



# SAFETY DATA SHEET

**MATERION**

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

### 1.1. Product identifier

**Name of the substance** Potassium  
**Identification number** 019-001-00-2 (Index number)  
**Registration number** -  
**Synonyms** None.  
**Issue date** 04-October-2013  
**Revision date** 14-July-2015

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

#### Supplier

**Company name** Materion Advanced Chemicals Inc.  
**Address** 407 N. 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
United States  
**Division** Milwaukee  
**Telephone** 414.212.0257  
**e-mail** advancedmaterials@materion.com  
**Contact person** Laura Hamilton

### 1.4. Emergency telephone number

**Supersedes date** 17-May-2015  
**Version number** 03

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

**Identified uses** Not available.  
**Uses advised against** None known.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Physical hazards

Substances and mixtures which, in contact with water, emit flammable gases Category 1

H260 - In contact with water releases flammable gases which may ignite spontaneously.

##### Health hazards

Skin corrosion/irritation Category 1B

H314 - Causes severe skin burns and eye damage.

#### Hazard summary

In contact with water releases flammable gases which may ignite spontaneously. Causes severe skin burns and eye damage. Causes serious eye damage.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Potassium

#### Hazard pictograms



**Signal word** Danger

#### Hazard statements

H260 In contact with water releases flammable gases which may ignite spontaneously.  
H314 Causes severe skin burns and eye damage.

H318

Causes serious eye damage.

**Precautionary statements****Prevention**

P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231 + P232	Handle under inert gas. Protect from moisture.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P370 + P378	In case of fire: Use appropriate media for extinction.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P310	Immediately call a POISON CENTRE or doctor/physician.
P321	Specific treatment (see this label).
P335 + P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
P363	Wash contaminated clothing before reuse.

**Storage**

P402 + P404	Store in a dry place. Store in a closed container.
P405	Store locked up.

**Disposal**

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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**Supplemental label information**

Reacts violently with water.

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients****3.1. Substances****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Potassium	90 - 100	7440-09-7 231-119-8	-	019-001-00-2	
<b>Classification:</b>	Water-React. 1;H260, Skin Corr. 1B;H314, Eye Dam. 1;H318				

**List of abbreviations and symbols that may be used above**

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

**Composition comments**

The full text for all R- and H-phrases is displayed in section 16.

**SECTION 4: First aid measures****General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

**4.1. Description of first aid measures**

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control centre immediately.
<b>Skin contact</b>	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

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

Corrosive effects. Irritation of eyes and mucous membranes. May cause temporary blindness and severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

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

Provide general supportive measures and treat symptomatically. Treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**SECTION 5: Firefighting measures**

**General fire hazards**

Not available.

**5.1. Extinguishing media**

**Suitable extinguishing media**

Powder. Dry sand.

**Unsuitable extinguishing media**

Water.

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

In contact with water releases flammable gases which may ignite spontaneously.

**5.3. Advice for firefighters**

**Special protective equipment for firefighters**

Wear suitable protective equipment.

**Special firefighting procedures**

Do not get water inside container.

**SECTION 6: Accidental release measures**

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

**For non-emergency personnel**

Local authorities should be advised if significant spillages cannot be contained. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.

**For emergency responders**

Keep unnecessary personnel away.

**6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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

Stop the flow of material, if this is without risk. Do not get water on spilled substance or inside containers.

**6.4. Reference to other sections**

Not available.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Wash hands thoroughly after handling.

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

Store locked up. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a dry place. Never allow product to get in contact with water during storage. Keep out of the reach of children.

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

Not available.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits**

No exposure limits noted for ingredient(s).

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures**

Follow standard monitoring procedures.

**Derived no effect levels (DNELs)**

Not available.

**Predicted no effect concentrations (PNECs)**

Not available.

**8.2. Exposure controls**

**Appropriate engineering controls**

Provide eyewash station.

## Individual protection measures, such as personal protective equipment

<b>General information</b>	Wear chemical protective equipment that is specifically recommended by the manufacturer. Eye wash fountain is recommended.
<b>Eye/face protection</b>	Wear eye/face protection.
<b>Skin protection</b>	
- <b>Hand protection</b>	Wear protective gloves. Not normally needed.
- <b>Other</b>	Wear appropriate chemical resistant clothing. Wear protective gloves. It may provide little or no thermal protection. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<b>Respiratory protection</b>	Wear suitable respiratory protection.
<b>Thermal hazards</b>	Not available.
<b>Hygiene measures</b>	When using, do not eat, drink or smoke. Do not get in eyes. Do not get this material in contact with skin. Do not get this material on clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practices.
<b>Environmental exposure controls</b>	Not available.

## SECTION 9: Physical and chemical properties

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

#### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Colour</b>	Not available.
<b>Odour</b>	Not available.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	63,5 °C (146,3 °F)
<b>Initial boiling point and boiling range</b>	759 °C (1398,2 °F)
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

#### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	< 0,0000001 kPa at 25 °C
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Oxidising properties</b>	Not available.

### 9.2. Other information

<b>Density</b>	0,86 g/cm <sup>3</sup> estimated
<b>Molecular formula</b>	K
<b>Molecular weight</b>	39,1 g/mol
<b>Specific gravity</b>	0,86 at 20 °C

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	Not available.
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<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Moisture. Contact with water liberates flammable gas.
<b>10.5. Incompatible materials</b>	None known.
<b>10.6. Hazardous decomposition products</b>	No hazardous decomposition products are known.

## SECTION 11: Toxicological information

<b>General information</b>	Not available.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	May cause irritation to the respiratory system.
<b>Skin contact</b>	Causes severe skin burns.
<b>Eye contact</b>	Causes severe eye burns. Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns.
<b>Symptoms</b>	Burning pain and severe corrosive skin damage. Permanent eye damage including blindness could result.

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	Causes severe skin burns and eye damage.
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.
<b>Serious eye damage/eye irritation</b>	Causes severe eye burns. Causes serious eye damage.
<b>Respiratory sensitisation</b>	Due to lack of data the classification is not possible.
<b>Skin sensitisation</b>	Due to lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	Due to lack of data the classification is not possible.
<b>Carcinogenicity</b>	Due to lack of data the classification is not possible.
<b>Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)</b>	Not listed.
<b>Reproductive toxicity</b>	Due to lack of data the classification is not possible.
<b>Specific target organ toxicity - single exposure</b>	Due to lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to lack of data the classification is not possible.
<b>Mixture versus substance information</b>	Not available.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	No toxicity data noted for the ingredient(s).
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of this product.
<b>12.3. Bioaccumulative potential</b>	Not available.
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	Not available.
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.
<b>12.6. Other adverse effects</b>	Not available.

## SECTION 13: Disposal considerations

<b>13.1. Waste treatment methods</b>	
<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN1420
<b>14.2. UN proper shipping name</b>	POTASSIUM METAL ALLOYS, LIQUID
<b>14.3. Transport hazard class(es)</b>	
Class	4.3
Subsidiary risk	-
Label(s)	4.3
Hazard No. (ADR)	X323
Tunnel restriction code	B/E
<b>14.4. Packing group</b>	I
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Not available.

### RID

<b>14.1. UN number</b>	UN1420
<b>14.2. UN proper shipping name</b>	POTASSIUM METAL ALLOYS, LIQUID
<b>14.3. Transport hazard class(es)</b>	
Class	4.3
Subsidiary risk	-
Label(s)	4.3
<b>14.4. Packing group</b>	I
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Not available.

### ADN

<b>14.1. UN number</b>	UN1420
<b>14.2. UN proper shipping name</b>	Potassium Metal Liquid
<b>14.3. Transport hazard class(es)</b>	
Class	4.3
Subsidiary risk	-
Label(s)	4.3
<b>14.4. Packing group</b>	I
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Not available.

### IATA

<b>14.1. UN number</b>	UN1420
<b>14.2. UN proper shipping name</b>	Potassium metal alloys, liquid
<b>14.3. Transport hazard class(es)</b>	
Class	4.3
Subsidiary risk	-
<b>14.4. Packing group</b>	I
<b>14.5. Environmental hazards</b>	No.
<b>ERG Code</b>	4W

**14.6. Special precautions for user** Not available.

**Other information**

**Passenger and cargo aircraft** Forbidden

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**14.1. UN number** UN1420

**14.2. UN proper shipping name** POTASSIUM METAL ALLOYS, LIQUID

**14.3. Transport hazard class(es)**

**Class** 4.3

**Subsidiary risk** -

**14.4. Packing group** I

**14.5. Environmental hazards**

**Marine pollutant** No.

**EmS** F-G, S-L

**14.6. Special precautions for user** Not available.

**ADN; ADR; IATA; IMDG; RID**



## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**  
Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**  
Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**  
Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**  
Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**  
Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**  
Potassium (CAS 7440-09-7)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Potassium (CAS 7440-09-7)

**Other regulations** The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

**National regulations** Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.

**15.2. Chemical safety assessment** No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

**List of abbreviations** Not available.

**References** Not available.

**Training information** Not available.

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