



Manufacturers of Instruments for
pH, Redox, Specific Ions,
Conductivity, Salinity,
Dissolved Oxygen,
Humidity, Temperature,
for Research and Industry



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MATERIAL SAFETY DATA SHEET

Highly Toxic. Corrosive. Sensitiser.

IDENTIFICATION

Chloroplatinic Acid

Part No	Product Code	Description & Volume
122300	GCPLAT	Platinising Solution, for Conductivity cells, supplied as 1 gram of solid crystals.

UN Number : UN2507
Other Names : Dihydrogen hexachloroplatinate (IV) hydrate
Hexachloroplatinic acid hydrate
Dangerous Goods Class : 8
Packing Group : 3
Subsidiary Risk : None Allocated
Manufacturers Code : GCPLAT
Hazchem Code : None Allocated
Poisons Schedule : Not Scheduled

Uses : To be diluted to required volume, then used to replatinise Conductivity sensors.

Physical Description / Properties :

Appearance : Solid orange crystals
Boiling Point (°C) : No Data
Melting Point (°C) : 60 °C
Specific Gravity : No Data
Flash Point (°C) : Not flammable
Flammability Limits (%) : Not flammable
Solubility in Water (g/L) : Completely miscible
Molecular Formula : H₂CL₆Pt.xH₂O
Molecular Weight : 409.82

Other Properties : Hygroscopic.



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HEALTH HAZARD INFORMATION

Health Effects :

Swallowed

: Highly toxic by ingestion. Corrosive substance: risk of internal burns if ingested.
Toxicology : Oral – rat LD50: 49 mg/kg

Eye

: Corrosive, contact causes severe eye burns which may result in permanent tissue and corneal damage.

Skin

: Corrosive causes skin burns and severe irritation.

Inhaled

: Corrosive. Severe irritant to respiratory tract. Possible systemic effects. Possible sensitiser : repeated exposure may cause asthma symptoms in susceptible individuals.

Target Organs

: Eyes. Skin. Respiratory system. G.I. Tract.

Signs/Symptoms

: Effects of exposure to platinum compounds include wheezing, coughing, chest tightness, shortness of breath and cyanosis.

Chronic Effects

: No data available

First Aid :

Swallowed

: If swallowed, call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting unless instructed by medical personnel. Get medical attention. Show this MSDS to medical practitioner.

Eye

: Immediately flush eyes with plenty of water for at least 20 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention if irritation persists, or symptoms of overexposure become apparent. Show this MSDS to medical practitioner.

Skin

: Immediately wash skin with plenty of water for at least 20 minutes, while removing contaminated clothing and shoes. Get medical attention especially, if irritation develops, persists, or symptoms of overexposure become apparent.

Launder clothing before reuse.

Inhaled

: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Keep warm. Get immediate medical attention. Show this MSDS to a doctor.

Advice to Doctor :

Treat symptomatically



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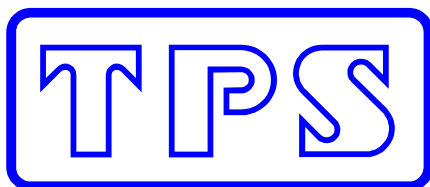


PRECAUTIONS FOR USE

- Exposure Limits** : Worksafe - None Established
- Engineering Controls** : Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OHS or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
- Skin Protection Description** : Wear suitable protective clothing to prevent contact with skin.
- Hand Protection Description** : Wear appropriate protective gloves. Consult glove manufacturers for glove permeability data.
- Eye/Face Protection** : Wear appropriate protective glasses or splash goggles.
- Other Protective** : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

STABILITY AND REACTIVITY

- Conditions to Avoid** : High temperatures. High humidity. Strong light.
- Incompatibilities with other Materials** : Reducing agents. Reactive metals, including iron and steel. Carbonates. Sulphides. Cyanides.
- Possible Decomposition Products** : Platinum. Hydrogen Chloride.



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SAFE HANDLING INFORMATION

- Storage & Transport** : Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. No special transport requirements apply. Product is hygroscopic and light sensitive.
- Handling** : This product should be handled only by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data. It should always be handled in an efficient fume hood or equivalent system. The user should consider that the toxicological and physiological properties of many compounds are not yet well determined and that new hazardous products may arise from reactions between chemicals. Care should be taken to prevent any chemical from coming into contact with the skin or eyes and from contaminating personal clothing.
- Hygiene Practices** : Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling dust.
- Spills & Disposal** : Absorb spills with sand or vermiculite. Transfer carefully to sealed, disposal container. Dispose of in accordance with local regulations.
- Do not allow material to enter drains or streams.**
- Fire/Explosion Hazard** : Material is not readily combustible. Fire fighters should wear self contained breathing apparatus and impervious clothing if exposure to fumes is likely. Use water spray, foam or dry chemical to control fire situation if compatible with other chemical products in the vicinity.

REGULATORY INFORMATION

- Risk Phrases** : R25 Toxic if swallowed.
R34 Causes Burns
R42/43 May cause sensitization by inhalation and skin contact.
- Safety Phrases** : S22 Do not breathe dust.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately

Other :

References :

Lenga, R.E. (Ed.) *Safety The Sigma Aldrich Library of Chemical Safety Data* Sigma Aldrich Corporation 1985
National Institute for Occupational Safety & Health *NIOSH Pocket Guide to Chemical Hazards* 1990.
Merck & Co Inc. *The Merck Index 11th Ed.* Merck & Co 1989.
International Labour Office *Encyclopaedia of Occupational Health & Safety* Vol 1 & 2 International Labour Office 1983
National Occupational Health & Safety Commission *Exposure Standards for Atmospheric Contaminants in the Occupational Environment* AGPS 1995
National Occupational Health & Safety Commission *List of Designated Hazardous Substances* [NOHSC:10005(1994)] AGPS 1994

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