-----\Federal, State & International Regulations - Part 1\-----

-SARA 302- -----SARA 313-----

Ingredient RQ TPQ List Chemical Catg.

Chloroplatinic Acid (16941-12-1) No No No No

-----\Federal, State & International Regulations - Part 2\-----

-RCRA- -TSCAIngredient

CERCLA 261.33 8(d)

Chloroplatinic Acid (16941-12-1) No No No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No

Reactivity: No (Pure / Solid)

Australian Hazchem Code: 2X

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 2 Flammability: 0 Reactivity: 0

Label Hazard Warning: WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE IRRITATION TO EYES, SKIN AND RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION.

Label Precautions: Do not breathe dust. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Label First Aid: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of skin contact, immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In all cases, get medical attention **Product Use:** Laboratory Reagent.

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In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

DISCLAIMER:

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation 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.

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