



TCI AMERICA

SAFETY DATA SHEET

Revision number: 1
Revision date: 11/20/2013

1. IDENTIFICATION

Product name: Rhodium 5% on Carbon (wetted with ca. 55% Water)
Product code: R0075

Product use: For laboratory research purposes.
Restrictions on use: Not for drug or household use.

Company:
TCI America
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Responsible department:
TCI America
Environmental Health Safety and Security
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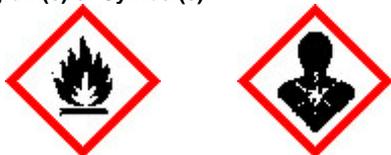
2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Sensitization - Respiratory [Category 1]
Pyrophoric Solids [Category 1]

Signal word: Danger!

Hazard Statement(s): Catches fire spontaneously if exposed to air
May cause allergy or asthma symptoms or breathing difficulties if inhaled

Pictogram(s) or Symbol(s):



Precautionary Statement(s):
[Prevention]

Avoid breathing dusts or mists. In case of inadequate ventilation wear respiratory protection. Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Do not allow contact with air. Wear protective gloves, eye protection and face protection.

[Response]

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or doctor. Brush off loose particles from skin and immerse in cool water or wrap in wet bandages. In case of fire: Use dry chemical, soda ash, lime or DRY sand to extinguish.

[Storage]

Store contents under inert gas (argon).

[Disposal]

Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture
Components: Rhodium 5% on Carbon (wetted with ca. 55% Water)
Percent:
CAS Number: 7440-16-6
Molecular Weight: 102.91

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Formula: Rh

4. FIRST-AID MEASURES

Inhalation: May cause coughing, difficult breathing and nausea. Call emergency medical service. Effects of exposure (inhalation) to substance may be delayed. Inhalation of vapors or contact with substance will result in contamination and potential harmful effects. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin contact: Call a poison center or doctor if you feel unwell. Effects of exposure (skin contact) to substance may be delayed. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Eye contact: In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Ingestion: Effects of exposure (ingestion) to substance may be delayed. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Symptoms/effects:

Acute: No data available
Delayed: No data available

Immediate medical attention: CAUTION: Victim may be a source of contamination. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, soda ash, lime or dry sand. Consult with local fire authorities before attempting large scale fire fighting operations.

Unsuitable extinguishing media: Do NOT use water, CO₂ or foam.

Specific hazards arising from the chemical

Hazardous combustion products: These products include: Metallic oxides
Other specific hazards: Closed containers may explode from heat of a fire.

Special precautions for fire-fighters:

Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. May re-ignite after fire is extinguished. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark-proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Personal protective equipment: Safety glasses. Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

Emergency procedures: Keep combustibles (wood, paper, oil, etc.) away from spilled materials. Prevent dust cloud. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in the immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

6. ACCIDENTAL RELEASE MEASURES**Methods and materials for containment and cleaning up:**

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Use clean non-sparking tools to collect absorbed material. Cover with water, sand, or earth. Shovel into metal container and keep material under water. Ventilate the area.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE**Precautions for safe handling:**

Avoid inhalation of vapor or mist. Avoid contact with skin and eyes. Catches fire if exposed to air. May catch fire in presence of oxidizing materials. Keep away from heat and sources of ignition. Use explosion-proof equipment. Take measures to prevent build up of electrostatic charge. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.

Conditions for safe storage:

Store under inert gas (e.g. Argon). Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from combustible materials. Keep away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods.

Storage incompatibilities:

Combustible substances, Reducing Agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure limits:**

No data available

Appropriate engineering controls:

Handle only in a fully enclosed system and equipment. Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment**Respiratory protection:**

Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hand protection:

Wear protective gloves.

Eye protection:

Safety glasses.

Skin and body protection:

Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical state (20°C):**

Solid

Form:

Crystal - Powder

Color:

Black

Odor:

Odorless

Odor threshold:

No data available

Melting point/freezing point:

No data available

Boiling point/range:

No data available

Decomposition temperature:

No data available

Relative density:

No data available

Kinematic viscosity:

No data available

Partition coefficient:

No data available

n-octanol/water (log P_{ow})**Flash point:**

No data available

Flammability (solid, gas):

No data available

Solubility(ies):

Water: Insoluble

10. STABILITY AND REACTIVITY**Reactivity:**

May spontaneously ignite on contact with air.

Chemical Stability:

Air sensitive.

10. STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: May ignite spontaneously on contact with air.
Conditions to avoid: Air sensitive. Exposure to air.
Incompatible materials: Oxidizing agents
Hazardous Decomposition Products: No data available

11. TOXICOLOGICAL INFORMATION

RTECS Number: VI9069000

Acute Toxicity:
No data available

Skin corrosion/irritation:
No data available

Serious eye damage/irritation:
No data available

Respiratory or skin sensitization:
No data available

Germ cell mutagenicity:
No data available

Carcinogenicity:
No data available

IARC: No data available

NTP: No data available

OSHA: No data available

Reproductive toxicity:
No data available

Routes of Exposure: Inhalation, Eye contact, Ingestion.
Symptoms related to exposure: Inhalation causes irritation of the lungs and respiratory system.
Potential Health Effects: No specific information available; skin and eye contact may result in irritation. May be harmful if inhaled or ingested.
Target organ(s): No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence and degradability: No data available
Bioaccumulative potential (BCF): No data available
Mobility in soil: No data available
Partition coefficient: No data available
n-octanol/water (log P_{ow}):
Soil adsorption (K_{oc}): No data available
Henry's Law: No data available
constant (PaM³/mol)

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.
Disposal of container: Dispose of as unused product. Do not re-use empty containers.
Other considerations: Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

DOT (US)

UN number: UN1378	Proper Shipping Name: Metal catalyst, wetted	Class or Division: 4.2 Spontaneously combustible material.	Packing Group: II
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IATA

UN number: UN1378	Proper Shipping Name: Metal catalyst, wetted	Class or Division: 4.2 Spontaneously combustible material.	Packing Group: II
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IMDG

UN number: UN1378	Proper Shipping Name: Metal catalyst, wetted	Class or Division: 4.2 Spontaneously combustible material.	Packing Group: II
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Air Transport: Cargo Aircraft Only.
EmS number: F-H, S-M

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313:	Not Listed
SARA 302:	Not Listed

State Regulations

State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

Other Information

NFPA Rating:

Health:	0
Flammability:	3
Instability:	3

HMIS Classification:

Health:	0
Flammability:	3
Physical:	3

International Inventories

WHMIS hazard class:	B6: Reactive Flammable Material.
Canada: DSL	On DSL
EC-No:	231-125-0
Notice Through Official Gazettes Reference Number: (Japan)	
ENCS:	Not Listed

16. OTHER INFORMATION

Revision date: 11/20/2013
Revision number: 1

16. OTHER INFORMATION

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.