



# Safety Data Sheet (SDS)

SDS Number: 8125-01

12/05/2009

**EMERGENCY ASSISTANCE** CHEMTREC (International): +1-703-527-3887 (Call Collect)

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

**Product name :** OPARIS® CATALYST  
**COMMON NAME:** Metal Oxide  
**PRODUCT USE:** Catalyst.  
**SUPPLIER:** CRI/Criterion Marketing Asia Pacific Pte Ltd.  
298 Tiong Bahru Road  
#07-03/04/05 Central Plaza,  
Singapore 168730  
+65 6276 3627  
+65 6276 7456 (FAX)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### COMPONENTS OF THE MATERIAL

| Component                      | Chemical Formula | CAS       | Concentration |
|--------------------------------|------------------|-----------|---------------|
| Aluminum oxide/zeolite carrier |                  | Mixture   | > 99 %        |
| Platinum oxide                 | PtO <sub>2</sub> | 1314-15-4 | <1 %          |

## 3. HAZARDS IDENTIFICATION

**Physical Appearance:** Off-White To Gray Extrudates, Odourless

### Human health hazards:

Dusts may be irritating to the nose, throat and respiratory tract.  
May cause sensitization by skin contact.

### Safety hazards:

No specific hazards.

### Environmental precautions:

No specific hazards.

#### 4. FIRST AID MEASURES

**Eye:**

Flush eye with water.

**Skin Contact:**

Wash skin with water and, if available, soap.

**Inhalation:**

Move to fresh air.

**Ingestion:**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Advice to physicians:**

Treat symptomatically. If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed.

#### 5. FIRE FIGHTING MEASURES

**Extinguishing Media:**

Material will not burn; use an extinguishing medium appropriate for the surrounding fire.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:**

Avoid raising a dust cloud. Do not breathe dust. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves. Use either an atmosphere-supplying respirator or an air-purifying respirator for particulates. In a confined space self-contained breathing apparatus may be required.

**Spill Management:**

Prevent contamination of soil and water. Do not wash spills into sewers or other public water systems. Prevent further leakage or spillage and prevent from entering drains.

**Spill Disposal:**

Shovel up and place in a labeled, sealable container for subsequent safe disposal.

#### 7. HANDLING AND STORAGE

**Handling Recommendations:**

Avoid contact with skin and eyes.  
Avoid raising a dust cloud.  
Do not breathe dust.  
Do not eat, smoke or drink in areas where catalyst is present.  
Use only in well ventilated areas. Use local exhaust extraction.  
Take precautionary measures against static discharge.  
Earth all equipment.

**Storage:**

Keep container tightly closed and dry.  
Reseal plastic liner.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls:**

Use only in well ventilated areas. Use local exhaust extraction.

**Hygiene measures:**

Avoid contact with material. Wash hands thoroughly after handling. Do not reuse clothing if contaminated until thoroughly decontaminated.

**Respiratory protection:**

Use either an atmosphere-supplying respirator or an air-purifying respirator for particulates.

**Eye protection:**

Wear safety goggles or glasses to prevent eye contact.

**Hand protection:**

Wear neoprene, nitrile, PVC or latex gloves to prevent contact.

**Body Protection:**

When there is a possibility of exposure wear a one piece coated overall with integral hood, safety boots, chemical-resistant without lace holes.

| Chemical Name  | Authority | Limits                   | Special Notations |
|----------------|-----------|--------------------------|-------------------|
| Platinum oxide | ACGIH     | TWA 1 mg/m <sup>3</sup>  | as Pt             |
| Aluminum oxide | ACGIH     | TWA 10 mg/m <sup>3</sup> | total dust        |

**9. PHYSICAL AND CHEMICAL PROPERTIES**

| Product                           |   |
|-----------------------------------|---|
| Physical & Chemical Properties    | Characteristics                         |
| <b>Appearance and Odour:</b>      | Off-White To Gray Extrudates, Odourless |
| <b>Solubility in water:</b>       | <5%                                     |
| <b>Bulk density (for solids):</b> | 0.60-0.70 g/cc                          |

**10. STABILITY/REACTIVITY****Stability:**

Stable. Hygroscopic.

**Materials to avoid:**

Strong acids, strong bases, strong oxidizing agents.

**11. TOXICOLOGICAL INFORMATION**

The hazard determination and the information presented below is based on available data derived from testing for the material, hazardous components of this material and/or a testing on a substantially similar material(s). The material tested is indicated in the data.

**Sensitization**

| Route      | Material Tested | Description | Species |
|------------|-----------------|-------------|---------|
| Inhalation | Platinum oxide  | Sensitiser  | Human   |

**12. ECOLOGICAL INFORMATION**

Ecotoxicological data have not been determined specifically for this material. The information given below is based on a knowledge of the components and the ecotoxicology of similar products.

**ENVIRONMENTAL IMPACT****Toxicity:**

Not expected to be toxic.

**Persistence & Bioaccumulation:**

Not inherently biodegradable.

**Mobility:**

Sinks in water. Partly dissolves, but significant proportion will remain after one day. If product enters soil, one or more constituents will be mobile and may contaminate groundwater.

**Sewage treatment:**

Not toxic at the limit of water solubility.

**13. DISPOSAL CONSIDERATIONS****Product disposal:**

Recover or recycle, if possible. Otherwise: Send to an approved contractor for regeneration or metal recovery or dispose with a licensed disposal contractor.

**Waste disposal:**

If product is unused, see above. If used, evaluate the toxicity and physical properties of the material you have generated and dispose of the material in accordance with local, state and federal regulations.

**Container disposal:**

Empty containers may contain residues. Ensure container is properly cleaned. Do not cut, puncture, torch or weld on or near the emptied container. Send drum to a drum recoverer or metal reclaimer. Remove all packaging for recovery or waste disposal. **DO NOT USE CONTAINER FOR OTHER PURPOSES.**

**Regulatory Controls:**

Comply with all federal, state and local laws regulating the handling and disposal of wastes.

**14. TRANSPORT INFORMATION****Transport Statement:**

Not dangerous for conveyance under UN, USA DOT, Canadian TDG, IMO, ADR/RID and IATA/ICAO codes. Consult local laws to determine transportation regulations.

#### Road/Rail Transportation

Not dangerous for conveyance by Road/Rail

#### Road/Rail Transport ADR/RID:

Not dangerous for conveyance under ADR/RID codes.

#### Maritime transport (IMO)

Not dangerous for conveyance under IMO codes.

#### Air transport ICAO/IATA

Not dangerous for conveyance under IATA/ICAO codes.

### 15. REGULATORY INFORMATION

#### National Inventories

| National Authority | Country     | Status                 |
|--------------------|-------------|------------------------|
| EINECS/ELINCS      | EC          | All components listed. |
| TSCA               | USA         | All components listed. |
| MITI               | Japan       | All components listed. |
| DSL/NDSL           | Canada      | All components listed. |
| TCCL               | Korea       | All components listed. |
| AICS               | Australia   | All components listed. |
| PICCS              | Philippines | All components listed. |
| IECS               | China       | All components listed. |

#### European Community

|                |   |
|----------------|---|
| Label Name     | Contains platinum oxide. May produce an allergic reaction.  |
| Classification | Not classified as dangerous under EC criteria.  |
| Safety Phrases | <b>S22:</b> Do not breathe dust.<br><b>S24:</b> Avoid contact with skin.<br><b>S38:</b> In case of insufficient ventilation, wear suitable respiratory equipment. |

**16. OTHER INFORMATION**

**SDS Prepared By:** CRI/Criterion, Inc.  
16825 Northchase Drive, Suite #1110  
Houston, TX 77060 (USA)  
+1 281-874-2600 (USA CST)  
Product.Steward@CRI-Criterion.com

**Uses and restrictions:**

Use as a raw material/intermediate for catalyst manufacture, as a catalyst for refinery processing or for petrochemicals manufacture.

**SDS distribution:**

The information in this document should be made available to all who may handle the product.

**Amendment Notation:**

Amendments from the previous version of the MSDS are indicated by two vertical bars in the left margin and the section is highlighted.

**Disclaimer:**

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not, therefore, be construed as guaranteeing any specific property of the product.

**Date of issue:**

12/04/2009

International - (British English)