

CHAITANYA CHS, 2nd FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAł 400062, MH, INDIA. CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

MATERIAL SAFETY DATA SHEET (MSDS)

NIOBIUM PENTOXIDE AR

1. Identification of the substance/mixture and of the company/undertaking

| <u>1.1. Product identifier</u> Trade name | : NIOBIUM PENTOXIDE AR | |
|--|--|--|
| Product code Identification of the product | : N0146400500 : NIOBIUM PENTOXIDE 99.9% AR CAS No: 1313-96-8 | |
| 1.2. Relevant identified uses of the substance or mixture and uses advised against | | |
| Use | : Industrial. For professional use only. | |
| 1.3. Details of the supplier of the safety data sheet | | |
| Company identification | SUVCHEM Chaitanya Tower, 2nd Floor, Office # 206, Siddharth Nagar, S.V. Road, Goregaon (West), Mumbai - 400062, Maharashtra, India. Contact: +91 22 28725393 / 94 / 95 Email ID: info@suvchem.com/care@suvchem.com | |
| 1.4. Emergency telephone number | | |
| Phone no. | : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours] | |

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

| Classification | : Xi; R36/37/38 |
|---------------------------|---|
| Hazard Class and Category | <u>v Code(s), Regulation (EC) No 1272/2008 (CLP)</u> |
| Health hazards | : Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation - Category 3 - Warning (CLP : STOT SE 3) H335 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315 Acute toxicity, Oral - Category 4 - Warning (CLP : Acute Tox. 4) H302 Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319 |

Labelling EC 67/548 or EC 1999/45



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2. Hazards identification -DSD (continued)

Symbol(s)



| Symbol(s) R Phrase(s) | : Xi : Irritant : 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. S36 : Wear suitable protective clothing. |
| Labelling Regulation EC 1272/2008 (C | CLP) |
| Hazard pictograms | |
| Signal words | : Warning |
| Hazard statements | H302 : Harmful if swallowed. H319 : Causes serious eye irritation. H315 : Causes skin irritation. H335 : May cause respiratory irritation. |
| Precautionary statements | |
| Prevention | P280: Wear protective gloves, protective clothing, eye protection, face protection. P271: Use only outdoors or in a well-ventilated area. P261: Avoid breathing dust, fume, gas, mist, vapours, spray. P264: Wash thoroughly after handling. P270: Do not eat, drink or smoke when using this product. |
| Response | : P302+P352: IF ON SKIN : Wash with plenty of soap and water. P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel |
| | unwell. P332+P313: If skin irritation occurs : Get medical advice. P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing. |
| | P363: Wash contaminated clothing before reuse. |
| Storage | : P403+P233: Store in well-ventilated place. Keep container tightly closed. P405: Store locked up. |
| Disposal considerations | P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| 2.3. Other hazards | |
| Other hazards | : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH. |



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3. Composition/information on ingredients Substance / Preparation : NIOBIUM PENTOXIDE 99.9% AR Substance. Contains no other components or impurities which will influence the classification of the product. 4. First aid measures 4.1. Description of first aid measures Inhalation : Call a POISON CENTER or doctor if you feel unwell. Remove to fresh air and keep at rest in a position comfortable for breathing. : Specific treatment (see on this label). Get medical advice. If skin irritation occurs : Skin contact Wash with plenty of soap and water. Wash contaminated clothing before reuse. : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse Eye contact cautiously with water for several minutes. If eye irritation persists : Get medical advice. Ingestion : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed Symptoms relating to use : Swallowing a small quantity of this material will result in serious health hazard. Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. 4.3. Indication of any immediate medical attention and special treatment needed : Never give anything by mouth to an unconscious person. If you feel unwell, seek **General information** medical advice (show the label where possible). 5. Fire-fighting measures

5.1. Extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.Suitable extinguishing media: Do not use a heavy water stream.Surrounding fires: Use water spray or fog for cooling exposed containers.5.2. Special hazards arising from the substance or mixtureHazardous combustion products: Under fire conditions, hazardous fumes will be present.5.3. Advice for fire-fighters



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| 5. Fire-fighting measures (continued) | | |
|---------------------------------------|--|--|
| Protection against fire | : Do not enter fire area without proper protective equipment, including respiratory protection. | |
| Special procedures | : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment. | |
| | | |
| 6. Accidental release measures | | |
| 6.1. Personal precautions, protecti | ve equipment and emergency procedures | |
| For emergency responders | : Equip cleanup crew with proper protection. Ventilate area. | |
| For non-emergency personnel | : Evacuate unnecessary personnel. | |
| 6.2. Environmental precautions | | |
| Environmental precautions | : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. | |
| 6.3. Methods and material for cont | ainment and cleaning up | |
| Clean up methods | : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials. | |
| 6.4. Reference to other sections | | |
| See section 8. Exposure controls/per | rsonal protection | |

| _ | | | _ | | |
|----|-----|-------|-----|--------|---|
| 7. | Han | dlina | and | storag | e |

7.1. Precautions for safe handling

| Handling | : Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. | |
|---|---|--|
| Technical protective measures | : Provide good ventilation in process area to prevent formation of vapour. | |
| Special precautions | : Avoid breathing dust, fume, gas, mist, vapours, spray. | |
| 7.2. Conditions for safe storage, including any incompatibilities | | |
| Storage | : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed. | |
| Storage - away from | : Strong bases. Strong acids. Sources of ignition. Direct sunlight. | |
| <u>7.3. Specific end use(s)</u> | | |



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| 7. Handling and storage (continued) | |
|--|---|
| Specific end use(s) | : None. |
| | |
| 8. Exposure controls/personal prof | ection |
| 8.1. Exposure controls | |
| Personal protection | : Avoid all unnecessary exposure. |
| Respiratory protection | : Wear approved mask. |
| Hand protection | : Wear protective gloves. |
| Skin protection | : Wear suitable protective clothing. |
| Eye protection | : Chemical goggles or safety glasses. |
| Others | : When using, do not eat, drink or smoke. |
| 8.2. Control parameters | |
| Occupational Exposure Limits | : No data available. |
| | |

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state at 20 °C Colour | : Solid. : White crystalline |
|-----------------------------------|---------------------------------|
| Odour | : Odorless |
| Odour threshold | : No data available. |
| pH value | : Not applicable. |
| Melting point [°C] | : 1520 °C |
| Decomposition point [°C] | : N/A |
| Critical temperature [°C] | : N/A |
| Auto-ignition temperature [°C] | : N/A |
| Flammability (solid, gas) | : N/A |
| Flash point [°C] | : N/A |
| Boiling point [°C] | : N/A |
| Initial boiling point [°C] | : N/A |
| Final boiling point [°C] | : N/A |
| Evaporation rate | : N/A |
| Vapour pressure [20°C] | : N/A |
| Vapour pressure mm/Hg | : N/A |
| Vapour density | : N/A |



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9. Physical and chemical properties (continued)

| Density [g/cm3] Relative density, gas (air=1) Relative density, liquid (water=1) Solubility in water [% weight] Solubility in water Log Pow octanol / water at 20°C | : 4,47 : N/A : N/A : Insoluble in water : N/A : No data available. : N/A |
|--|--|
| Solubility Viscosity at 40°C [mm2/s] | . N/A : N/A |
| 9.2. Other information | |
| Explosive properties | : N/A |
| Explosion limits - upper [%] | : N/A |
| Explosion limits - lower [%] | : N/A |
| Oxidising properties | : No data available. |

10. Stability and reactivity

| 10.1. Reactivity | | |
|--|--|--|
| Reactivity | : Not established. | |
| 10.2. Chemical stability | | |
| Chemical stability | : Stable under recommended storage conditions. | |
| 10.3. Possibility of hazardous reactions | | |
| Hazardous reactions | : Not established. | |
| 10.4. Conditions to avoid | | |
| Conditions to avoid | : Direct sunlight. Extremely high or low temperatures. | |
| 10.5. Incompatible materials | | |
| Materials to avoid | : Strong acids. Strong bases. | |
| 10.6. Hazardous decomposition products | | |
| Hazardous decomposition products | : Fumes. Carbon monoxide. Carbon dioxide. | |



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11. Toxicological information

11.1. Information on toxicological effects

| Acute toxicity | |
|------------------------|--|
| Inhalation | : Based on available data, the classification criteria are not met. |
| • Dermal | : Based on available data, the classification criteria are not met. |
| Ingestion | : Harmful if swallowed. |
| Corrosion | : Based on available data, the classification criteria are not met. |
| Irritation | : Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. |
| Sensitization | : Based on available data, the classification criteria are not met. |
| Mutagenicity | : Based on available data, the classification criteria are not met. |
| Carcinogenicity | : Based on available data, the classification criteria are not met. |
| Toxic for reproduction | : Based on available data, the classification criteria are not met. |
| STOT-single exposure | : Based on available data, the classification criteria are not met. |
| STOT-repeated exposure | : Based on available data, the classification criteria are not met. |
| Aspiration hazard | : Based on available data, the classification criteria are not met. |

12. Ecological information

| <u>12.1. Toxicity</u> | |
|---|---|
| Toxicity information | : Not established. |
| <u> 12.2. Persistence - degradability</u> | |
| Persistence - degradability | : Biodegradable. |
| 12.3. Bioaccumulative potential | |
| Bioaccumulative potential | : Not established. |
| <u>12.4. Mobility in soil</u> | |
| Mobility in soil | : Not established. |
| 12.5. Results of PBT and vPvB assessment | |
| Results of PBT and vPvB assessme | ent : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH. |
| 12.6. Other adverse effects | |



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| 12. Ecological information (continued) | |
|--|---|
| Environmental precautions | : Avoid release to the environment. |
| 13. Disposal considerations | |
| | |
| 13.1. Waste treatment methods | |
| General | Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| 14. Transport information | |
| <u>14.1. Land transport (ADR-RID)</u> | |
| General information | : Not regulated. |
| 14.2. Sea transport (IMDG) [English only] | |
| General information | : Not regulated. |
| 14.3. Air transport (ICAO-IATA) [English only] | |
| General information | : Not regulated. |
| 45 Demulatema la facer di | |
| 15. Regulatory information | |
| 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture | |
| Safety, health and environmental regulations/legislation specific for the substance or mixture | : Ensure all national/local regulations are observed. e |
| REACH Restrictions - Annex XVII | : The components of this product are not subject to restrictions. |
| REACH Authorisation - Annex XIV | : The components of this product are not subject to authorization. |
| 15.2. Chemical Safety Assessment | |
| Chemical Safety Assessment | : It has not been carried out. |



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In accordance with REACH Regulation (CE) Nº 1907/2006 and with CLP Regulation (CE) Nº 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- SUVCHEM provides the information contained herein in good faith but makes no representation as to its
 comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of
 the material by a properly trained person using this product.

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