

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

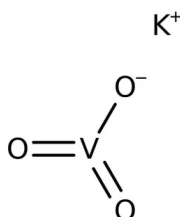
SDS Reference Number: 05462

Issue date: 4/9/2014 Revision date: 10/18/2024 Supersedes version of: 4/9/2015 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Trade name : POTASSIUM METAVANADATE EXTRA PURE  
EC-No. : 237-388-8  
CAS-No. : 13769-43-2  
Product code : 05462  
Type of product : Inorganic compound  
Formula : KVO<sub>3</sub>  
Chemical structure :



Synonyms : Potassium vanadate (V), Potassium vanadium trioxide

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### 1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai  
INDIA  
T +91 22 6663 6663, F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com), [www.lobachemie.com](http://www.lobachemie.com)

#### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

|   |      |
|---|------|
| Acute toxicity (oral), Category 1                             | H300 |
| Acute toxicity (dermal), Category 1                           | H310 |
| Acute toxicity (inhal.), Category 2                           | H330 |
| Skin corrosion/irritation, Category 2                         | H315 |
| Serious eye damage/eye irritation, Category 2                 | H319 |
| Specific target organ toxicity – Single exposure, Category 3, | H335 |
| Respiratory tract irritation                                  |      |

Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS06

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H300+H310+H330 - Fatal if swallowed, in contact with skin or if inhaled.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.

Precautionary statements (CLP)

: P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective clothing, eye protection, face protection, protective gloves.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P302+P352 - IF ON SKIN: Wash with plenty of water.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

| Name                   | Product identifier                       | %   |
|------------------------|--|-----|
| POTASSIUM METAVANADATE | CAS-No.: 13769-43-2<br>EC-No.: 237-388-8 | 100 |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : Immediately call a POISON CENTER/doctor. Specific measures (see supplemental first aid instruction on this label). Gently wash with plenty of soap and water. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Wash with plenty of water/.... If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth. Immediately call a POISON CENTER/doctor. Specific treatment (see supplemental first aid instruction on this label).

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Fatal in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Fatal if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### For emergency responders

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Stop release.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.  
Hygiene measures : Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in original container. Store in a dry place. Protect from moisture.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

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### 8.2. Exposure controls

#### Personal protection equipment

Personal protective equipment symbol(s):



#### Eye and face protection

**Eye protection:**

Chemical goggles or safety glasses

#### Skin protection

**Skin and body protection:**

Wear a mask

**Hand protection:**

Protective gloves

#### Respiratory protection

**Respiratory protection:**

Wear respiratory protection

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                                   |
|---|-----------------------------------|
| Physical state                                  | : Solid                           |
| Colour  | : White to light yellow.          |
| Appearance                                      | : Powder.                         |
| Molecular mass                                  | : 138.04 g/mol                    |
| Odour   | : Odourless.                      |
| Odour threshold                                 | : Not available                   |
| Melting point                                   | : 520 °C                          |
| Freezing point                                  | : Not available                   |
| Boiling point                                   | : Not available                   |
| Flammability                                    | : Not available                   |
| Lower explosion limit                           | : Not applicable                  |
| Upper explosion limit                           | : Not applicable                  |
| Flash point                                     | : Not applicable                  |
| Auto-ignition temperature                       | : Not applicable                  |
| Decomposition temperature                       | : Not available                   |
| pH  | : Not available                   |
| pH solution                                     | : Not available                   |
| Viscosity, kinematic                            | : Not applicable                  |
| Solubility                                      | : Water: Soluble in water         |
| Partition coefficient n-octanol/water (Log Kow) | : Not available                   |
| Vapour pressure                                 | : Not available                   |
| Vapour pressure at 50°C                         | : Not available                   |
| Density   | : 2.84 g/cm <sup>3</sup> at 25 °C |
| Relative density                                | : Not available                   |
| Relative vapour density at 20°C                 | : Not applicable                  |
| Particle size                                   | : Not available                   |

### 9.2. Other information

No additional information available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Acute toxicity (oral)             | : Fatal if swallowed.               |
| Acute toxicity (dermal)           | : Fatal in contact with skin.       |
| Acute toxicity (inhalation)       | : Fatal if inhaled.                 |
| Skin corrosion/irritation         | : Causes skin irritation.           |
| Serious eye damage/irritation     | : Causes serious eye irritation.    |
| Respiratory or skin sensitisation | : Not classified                    |
| Germ cell mutagenicity            | : Not classified                    |
| Carcinogenicity                   | : Not classified                    |
| Reproductive toxicity             | : Not classified                    |
| STOT-single exposure              | : May cause respiratory irritation. |
| STOT-repeated exposure            | : Not classified                    |
| Aspiration hazard                 | : Not classified                    |

#### 11.2. Information on other hazards

##### Other information

Potential adverse human health effects and symptoms : Fatal if swallowed, Fatal in contact with skin.

### SECTION 12: Ecological information

#### 12.1. Toxicity

|   |                  |
|---|------------------|
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

#### 12.2. Persistence and degradability

##### POTASSIUM METAVANADATE EXTRA PURE (13769-43-2)

|                               |                    |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

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### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.  
Ecological information : Hazardous waste due to toxicity.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

UN-No. (ADR) : UN 2864  
UN-No. (IMDG) : UN 2864  
UN-No. (IATA) : UN 2864  
UN-No. (ADN) : UN 2864  
UN-No. (RID) : UN 2864

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : POTASSIUM METAVANADATE  
Proper Shipping Name (IMDG) : POTASSIUM METAVANADATE  
Proper Shipping Name (IATA) : Potassium metavanadate  
Proper Shipping Name (ADN) : POTASSIUM METAVANADATE  
Proper Shipping Name (RID) : POTASSIUM METAVANADATE  
Transport document description (ADR) : UN 2864 POTASSIUM METAVANADATE, 6.1, II, (D/E)  
Transport document description (IMDG) : UN 2864 POTASSIUM METAVANADATE, 6.1, II  
Transport document description (IATA) : UN 2864 Potassium metavanadate, 6.1, II  
Transport document description (ADN) : UN 2864 POTASSIUM METAVANADATE, 6.1, II  
Transport document description (RID) : UN 2864 POTASSIUM METAVANADATE, 6.1, II

### 14.3. Transport hazard class(es)

ADR  
Transport hazard class(es) (ADR) : 6.1  
Danger labels (ADR) : 6.1



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### IMDG

Transport hazard class(es) (IMDG) : 6.1  
Danger labels (IMDG) : 6.1



### IATA

Transport hazard class(es) (IATA) : 6.1  
Danger labels (IATA) : 6.1



### ADN

Transport hazard class(es) (ADN) : 6.1  
Danger labels (ADN) : 6.1



### RID

Transport hazard class(es) (RID) : 6.1  
Danger labels (RID) : 6.1



## 14.4. Packing group

Packing group (ADR) : II  
Packing group (IMDG) : II  
Packing group (IATA) : II  
Packing group (ADN) : II  
Packing group (RID) : II

## 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-A  
Other information : No supplementary information available

## 14.6. Special precautions for user

### Overland transport

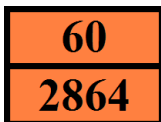
Classification code (ADR) : T5  
Limited quantities (ADR) : 500g  
Excepted quantities (ADR) : E4  
Packing instructions (ADR) : P002, IBC08  
Special packing provisions (ADR) : B4  
Mixed packing provisions (ADR) : MP10  
Portable tank and bulk container instructions (ADR) : T3  
Portable tank and bulk container special provisions (ADR) : TP33  
Tank code (ADR) : SGAH  
Tank special provisions (ADR) : TU15, TE19

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Vehicle for tank carriage : AT  
Transport category (ADR) : 2  
Special provisions for carriage - Packages (ADR) : V11  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28  
Special provisions for carriage - Operation (ADR) : S9, S19  
Hazard identification number (Kemler No.) : 60  
Orange plates :



Tunnel restriction code (ADR) : D/E  
EAC code : 2X

### Transport by sea

Limited quantities (IMDG) : 500 g  
Excepted quantities (IMDG) : E4  
Packing instructions (IMDG) : P002  
IBC packing instructions (IMDG) : IBC08  
IBC special provisions (IMDG) : B21, B4  
Tank instructions (IMDG) : T3  
Tank special provisions (IMDG) : TP33  
Stowage category (IMDG) : A  
Properties and observations (IMDG) : White crystalline powder. Slightly soluble in water. Toxic if swallowed, by skin contact or by inhalation.  
MFAG-No : 151

### Air transport

PCA Excepted quantities (IATA) : E4  
PCA Limited quantities (IATA) : Y644  
PCA limited quantity max net quantity (IATA) : 1kg  
PCA packing instructions (IATA) : 669  
PCA max net quantity (IATA) : 25kg  
CAO packing instructions (IATA) : 676  
CAO max net quantity (IATA) : 100kg  
ERG code (IATA) : 6L

### Inland waterway transport

Classification code (ADN) : T5  
Special provisions (ADN) : 802  
Limited quantities (ADN) : 500 g  
Excepted quantities (ADN) : E4  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 2

### Rail transport

Classification code (RID) : T5  
Limited quantities (RID) : 500g  
Excepted quantities (RID) : E4  
Packing instructions (RID) : P002, IBC08  
Special packing provisions (RID) : B4  
Mixed packing provisions (RID) : MP10  
Portable tank and bulk container instructions (RID) : T3  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : SGAH  
Special provisions for RID tanks (RID) : TU15  
Transport category (RID) : 2  
Special provisions for carriage – Packages (RID) : W11  
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31  
Colis express (express parcels) (RID) : CE9



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Hazard identification number (RID) : 60

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU-Regulations

##### REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

##### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

##### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

##### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### National regulations

##### Germany

- Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV).
- Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).
- Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

- SZW-lijst van kankerverwekkende stoffen : The substance is not listed
- SZW-lijst van mutagene stoffen : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

##### Denmark

- Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

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### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

#### Full text of H- and EUH-statements:

|                           |  |
|---------------------------|--|
| Acute Tox. 1 (Dermal)     | Acute toxicity (dermal), Category 1  |
| Acute Tox. 1 (Oral)       | Acute toxicity (oral), Category 1  |
| Acute Tox. 2 (Inhalation) | Acute toxicity (inhal.), Category 2  |
| Eye Irrit. 2              | Serious eye damage/eye irritation, Category 2  |
| H300                      | Fatal if swallowed.  |
| H310                      | Fatal in contact with skin.  |
| H315                      | Causes skin irritation.  |
| H319                      | Causes serious eye irritation.   |
| H330                      | Fatal if inhaled.  |
| H335                      | May cause respiratory irritation.  |
| Skin Irrit. 2             | Skin corrosion/irritation, Category 2  |
| STOT SE 3                 | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |

Safety Data Sheet (SDS), EU

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.