SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Vanadyl Oxalate

Product Code: VO-OXL-05-P

CAS Number: 15500-04-6

Relevant identified uses of the substance: Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

GHS classification
Classification of the substance or mixture

Acute toxicity - Oral Category 4
Serious eye damage/eye irritation Category 2A

Signal word: Warning

Hazard statements:
H302 - Harmful if swallowed
H319 - Causes serious eye irritation

Precautionary statements:
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves, protective clothing, eye protection, face protection

IF IN EYES:
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Dispose of contents/container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Vanadyl Oxalate
Weight: 20.0-25.0 (vanadium), 35.0-45.0 (C2O4)%
CAS No. 15500-04-6

SECTION 4. FIRST AID MEASURES

Inhalation:
Remove to fresh air. If symptoms persist, call a physician.

Skin contact:
Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion:
Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders:
Use personal protective equipment as required.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media:
No information available

Special extinguishing method:
No information available

Specific hazards arising from the chemical product:
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of fire-fighters:
Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions:
To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up:
Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization:
No information available

Secondary disaster prevention measures:
Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Handling
Technical measures:
Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions:
Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions:
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage
Storage conditions:
Store away from sunlight in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Store locked up.

Safe packaging material:
Glass

Incompatible substances:
Strong oxidizing agents
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:
In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

Exposure limits:
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name: Vanadyl Oxalate
CAS No. 15500-04-6
ISHL (Japan): N/A
ACGIH: N/A

Personal protective equipment:
Respiratory protection: Dust mask
Hand protection: Protection gloves
Eye protection: Protective eyeglasses or chemical safety goggles
Skin and body protection: Long-sleeved work clothes

General hygiene considerations:
Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: blue
Appearance: powder or mass
Odor: No data available
pH: No data available
Melting point/freezing point: No data available
Boiling point, initial boiling point and boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability (solid, gas): No data available
Upper/lower flammability or explosive limits
Upper? No data available
Lower? No data available
Vapour pressure: No data available
Vapour density: No data available
Specific Gravity Relative density: No data available
Solubilities water: sparingly soluble
n-Octanol/water partition coefficient:(log Pow): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity (coefficient of viscosity): No data available
Dynamic viscosity: No data available

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.
Reactivity: No data available
Hazardous reactions:
None under normal processing

Conditions to avoid:
Extremes of temperature and direct sunlight

Incompatible materials:
Strong oxidizing agents

Hazardous decomposition products:
Carbon monoxide (CO), Carbon dioxide (CO2), Vanadium oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity: No data available
Skin irritation/corrosion: No data available
Serious eye damage/ irritation: No data available
Respiratory or skin sensitization: No data available
Reproductive cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
STOT-single exposure: No data available
STOT-repeated exposure: No data available
Aspiration hazard: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: No information available
Other data: No data available
Persistence and degradability: Degree of decomposition?37 % by BOD (METI Existing chemical safety inspections)
Bioaccumulative potential: No information available
Mobility in soil: No information available
Hazard to the ozone layer: No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from residues:
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging:
Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

ADR/RID Not regulated
UN number - Proper shipping name:
UN classification
Subsidiary hazard class
Packing group
Marine pollutant Not applicable

IMDG Not regulated
UN number - Proper shipping name:
UN classification
Subsidiary hazard class
Packing group
Marine pollutant (Sea) Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: No information available

IATA Not regulated
UN number - Proper shipping name:
UN classification
Subsidiary hazard class
Packing group
Environmentally Hazardous Substance Not applicable

SECTION 15. REGULATORY INFORMATION

International Inventories
EINECS/ELINCS -
TSCA -

Japanese regulations
Fire Service Act Not applicable
Poisonous and Deleterious Substances Control Law
Deleterious Substances 3rd. Grade
Industrial Safety and Health Act Not applicable
Regulations for the carriage and storage of dangerous goods in ship
Not applicable
Civil Aeronautics Law Not applicable
Pollutant Release and Transfer Register Law
Class 1
Class 1 - No. 321
Export Trade Control Order Not applicable

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2019 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.