1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name Pentacarbonylchlororhenium(I)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008 Acute toxicity, Inhalation (Category 3) Acute toxicity, Dermal (Category 3) Acute toxicity, Oral (Category 3) Skin irritation (Category 2) Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

According to European Directive 67/548/EEC as amended.

Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Label elements

Toxic if swallowed.

Danger

Pictogram

Signal word

Hazard statement(s)

H301 H311

Toxic in contact with skin. Causes skin irritation. H315 H319 Causes serious eye irritation. H331 Toxic if inhaled. H335

P261

May cause respiratory irritation. Precautionary statement(s) Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing.

IF SWALLOWED: Immediately call a POISON CENTER or P301 + P310doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove P305 + P351 + P338contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician. P311

Hazard symbol(s) T **Toxic**

R-phrase(s) Toxic by inhalation, in contact with skin and if swallowed.

R23/24/25 R36/37/38

Irritating to eyes, respiratory system and skin. S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 After contact with skin, wash immediately with plenty of water.

Wear suitable protective clothing, gloves and eye/face protection. S36/37/39 In case of accident or if you feel unwell, seek medical advice immediately S45 (show the label where possible).

Other hazards - none 3. COMPOSITION/INFORMATION ON INGREDIENTS Rhenium(I) pentacarbonyl chloride Synonyms

Formula Molecular Weight

CAS-No.

361,71 g/mol EC-No.

Pentacarbonylchlororhenium 14099-01-5 237-948-1 Acute Tox. 3; Skin Irrit. 2; Eye

C5ClO5Re

H311, H315, H319, H331, H335 T, R23/24/25 - R36/37/38 For the full text of the H-Statements mentioned in this Section, see Section 16. 4. FIRST AID MEASURES

Classification

Irrit. 2; STOT SE 3; H301,

Concentration

If inhaled If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

Consult a physician. Show this safety data sheet to the doctor in attendance.

In case of skin contact Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

General advice

If swallowed

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 5. FIRE-FIGHTING MEASURES

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special protective equipment for fire-fighters

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Evacuate personnel to safe areas. **Environmental precautions**

Personal precautions

6. ACCIDENTAL RELEASE MEASURES

Suitable extinguishing media

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Wear self contained breathing apparatus for fire fighting if necessary.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Air and moisture sensitive.

7. HANDLING AND STORAGE

Precautions for safe handling

Conditions for safe storage

Personal protective equipment

Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the

respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and

components tested and approved under appropriate government standards such as NIOSH (US) or CEN

(EU). Hand protection

Handle with gloves.

product.

Appearance

pН

Melting point

Boiling point

Flash point

Upper explosion limit

Water solubility

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection Face shield and safety glasses

Skin and body protection Choose body protection according to the amount and concentration of the dangerous substance at the work place. Hygiene measures Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the

Form powder Colour tan Safety data

9. PHYSICAL AND CHEMICAL PROPERTIES

Ignition temperature no data available Lower explosion limit no data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

Causes eye irritation.

To the best of our knowledge, the chemical physical, and toxicological properties have not been thoroughly

no data available

10. STABILITY AND REACTIVITY Chemical stability Stable under recommended storage conditions. **Conditions to avoid** Air sensitive. Materials to avoid Strong oxidizing agents Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, rhenium oxides

Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitization

Specific target organ toxicity - single exposure

Specific target organ toxicity - repeated exposure

Inhalation - May cause respiratory irritation.

11. TOXICOLOGICAL INFORMATION

Acute toxicity no data available

no data available

no data available

Carcinogenicity

no data available

Eyes

investigated.

no data available

no data available

no data available

Mobility in soil no data available

Product

IMDG

Aspiration hazard no data available

Germ cell mutagenicity

probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity no data available

Potential health effects Toxic if inhaled. Causes respiratory tract irritation. Inhalation Ingestion Toxic if swallowed. Toxic if absorbed through skin. Causes skin irritation. Skin

Signs and Symptoms of Exposure

Additional Information RTECS: no data available 12. ECOLOGICAL INFORMATION **Toxicity**

> no data available Other adverse effects no data available

13. DISPOSAL CONSIDERATIONS

PBT and vPvB assessment

Persistence and degradability

Bioaccumulative potential

Dispose of as unused product. 14. TRANSPORT INFORMATION ADR/RID UN-Number: 3288 Class: 6.1

Contaminated packaging

UN-Number: 3288 Class: 6.1

Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Pentacarbonylchlororhenium) Marine pollutant: No **IATA**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste

in a chemical incinerator equipped with an afterburner and scrubber.

disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn

Packing group: III

Packing group: III

EMS-No: F-A, S-A

H301 H311

15. REGULATORY INFORMATION

H315 Causes skin irritation. H319 H331 Toxic if inhaled. H335

Further information For R&D use only. Not for drug, household or other uses.

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WARRANTY: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not

UN-Number: 3288 Class: 6.1

Packing group: III Proper shipping name: Toxic solid, inorganic, n.o.s. (Pentacarbonylchlororhenium)

Proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (Pentacarbonylchlororhenium)

16. OTHER INFORMATION Text of H-code(s) and R-phrase(s) mentioned in Section 3

Acute toxicity Acute Tox. Eye Irrit. Eye irritation

Causes serious eye irritation. Skin Irrit. Skin irritation T **Toxic** R23/24/25 R36/37/38

represent any guarantee of the properties of the product. Lookchem shall not be held liable for any

Toxic if swallowed. Toxic in contact with skin. May cause respiratory irritation.

Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

> damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.