

**Safety Data Sheet**  
according to WHS Regulations

Print date: 05.06.2024

Revision date: 31.05.2024

**1 Identification**

**Product Name: OREAS (RADA)**

**Other Means of Identification:** Mixture

**Other Name:**

All products are branded 'OREAS' followed by a number ± letter  
100a, 101a, 101b, 102a, 104, 105, 106, 120, 121, 122, 123, 124, 146

**Recommended Use of the Chemical and Restriction on Use:** Reference material

**Details of Manufacturer or Importer:**

Ore Research & Exploration Pty Ltd  
37A Hosie Street  
Bayswater North VIC 3153

**Phone Number:** 03 9729 0333

**Emergency telephone number:** 03 9729 0333

**2 Hazard(s) Identification**

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), IATA and IMDG/IMSBC.



Skull and crossbones

Acute Toxicity (Oral) 3      H301 Toxic if swallowed.



Health hazard

Carcinogenicity 1A      H350i May cause cancer by inhalation.

STOT RE 1      H372 Causes damage to organs through prolonged or repeated exposure.



Acute Toxicity (Inhalation) 4      H332 Harmful if inhaled.

Aquatic Chronic 3      H412 Harmful to aquatic life with long lasting effects.

**Signal Word** Danger

**Hazard Statements**

H301 Toxic if swallowed.

H332 Harmful if inhaled.

H350i May cause cancer by inhalation.

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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- P271 Use only outdoors or in a well-ventilated area.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P321 Specific treatment (see on this label).  
 P330 Rinse mouth.  
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P312 Call a POISON CENTER/doctor if you feel unwell.  
 P314 Get medical advice/attention if you feel unwell.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition and Information on Ingredients

#### Chemical Characterization: Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

#### Hazardous Components:

CAS: 7631-86-9	Silica ☠ Carcinogenicity 1A, H350i; STOT RE 1, H372	30-82%
CAS: 7440-50-8	Copper 🐠 Aquatic Chronic 2, H411	0.01-<3%
CAS: 7440-61-1	Uranium ☠ Acute Toxicity (Oral) 1, H300; Acute Toxicity (Inhalation) 1, H330; ☠ STOT RE 2, H373	<0.2%

#### Non Hazardous Components:

CAS: 1309-37-1	Iron(III) oxide	1-10%
CAS: 12001-26-2	Potassium Aluminum Silicate	1-10%

### 4 First Aid Measures

**Inhalation:** If inhaled, remove to fresh air. Seek medical attention if breathing problems develop.

#### Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if irritation occurs.

#### Eye Contact:

In case of eye contact, rinse with water for several minutes, including under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

#### Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

#### Symptoms Caused by Exposure:

Inhalation: Harmful if inhaled. May cause cancer by inhalation. May cause respiratory irritation.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Toxic if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

### 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use fire extinguishing methods suitable to surrounding conditions.

#### Specific Hazards Arising from the Chemical:

Hazardous combustion products include toxic gases.

Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

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Prevent run-off from fire fighting entering drains or water courses.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

## 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses. Inform respective authorities in case of seepage into water course or sewage system.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and sweep granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Provide adequate ventilation. Decontaminate spill area with detergent and water.

## 7 Handling and Storage

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Keep away from strong oxidising agents such as fluorine, bromine trifluoride, chlorine trifluoride, manganese trifluoride, oxygen difluoride, and ozone; acids such as hydrofluoric acid, and hydrochloric acid; strong alkalis; vinyl acetate, and xenon hexafluoride.

## 8 Exposure Controls and Personal Protection

**Exposure Standards:****CAS: 7631-86-9 Silica**WES TWA: 2 mg/m<sup>3</sup>**CAS: 1309-37-1 Iron(III) oxide**WES TWA: 5 mg/m<sup>3</sup>**CAS: 12001-26-2 Potassium Aluminum Silicate**WES TWA: 2.5 mg/m<sup>3</sup>**CAS: 7440-50-8 Copper**WES TWA: 1\* 0.2\*\* mg/m<sup>3</sup>  
\*dust & mists (as Cu) \*\*fume**CAS: 7440-61-1 Uranium**WES STEL: 0.6 mg/m<sup>3</sup>  
TWA: 0.2 mg/m<sup>3</sup>  
as U**Engineering Controls:**

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

**Respiratory Protection:**

Where an inhalation risk exists, wear approved particulate respirator (filter type P). At high dust levels, wear a powered air purifying respirator (PAPR) with P3 filter or an air-line respirator or a full-face P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

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**Skin Protection:**

Protective gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

### 9 Physical and Chemical Properties

**Appearance:**

<b>Form:</b>	Powder
<b>Colour:</b>	Pale grey to tan to dark grey
<b>Odour:</b>	None
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	Not applicable
<b>Melting point/freezing point:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	No information available
<b>Flash Point:</b>	Not applicable
<b>Flammability (solid, gas):</b>	No information available
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	No information available
<b>Upper:</b>	No information available
<b>Vapour Pressure:</b>	Not applicable
<b>Density:</b>	No information available
<b>Evaporation Rate:</b>	Not applicable
<b>Solubility in Water:</b>	Insoluble
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>Viscosity:</b>	No information available

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** No dangerous reactions known under conditions of normal use.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of storage and use.

**Conditions to Avoid:** No further relevant information available.

**Incompatible Materials:**

Strong oxidising agents such as fluorine, bromine trifluoride, chlorine trifluoride, manganese trifluoride, oxygen difluoride, and ozone; acids such as hydrofluoric acid, and hydrochloric acid; strong alkalis; vinyl acetate, and xenon hexafluoride.

**Hazardous Decomposition Products:** Toxic gases.

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## 11 Toxicological Information

**Toxicity:****LD50/LC50 Values:****CAS: 7631-86-9 Silica**

Oral LD50 10,000 mg/kg (Rattus norvegicus (rat))

**CAS: 1309-37-1 Iron(III) oxide**

Oral LD50 &gt;15,000 mg/kg (Rattus norvegicus (rat))

**CAS: 7440-50-8 Copper**

Oral LD50 &gt;2,000 mg/kg (Rattus norvegicus (rat))

**Acute Health Effects****Inhalation:** Harmful if inhaled. May cause cancer by inhalation. May cause respiratory irritation.**Skin:** May cause skin irritation.**Eye:** May cause eye irritation.**Ingestion:** Toxic if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:**

Crystalline silica and uranium are classified by IARC as Group 1 - Carcinogenic to humans.

May cause cancer by inhalation.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Causes damage to organs through prolonged or repeated exposure.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No data associated with long term health effects.**Existing Conditions Aggravated by Exposure:** No data available.

## 12 Ecological Information

**Ecotoxicity:****Aquatic toxicity:**

Harmful to aquatic life with long lasting effects.

**CAS: 7440-50-8 Copper**

EC50/48 h 0.792 mg/l (Daphnia magna (water flea))

EC50/72 h 0.333 mg/l (Algae)

LC50/96 h 0.0068-0.0156 mg/l (Pimephales promelas (fathead minnow))

**Persistence and Degradability:** No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.

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**Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

## 14 Transport Information

**UN Number** Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

## 15 Regulatory Information

**Australian Inventory of Industrial Chemicals:** All ingredients are listed.**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:**

Not a scheduled poison.

## 16 Other Information

**Date of Preparation or Last Revision:** 31.05.2024**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 1: Acute toxicity – Category 1

Acute Toxicity (Oral) 3: Acute toxicity – Category 3

Acute Toxicity (Inhalation) 4: Acute toxicity – Category 4

Carcinogenicity 1A: Carcinogenicity – Category 1Ai

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020".

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Ore Research & Exploration Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.