1. Product And Company Identification

**Supplier**
DF Goldsmith Chemical and Metal
909 Pitner Avenue
Evanston, IL 60202, USA

Telephone Number: 847-869-7800
FAX Number: 847-869-2531
E-mail: goldchem@aol.com
Web Site: www.dfgoldsmith.com

**Manufacturer**
DF Goldsmith Chemical and Metal
909 Pitner Avenue
Evanston, IL 60202, USA

Telephone Number: 847-869-7800
FAX Number: 847-869-2531
E-mail: goldchem@aol.com
Web Site: www.dfgoldsmith.com

**Supplier Emergency Contacts & Phone Number**
Chemtrac: 800-424-9300

**Issue Date:** 03/26/2008

**Product Name:** Rhodium (III) Chloride Hydrate
**Chemical Name:** Rhodium (III) Chloride/Rhodium Trichloride
**CAS Number:** 20765-98-4
**Chemical Family:** Platinum Group Metal Salts
**Chemical Formula:** RhCl3.3H2O
**MSDS Number:** 45-482
**Product Code:** 45-482

**Synonyms**
NA

2. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Percent Of Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhodium (III) Chloride Hydrate</td>
<td>20765-98-4</td>
<td>99</td>
</tr>
</tbody>
</table>

**EMERGENCY OVERVIEW**

**Harmful**
Harmful if swallowed. Risk of serious damage to eyes if exposed to the powder.
Target Organs: Nerves. Blood

3. Hazards Identification

**Primary Routes(s) Of Entry**
- **Inhalation:** Likely
- **Skin:** Likely
- **Ingestion:** Likely
3 Hazards Identification (cont)

**Eye Hazards**
Causes eye irritation.

**Skin Hazards**
Causes skin irritation.

**Ingestion Hazards**
Harmful if swallowed.

**Inhalation Hazards**
Causes respiratory tract irritation. May cause nose, throat, and lung irritation.

**Subchronic (Target Organ Effects)**
Nerves and Blood.

**Conditions Aggravated By Exposure**
May cause irritation of the respiratory system. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization.

**Conditions Aggravated By Overexposure**
To the best of our knowledge, the chemical, and toxicological properties have not been thoroughly investigated.

4. First Aid Measures

**Eye**
Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician.

**Skin**
Flush area for 15 minutes with water and wash with soap and water. If discomfort occurs or persists, contact a physician. Remove contaminated clothing and shoes and wash before reuse.

**Ingestion**
Not expected to be a problem in industry. However if swallowed and discomfort occurs, contact a physician.

**Inhalation**
Remove to fresh air immediately. If discomfort occurs or persists, contact a physician.

Fire Fighting (Pictograms)
5. Fire Fighting Measures

Flash Point Method: NA
Flammability Class: NA

Fire And Explosion Hazards
Use proper safety equipment. Can decompose to emit toxic hydrochloric acid or chlorine vapor.
Extinguishing Media
Use water spray, foam, dry chemical, carbon dioxide or medium to fight primary source.

Fire Fighting Instructions
NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing

6. Accidental Release Measures

Sweep or soak up and place in sealed container for reclamation or disposal. Person protected with full face shield and proper respirator for chlorine and dust. Ventilate area and wash spill site after pick up is complete.

Handling and Storage (Pictograms)

7. Handling and Storage

Handling And Storage Precautions
Avoid contact with eyes, prolonged or repeated contact with skin. Avoid breathing dust. Use compatible chemical-resistant gloves. Wash hands thoroughly after handling.

Handling Precautions
Avoid breathing dust or solution spray. Avoid contact with eyes. Avoid contact with skin and clothing.

Storage Precautions
Do not store directly on ground. Keep Tightly Closed.
Work/Hygienic Practices
Use good personal hygiene. Wash thoroughly after handling. Wash thoroughly with soap and water after handling.

Other Precautions
0.01 ppm high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 ppm same as above with full face piece; 1 ppm powdered air purifying respirator with high efficiency filter/type C supplied air respirator operated in pressure demand mode. Store in a sealed container, plastic or plastic liner, in a cool, well ventilated, dry area away from volatile acids.

Protective Clothing (Pictograms)
8. Exposure Controls/Personal Protection

**Engineering Controls**
- Ventilation: Local Exhaust: Required in handling area
- Mechanical: Desirable to insure concentration of material below TLV/TWA levels
- Other: Recommended

**Eye/Face Protection**
- ANSI approved safety glasses/goggles

**Skin Protection**
- Rubber/Neoprene (use compatible chemical-resistant gloves)

**Respiratory Protection**
- NIOSH approved chemical cartridge respiratory for dust/mist/fume/radionuclide or self-contained breathing apparatus with full face shield.

**Other/General Protection**
- Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing

9. Physical And Chemical Properties

**Appearance**
- Dark red deliquescent crystals
  - Chemical Type: Mixture
  - Physical State: Solid
  - Melting Point: >100 (decomposes) °C
  - Molecular Weight: 263.31
  - Vapor Pressure: NA
  - Vapor Density: NA
  - pH Factor: NA
  - Solubility: Soluble
  - Evaporation Rate: NA

10. Stability And Reactivity

**Stability**
- Stable
  - Hazardous Polymerization: Will not occur

**Conditions To Avoid (Stability)**
- Avoid oxidizing agents.

**Incompatible Materials**
- Mixing with mineral acids and strong reducing agents

**Hazardous Decomposition Products**

**Conditions To Avoid (Polymerization)**
- Will not occur.
**MATERIAL SAFETY DATA SHEET**

Rhodium (III) Chloride Hydrate

11. Toxicological Information

**Eye Effects**
May cause eye irritation. Causes severe eye irritation.

**Skin Effects**
May cause skin irritation.

**Acute Oral Effects**
Ingestion: Harmful if swallowed.

**Acute Inhalation Effects**
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

**Subchronic (Target Organ Effects)**
Central Nervous System and Blood.

12. Ecological Information

No Data Available...

13. Disposal Considerations

Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation

**NOTE:** Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

**RCRA Information**
NL

14. Transport Information

**Proper Shipping Name**
None

**Additional Shipping Paper Description**
IATA: None - Consult IATA regulation before shipping.

15. Regulatory Information

**U.S. Regulatory Information**
For R&D use only. Not for drug, household or other uses.

**SARA Section 313 Notification**
This product does not require reporting under SARA Notification.

**Canadian Regulatory Information**
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
15. Regulatory Information (cont)

**European Union (EU) Regulatory Information**

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 22-41

Risk Statements: Harmful if swallowed. Risk of serious damage to eyes.

S: 26-36/39

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and eye/face protection.

**Other International Regulations**

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.

Risk Statements: Harmful if swallowed. Risk of serious damage to eyes.

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and eye/face protection.


**DSCL - Europe (Pictograms)**

16. Other Information

**NFPA Rating**

Health: 2

Fire: 0

Reactivity: 0

Other: NA

**HMIS Rating**

Health: 2

Fire: 0

Reactivity: 0

Personal Protection: C

**Revision/Preparer Information**

MSDS Preparer: DF Goldsmith Chemical and Metal

MSDS Preparer Phone Number: 847-869-7800

This MSDS Supersedes A Previous MSDS Dated: 03/15/1998
**Disclaimer**

In compliance with the OSHA Hazard Communication Standard, 29 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

DF Goldsmith Chemical and Metal makes no presentation as to the accuracy of the information in the MSDS. The information is believed to be correct; however, you (the customer), should perform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.