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

1.1 Product Identifiers

Product name : Tin Electrolyte (OVA – Acetate buffered)
Product number : R-100-210ESN-02
Substance name : Tin (Sn) Electrolyte 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

1.3 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

Not hazardous

2.2 Label elements: None required

Signal Word: None required

Hazard statements: None required

Precautionary statements**:** None required

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
Acetic acid	<1%	64-19-7	200-580-7
H226 – Flammable liquid and vapour			
H314 – causes severe skin burns and eye damage			

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.

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

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.

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

None

5.3 Advice for firefighters

Not combustible

5.4 Additional information

None

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 large quantities 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.

SECTION 8: Exposure controls/personal protection.

8.1 Control parameters
Components with workplace control parameters

Component	CAS-No	Value type	Limit value	
Acetic acid	64-19-7	STEL	15ppm (37mg/m3)	EU and UK EH40 WEL
		TWA	10ppm (25mg/m3)	EU and UK EH40 WEL

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	Clear colourless liquid
Odour	slight odour of acetic acid
Odour threshold	no data available
pH	4.5 (Approx.)
Melting point/range (°C)	no data available
Boiling point (°C):	100 (Approx.)
Flash point	not flammable
Evaporation rate	not applicable
Flammability (solid/gas)	not applicable
Upper/lower flammability rates	not flammable
Vapour pressure (mmHg at 20°C)	25 (Approx.)
Vapour density	not applicable
Relative density	1.0
Water solubility	completely miscible
Partition coefficient: n-octane/water	not applicable
Auto ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	not applicable
Explosive properties	no data available
Oxidising properties	no data available

9.2 Other data

None

SECTION 10: Stability and reactivity.

10.1 Reactivity
Mildly reactive to metals and bases.

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 oxidising agents, strong bases.

10.6 Hazardous decomposition products
None

SECTION 11: Toxicological information.

11.1 Information on toxicological effects

Acute toxicity
No data available

Skin corrosion/irritation
May cause skin irritation.

Serious eye damage/eye irritation
May cause eye irritation

Respiration or skin sensitisation
Not sensitising

Germ cell mutagenicity
No data available

Carcinogenicity
No indication of human carcinogenicity

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
No data available

SECTION 12: Ecological information.

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available, expected to biodegrade, miscible with water

12.3 Bioaccumulative potential
No data available, Bioaccumulation unlikely

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
None that are known

SECTION13: 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.

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
14.5	Environmental hazards	Not applicable
14.6	Special precaution for user	Not 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

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

None

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