

Safety Data Sheet According to Regulation (EC) No. 1907/2006 Document No.: Version No.:

Effective Date:

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02

MSDS090

01 Jan 2016

Gold Electrode Conditioning Solution

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

- I.I
 Product Identifiers

 Product name
 : Gold Electrode Conditioning Solution

 Product number
 : R-100-051KMN-01

 Substance name
 : Potassium Permanganate Conditioning and cleaning Solution

 REACH reg no.
 : This product is exempt from registration, insufficient annual volume.
- **1.2** Relevant identified uses of the substance or mixture and uses advised against Identified uses : Reagent for analysis

I.3 Details of the supplier of the safety data sheet Company : Modern Water Monitoring Limited Units 15-17 Cambridge Science Park Cambridge, CB4 0FQ UK Email : info@modernwater.co.uk

1.4 Emergency telephone number +44 (0) 1483 696030

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2)

Eye irritation (Category 2)

Chronic aquatic toxicity (Category I)

2.2 Label elements

Hazard pictogram



Signal Word: Warning

Hazard statements:

H320	Causes eye irritation
H315	Causes skin irritation
H4II	Toxic to aquatic life with long lasting effects.



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Precautionary statements:

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P273	Avoid release to the environment.	

2.3 Other hazards : Not known

SECTION 3: Composition/information on ingredients

3.1 Substance : Not relevant, see 3.2 Mixtures

3.2 Mixtures

Hazardous ingredients classification according to Regulation (EC) No. 1272/2008 CLP

Substance name	Concentration	CAS No	EC No
Potassium Permanganate	<0.01%	7722-64-7	231-760-3
H272 – may intensify fire; oxidiser			
H302 - Harmful if swallowed			
H314 – causes severe skin burns and eye damage			
H410 – very toxic to aquatic life with long lasting effects			
HATO - Very Loxic to aquatic life with long lasting effects			

SECTION 4: First Aid measures

4.1 Description of first aid measure

General advice: When in doubt or if symptoms observed, get medical advice. Show this safety data sheet to the doctor in attendance.

After Inhalation: Remove casualty to fresh air and keep warm. If breathing difficult or respiratory tract irritation get medical assistance. If not breathing, give artificial respiration and get urgent medical assistance.

In case of skin contact: Remove contaminated clothing. Wash off with soap and plenty of water. Get medical assistance.

After eye contact: Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses. Get urgent medical assistance.

In case of ingestion: If accidentally swallowed rinse mouth with plenty of water (only if person is conscious). Do not induce vomiting. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.



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SECTION 5: Fire-fighting measures.

- 5.1 Extinguishing media: Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media No restriction
- 5.2 Special hazards arising from the substance or mixture Potassium oxides, Manganese/manganese oxides
- **5.3** Advice for firefighters Wear self-contained breathing apparatus.
- **5.4** Additional information Do not let run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures.

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment (see section 8). Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

6.2 Environmental precautions

Do not let product enter drains or surface water. Spills are to be contained. Discharge into environment must be avoided.

- **6.3 Methods and materials for containment and cleaning up** Soak up with inert absorbent material. Keep in a suitable closed container for disposal. Dispose correctly, referring to local regulations.
- 6.4 References to other sections For disposal see section 13.

SECTION 7: Handling and storage.

- 7.1 **Precautions for safe handling** Avoid exposure to skin and eyes.
- **7.2** Conditions for safe storage, including and incompatibilities Store in a cool place, below 25'c. Keep contained upright and the cap tightly closed.

7.3 **Specific end use(s)**

Apart from uses specified in section 1.2, no other specific uses.

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SECTION 8: Exposure controls/personal protection.

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No	Value type	Limit value	
Potassium	7722-64-7	TWA	0.5mg/m3)	EU and UK EH40 WEL
Permanganate				
		Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used		

8.2 Exposure controls:

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at end of workday.

Personal protective equipment

Wear suitable protective clothing **Eye/face protection** Safety glasses with side-shields conforming to EN166 or equivalent standard. **Skin protection** Handle with gloves (PVC or nitrile)

SECTION 9: Physical and chemical properties.

9.1 Information on basic physical and chemical properties

Appearance Odour	Clear purple Liquid
Odour threshold	no data available
pН	no data available
Melting point/range (°C)	no data available
Boiling point (°C):	100 (approx.)
Flash point	not flammable
Evaporation rate	no data available
Flammability (solid/gas)	not applicable
Upper/lower flammability rates	not flammable
Vapour pressure (mmHg at 20°C)	25 (approx.)
Vapour density	no data available
Relative density	I.0 (approx.)
Water solubility	completely miscible
Partition coefficient: n-octane/water	no data available
Auto ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	not applicable

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Oxidising properties

no data available

9.2 Other data

No data available

SECTION 10: Stability and reactivity.

- **10.1 Reactivity** No data available
- **10.2** Chemical stability This product is chemically stable under standard ambient conditions (room temperature).
- **10.3 Possibility of hazardous reactions** No data available.
- **10.4** Conditions to avoid No data available.
- **10.5** Incompatible materials Strong reducing agents.
- **10.6 Hazardous decomposition products** No data available

SECTION 11: Toxicological information.

II.I Information on toxicological effects Acute toxicity No data available

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes eye irritation

Respiration or skin sensitisation Not sensitising

Germ cell mutagenicity No data available

Carcinogenicity No indication of human carcinogenicity



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Reproductive toxicity

No data available

Specific target organ exposure – single exposure No data available

Specific target organ exposure – repeated exposure No data available

Aspiration hazard Not applicable

Other adverse effects

Contact with skin can cause:, Oedema, Necrosis, Effects due to ingestion may include:, methemoglobinema, psychological disturbances, Vomiting, Nausea, Diarrhoea

SECTION 12: Ecological information.

- **12.1 Toxicity** No data available
- **12.2 Persistence and degradability** No data available
- **12.3 Bioaccumulative potential** Can accumulate in aquatic organisms.
- **12.4 Mobility in soil** No data available

12.5 Results of PBT and vPvB assessment

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Harmful to aquatic life with long lasting effects

SECTION 13: Disposal considerations.

13.1 Waste treatment methods: Product

Dispose in accordance to local regulations, consult the local waste disposal expert.

Contaminated packaging

Dispose in accordance to local regulations, the same way as the product itself.

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SECTION 14: Transport information.

Non - Hazardous for air, road and sea transport.

Land transport (ADR/RID)

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard	Not applicable
14.4	Packaging group	Not applicable
14.5	Environmental hazards	Not applicable
14.6	Special precaution for user	Not applicable

Air transport (IATA)

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard	Not applicable
14.4	Packaging group	Not applicable
		NI

14.5Environmental hazardsNot applicable14.6Special precaution for userNot applicable

SEA transport (IMDG)

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard	Not applicable
14.4	Packaging group	Not applicable
14.5	Environmental hazards	Not applicable
14.6	Special precaution for user	Not applicable

SECTION15: Regulatory information.

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture None applicable

15.2 Chemical Safety Assessment No data available



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SECTION16: Other information.

Abbreviations and acronyms

ADR – European Agreement Concerning the International Carriage of Dangerous Goods by Road IATA – International Air Transportation Association IMDG – international Maritime Code of Dangerous Goods STEL – Short term exposure limit TWA – Time Weighted Average WEL – Workplace Exposure Limit

Symbol, R and S phrases for this mixture

Symbol	Xi- Irritant		
R-phrase(s)	R36/38	Irritating to eyes and skin	
	R52/53	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment	
S-phrase(s)	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice	
	S61	Avoid release into the environment	

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