Safety Data Sheet

according to WHS Regulations

Print date: 23.11.2026 Revision date: 23.11.2026

1 Identification

Product Name: OREAS (NRAM)

Other Means of Identification: Not applicable

Product Description: Certified Reference Material (CRM), powdered geological material (rock powder).

Products branded 'OREAS' followed by a number ± letter:

2Ca, 2Pa, 2Pd,,4Pb, 5Pb, 6Ca, 6Pa, 6Pb, 6Pc, 7Ca, 7Pa, 7Pb, 10c, 12a, 13P, 13b, 13c, 14P, 15Pa, 15Pb, 15Pc, 15d, 16a, 16b, 17Pb, 17c, 18Pa, 18Pb, 18c, 19a, 20a, 20b, 21e, 21f, 21h, 22c, 22d, 22e, 22f, 22h, 22i, 22j, 23a, 23b, 23c, 24P, 24b, 24c, 24d, 24e, 25a, 25b, 26a, 26b, 27, 27b, 30a, 32, 33, 34h, 34i, 34j, 34k, 36, 37, 38, 40, 42P, 43P, 44P, 45b, 45c, 45d, 45e, 45f, 45h, 45P, 46, 47, 48, 49, 50P, 50c, 50Pb, 51P, 52P, 52c, 52Pb, 53P, 53Pb, 54Pa, 55P, 56P, 59a, 59b, 59c, 59d, 60P, 60b, 60c, 60d, 60e, 61Pa, 61Pb, 61d, 61e, 61f, 61h, 62Pa, 62Pb, 62c, 62d, 62e, 62f, 62h, 63, 64, 65a, 66a, 67a, 68a, 70b, 70P, 72a, 72b, 73a, 73b, 74a, 74b, 75a, 75b, 76a, 76b, 77a, 77b, 78, 80, 81, 84, 85, 86, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 99b, 100a, 101a, 101b, 102a, 110, 111, 111b, 112, 113, 114, 115, 130, 131a, 131b, 132a, 132b, 133a, 133b, 134a, 134b, 135, 135b, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151a, 151b, 151c, 152a, 152b, 152c, 153a, 153b, 153c, 160, 161, 161b, 162, 163, 163b, 164, 165, 166, 170a, 170b, 171, 172, 173, 174, 175, 180, 180b, 181, 181b, 182, 182b, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 211b, 212, 213, 214, 215, 216, 216b, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 228b, 229, 229b, 230, 230b, 231, 231b, 231c, 232, 232b, 232c, 233, 233b, 234, 234b, 235, 235b, 236, 236b, 237, 237b, 238, 238b, 238c, 239, 239b, 239c, 240, 240b, 240c, 241, 241b, 242, 242b, 243, 243b, 245, 245b, 247, 247b, 249, 250, 250b, 250c, 251, 251b, 251c, 252, 252b, 252c, 253, 253b, 254, 254b, 254c, 255, 255b, 255c, 256, 256b, 257, 257b, 258, 260, 261, 262, 262b, 263, 263b, 264, 264b, 265, 266, 267, 268, 270, 272, 273, 274, 277, 277b, 278, 278b, 279, 279b, 281, 282b, 284, 282, 284, 285, 286, 287, 288, 289, 290, 290b, 291, 291b, 292, 293, 294, 295, 296, 297, 298, 299, 313, 314, 315, 316, 317, 319, 320, 340, 349, 350, 351, 352, 353, 353b, 353c, 354, 354b, 401, 402, 403, 404, 405, 406, 407, 408, 411, 412, 413, 415, 452, 453, 455, 460, 460b, 461, 462, 463, 464, 464b, 465, 465b, 466, 467, 470, 471, 472, 473, 474, 501, 501b, 501c, 501d, 501e, 502, 502b, 502c, 502d, 503, 503b,503c, 503d, 503e, 504, 504b, 504c, 504d, 505, 505b, 506, 506b, 507, 507b, 508, 509, 520, 520c, 521, 521b, 522, 523, 523b, 524, 525, 550, 550b, 551, 551b, 552, 552b, 553, 553b, 554, 554b, 555, 555b, 556, 556b, 600, 600b, 600c, 601, 601b, 601c, 601d, 602, 602b, 602c, 603, 603b, 603c, 604, 604b, 605, 605b, 606, 606b, 607, 607b, 607c, 608, 608b, 609, 609b, 609c, 610, 610b, 611, 611b, 612, 613, 614, 615, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 630b, 680, 680b, 681, 682, 683, 683b, 684, 700, 701, 702, 703, 712, 713, 722, 723, 723b, 724, 725, 725b, 733, 737, 738, 739, 740, 741, 742, 743, 744, 750, 750b, 751, 751b, 752, 752b, 753, 753b, 754, 755, 780, 782, 901, 902, 903, 904, 905, 905b, 906, 906b, 907, 907b, 908, 908b, 909, 911, 912, 913, 920, 920b, 921, 921b, 922, 922b, 923, 924, 925, 926, 926b, 927, 927b, 928, 928b, 929, 929b, 930, 931, 931b, 931c, 932, 932b, 932c, 933, 934, 935, 990, 990b, 990c, 991, 992, 992b, 993, 993b, 994, 995, 996, 999, 999b, C26c, C26d, C26e, C26f, C27c, C27d, C27e, C27f, C27h, H1, H3, H5, L11, L11b, L12, L12b, L13, L13b, L14, L14b, L15, L15b, L16, AQW CRM 001, WON14, WON20, WON25, WON30.

Products branded 'AnalytiChem':
AC18.10657.0100, AC18.10658.0100, AC18.10659.0100, AC18.10660.0100, AC18.10661.0100, AC18.10662.0100, AC18.10663.0100.

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
AUSTRALIA

Phone Number: +61 (0)3 9729 0333 **Emergency telephone number:** +61 (0) 3 9729 0333

Email: info@ore.com.au **Website:** www.oreas.com

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Product Name: OREAS (NRAM)

AnalytiChem group company contacts:

Country	Company and address	Business telephone
Belgium	AnalytiChem Belgium, Industriezone “De Arend” 2, 8210 Zedelgem, Belgium	+32 50 28 83 20
Germany	AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany	+49 203 51 94 200
Netherlands	AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, Netherlands	+31 297 286848
Portugal	AnalytiChem Services, Unipessoal, Lda, Rua de Júlio Dinis 676 7º, P4050320 Porto, Portugal	+351 226002917
UK	AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England	+44 1869 355 500
USA	AnalytiChem USA, 227 China Road, Winslow, Maine 04901, United States	+1 800 244 8378
Canada	AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d’Urfe, H9X 4B6, Canada	+1 514 457 0701

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.


Health hazard

Carcinogenicity 1A H350i May cause cancer by inhalation.

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

Signal Word Danger

Hazard Statements
H350i May cause cancer by inhalation.
H372 Causes damage to organs through prolonged or repeated exposure.

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.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF EXPOSED or concerned: Get medical advice/attention.
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.

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Product Name: OREAS (NRAM)

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	≤65%

Non-Hazardous Components:		
CAS: 1332-58-7	Kaolin	≤90%
CAS: 1309-37-1	Iron(III) oxide	≤25%
CAS: 12001-26-2	Potassium Aluminum Silicate	≤20%
CAS: 471-34-1	Calcium carbonate	≤15%

4 First Aid Measures

Inhalation: If inhaled, move persons 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 medical attention if feeling unwell.

Symptoms Caused by Exposure:
Inhalation: May cause respiratory irritation. May cause cancer by inhalation.
Skin Contact: May cause skin irritation.
Eye Contact: May cause eye irritation.
Ingestion: 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:
No hazardous decomposition products known.
The 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.
Minimise 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.

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6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear protective equipment. Keep unprotected persons away.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:
Avoid generating airborne dust. Collect spilled material using an appropriate HEPA-filtered vacuum system or controlled wet-cleaning methods. Do not dry sweep or use compressed air. Place collected material in a suitable sealed container for disposal in accordance with applicable requirements.

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, chlorine trifluoride, oxygen trifluoride; and hydrofluoric acid.

8 Exposure Controls and Personal Protection

Workplace Exposure Limits:	
CAS: 1332-58-7 Kaolin	
WEL	TWA: 10 mg/m³ inhalable dust
CAS: 12001-26-2 Potassium Aluminum Silicate	
WEL	TWA: 2.5 mg/m³
CAS: 471-34-1 Calcium carbonate	
WEL	TWA: 10 mg/m³ inhalable dust
CAS: 1309-37-1 Iron(III) oxide	
WEL	TWA: 5 mg/m³
CAS: 7631-86-9 Silica	
WEL	TWA: 0.05 mg/m³

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.

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:
Safety glasses with top and side shields or goggles. See Australian/New Zealand Standards AS/NZS 1336 and 1337 for more information.

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9 Physical and Chemical Properties

Appearance:	
Form:	Powder
Colour:	Pale to dark grey, light brown to deep red brown
Odour:	Characteristic
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	1100-1300 °C
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable
Flammability (solid, gas):	No information available
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density:	2.2-3.6
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Insoluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	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, chlorine trifluoride, oxygen trifluoride; and hydrofluoric acid.

Hazardous Decomposition Products: No hazardous decomposition products known.

11 Toxicological Information

Toxicity:

LD50/LC50 Values:		
CAS: 7631-86-9 Silica		
Oral	LD50	10,000 mg/kg (Rattus norvegicus (rat))

Acute Health Effects
Inhalation: May cause respiratory irritation. May cause cancer by inhalation.
Skin: May cause skin irritation.
Eye: May cause eye irritation.
Ingestion: 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.

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Carcinogenicity:
Silica dust, crystalline, is 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:
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and Degradability: No data available on finished product.

Bio-accumulative Potential: No data available on finished product.

Mobility in Soil: No data available on finished product.

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.

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16 Other Information

Date of Preparation or Last Revision: 23.11.2026

Prepared by: MSDS.COM.AU Pty Ltd 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)
Carcinogenicity 1A: Carcinogenicity – Category 1Ai
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

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”.
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