

**Section 1. Identification****1.1 Product Identifier** 4038

Product Name	POTASSIUM DICHROMATE 0.1M (for METROHM RTI MONITOR)
CAS Number	Mixture
REACH Registration No	A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

**1.2 Relevant identified uses of the substance or mixture & uses advised against**

Uses of Material	Chemical for industrial and laboratory use. Not suitable for domestic use.
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**1.3 Supplier** Vickers Laboratories Ltd

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(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Serious eye damage/irritation, category 1	H318: Causes serious eye damage.
Respiratory sensitization, category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization, category 1	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, category 1B	H340: May cause genetic defects.
Carcinogenicity, category 1B	H350: May cause cancer.
Reproductive toxicity, category 1B	H360: May damage fertility or the unborn child.
Spec target organ tox - repeat, category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 2	H411: Toxic to aquatic life with long lasting effects.

**2.2 Label elements****Labelling according to regulation 1272/2008/EC**

Signal word Danger

Hazard Pictograms



**Hazard Statements** Harmful if inhaled. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May damage fertility or the unborn child. May cause genetic defects. May cause cancer. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

**Precautionary Statements** Wear protective gloves / protective clothing / eye protection / face protection. Wash thoroughly after handling. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Avoid release to the environment.

## Section 3. Composition

### 3.2 Mixtures

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Potassium Dichromate	7778-50-9	231-906-6	01-2119454792-32-XXXX	~3%	Ox. Sol. 2, Acute Tox. 2 (I), Acute Tox. 3 (O), Skin Corr. 1B, Acute Tox. 4 (D), Resp. Sens. 1, Skin Sens. 1, Muta. 1B, Carc. 1B, Repr. 1B, STOT SE 3 (I), STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION URGENTLY.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If conscious place in a sitting position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Do not allow water to come into direct contact with material.

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

Hazards	May evolve toxic fumes if involved in a fire.
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### 5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
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## Section 6. Accidental Release Measures

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

Personal Protection Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.

### 6.2 Environmental precautions

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

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

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

Well ventilated, cool, dry storage .

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits		
			Long Term (8hr TWA)	Short Term 15min period	
Potassium Dichromate	7778-50-9	~3%	-	0.05 ppm	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

### 8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.

Hand Protection Use PVC gauntlets.

Eye Protection Use chemical full face shield.

Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn. Wear PVC oversuit.

Special Hazards No special precautions required.

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance	Clear orange solution.
Odour	No specific odour.
pH	Not applicable
Boiling Point	100 °C
Melting Point	0 °C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable

Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	Yes.
Vapour Pressure	Not applicable
Relative Density	1.000
Water Solubility	Completely soluble in water.

## 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	No specific conditions.
10.5 Incompatible Materials	Oxidising and reducing agents.
10.6 Hazardous Decomposition Products	No data available.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
Skin	A potent skin sensitiser. Skin sensitization, category 1. Causes skin irritation.
LD50 Skin	Not available
Ingestion	Presents no significant hazard by ingestion. Main health hazard is through the inhalation of the vapour.
LD50 Oral	Not available
Inhalation	Harmful if inhaled. Respiratory sensitization, category 1.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Contains potassium dichromate a class 1 carcinagen, therefore may cause cancer by inhalation.
Mutagenicity	May be a mutagen. Germ cell mutagenicity, category 1B.
Reproductive Effects	Evidence of reproductive effects. May damage fertility or the unborn child.

## Section 12. Ecological

12.1 Toxicity	Dangerous to aquatic organism: causes damage to crops and vegetables. Bluegill sunfish. 24 hr fresh water-24.5 mg/l, 48 hr tap-water-49 mg/l. (LC50)
LC50 Algal	Not available
LC50 Crustacea	Not available
LC50 Fish	Not available
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

- Disposal Methods Dispose of in a licensed incinerator. Never dispose of into water courses or sewerage systems.
- Contaminated Packaging Very carefully wash out containers with water. Use a licensed waste disposer.

## Section 14. Transport Information

- 14.1 UN Number** 3287
- 14.2 Proper Shipping Name** Toxic liquid inorganic, N.O.S. (Potassium Dichromate)
- 14.3 Transport classes**
- UN classification 6.1
- Subsidiary hazard(s) None
- Transport category 2
- ADR Hazard ID 60
- Tunnel Restriction Code D/E
- 14.4 Packing Group** III
- 14.5 Environment hazards** See section 12.
- 14.6 Special precautions for user** No special precautions required.
- 14.7 Transport in bulk** Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

**Classification** Skin corrosion/irritation, category 2; Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 1; Respiratory sensitization, category 1; Skin sensitization, category 1; Germ cell mutagenicity, category 1B; Carcinogenicity, category 1B; Reproductive toxicity, category 1B; Spec target organ tox - repeat, category 2; Hazard to aquatic environment, category 2

**Signal word** Danger

**Hazard Pictograms**



**Hazard Statements** H332, H315, H318, H317, H360, H340, H350, H334, H373, H411  
Harmful if inhaled. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May damage fertility or the unborn child. May cause genetic defects. May cause cancer. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

**Precautionary Statements** P280, P264, P303+P361+P353, P304+P340, P309+P311, P273  
Wear protective gloves / protective clothing / eye protection / face protection. Wash thoroughly after handling. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Avoid release to the environment.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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