



Pony Testing International Group

Report No.: 0911102-049

MSDS Report

Sample Description

expansion liquid of thermometer

Applicant

Yuyao Shuanghe Electron Instrument Co.,
Ltd

Material Safety Data Sheet

expansion liquid of thermometer

Section 1 - Chemical Product and Company Identification

Sample Name: expansion liquid of thermometer

Company Identification: Yuyao Shuanghe Electron Instrument Co., Ltd

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Section 2 - Composition, Information on Ingredients

Chemical Name	Molecular Formula	Percent (by weight)	CAS No.	EC#
Sodium bromide	NaBr	22%	7647-15-6	231-599-9
Magnesium iodide	MgI ₂	15%	10377-58-9	233-825-1
Magnesium di(acetate)	(CH ₃ COO) ₂ Mg	7%	142-72-3	205-554-9
Sodium acetate	CH ₃ COONa	6%	127-09-3	204-823-8
Alkyl polyoxyethylene ether halides	R(C ₂ H ₃ X ₁ O) _n OH : R=H or alkyl (C1-4); X ₁ =H, F, Cl, Br, I; n ₁ =1-15.	3%	N/A	N/A
Water	H ₂ O	47%	7732-18-5	231-791-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! Contact may cause eye irritation. May be harmful by inhalation, ingestion, or skin absorption. May cause harm to the unborn child. The toxicological properties of this material have not been fully investigated.

UN Hazard Class: None.

Target Organs: Eye, skin, digestive tract and respiratory tract.

Potential Health Effects:

- Ø **Eye:** Contact may cause eye irritation, redness or lacrimation.
- Ø **Skin:** Contact may cause skin irritation. May be harmful if absorbed through the skin.
- Ø **Ingestion:** Will not occur under normal use. May be harmful if swallowed. If swallowed, may cause gastrointestinal irritation with nausea, vomiting. Chronic ingestion may cause central nervous system depression.
- Ø **Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation. Inhalation of high concentrations vapor may cause central nervous system depression characterized by nausea, headache, dizziness, unconsciousness and coma.
- Ø **Chronic:** Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. Chronic ingestion bromides may cause central nervous system depression.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if easily possible. Get medical aid if symptoms occur.

Skin: If irritation occurs, flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. If irritation persists, get medical aid. Wash clothing before reuse.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Ingestion: If swallowed, induce vomiting under the guidance of professional doctors. If the injured is fully conscious: wash mouth out with water, then give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Section 5 - Fire Fighting Measures

General Information: During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion. Runoff from fire control or dilution water may cause pollution. As in any fire, wear a self-contained breathing apparatus in pressure-demand, and full protective gear.

Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Ventilate spill area. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Absorb spill with inert material (e.g. vermiculite, sand or earth), and then place in suitable container for disposal. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Take precautions to ensure product does not contaminate the ground or enter the drainage system, surface water, sanitary sewer or ground water system.

Section 7 - Handling and Storage

General Information: This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances, sources of ignition or heat. Inspect regularly for deficiencies such as damage or leaks. Treat carefully, avoid physical damage to containers. Keep out of reach of children. The storage area should be equipped with the corresponding species and quantity of fire equipment and leakage emergency equipment.

Handling: Ensure good local exhaust ventilation. Avoid all unnecessary exposure. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Remove contaminated clothing and shoes. Wash clothing and shoes thoroughly before reuse. Empty containers retain product residue (Liquid or vapor). The work area should be equipped with the corresponding species and quantity of fire equipment and leakage emergency equipment.

Section 8 - Exposure Controls, Personal Protection

Exposure Limit: No exposure limits is listed for this product.

Monitoring Methods: No information found.

Engineering Controls: Use ventilation. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment:

- Ø **Eyes:** Use chemical safety goggles where splashing is possible.
- Ø **Skin and Clothing:** Wear appropriate protective clothing and gloves is recommended.

- Ø **Respirators:** An appropriate respirator or mask should be used whenever workplace conditions warrant a respirator's use. A full face positive pressure supplied-air respirator or a self contained breathing apparatus should be used when fire.
- Ø **Other Protection:** To maintain good health habits. No smoking or eating scene work.

Section 9 - Physical and Chemical Properties

Physical State: Colorless clear liquid, with odorless.

Molecular Formula: Mixture

Molecular Weight: N/A

PH: 5

Flash Point: >90°C (Closed cup, Boiling)

Boiling Point: N/A

Melting Point: N/A

Relative density (water=1): N/A

Relative density (air=1): N/A

Vapor pressure: N/A

Vapor density: N/A

Octanol / water distribution coefficient: N/A

Flash point (°C) : N/A

Viscosity: N/A

Ignition Temperature (°C) : N/A

Explosion Limits [% (V/V)]: N/A

Decomposition Temperature: N/A

Water Solubility: Soluble in water.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, sources of ignition.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, halogens.

Hazardous Decomposition Products: Acetic acid, hydrogen bromide, bromine fumes, hydrogen iodide, halogen compounds and etc.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Toxicological Information:

Composition: CAS# 7647-15-6

- RTECS# VZ3150000
- LD50: 2500 mg/kg (Oral, mouse)
- LD50: 2500 mg/kg (Oral, rat)

Composition: CAS# 10377-58-9

- RTECS# Unlisted

Composition: CAS# 142-72-3

- RTECS# AI5600000

Composition: CAS# 127-09-3

- RTECS# AJ4300010
- LD50: 6891 mg/kg (Oral, mouse)
- LD50: 3530 mg/kg (Oral, rat)

Composition: CAS# 7732-18-5

- RTECS# ZC0110000
- LD50: >90 ml/kg (Oral, rat)

Carcinogenicity:

Composition: CAS# 7647-15-6

- Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Composition: CAS# 10377-58-9

- Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Composition: CAS# 142-72-3

- Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Composition: CAS# 127-09-3

- Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Composition: CAS# 7732-18-5

- Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Sensitization Rate: Not available.

Teratogenicity: Not available.

Section 12 - Ecological Information

Ecological Toxicity: Not available.

Ecological Degradation: Not available.

Biology Degradation: Not available.

Section 13 - Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

Not regulated as a hazardous material for transportation. (TDG; IMDG CODE, IATA DGR)

UN: N/A

UN Hazard Class: N/A

Shipping Name: N/A

Packaging Sign: N/A

UN Packing Group: N/A

Transport Fashion: By air, by sea.

Packaging Information: N/A

Section 15 - Regulatory Information

Regulatory Information: Reference to the local, national, US, EU, CA and international regulations.

CAS No.	TSCA	Canada	OSHA	California Prop 65
7647-15-6	Listed	Listed in DSL	Unlisted	Unlisted
10377-58-9	Listed	Listed in NDSL	Unlisted	Unlisted
142-72-3	Listed	Listed in DSL	Unlisted	Unlisted
127-09-3	Listed	Listed in DSL	Unlisted	Unlisted
7732-18-5	Listed	Listed in DSL	Unlisted	Unlisted

European Labeling in Accordance with EC Directives:

CAS No.	EC#	Hazard Symbols	Risk Description	Safety Description
7647-15-6	231-599-9	None	R 36/37/38	S 26-37/39
10377-58-9	233-825-1	Xn	R 36-38 -42/43-61	S 22-36/37/39 -45-53
142-72-3	205-554-9	None	None	None
127-09-3	204-823-8	None	None	S 22-24/25
7732-18-5	231-791-2	None	None	None

Hazard Symbols:

Xn: Harmful.

Risk Description:

R 36/37/38: Irritating to eyes, respiratory system and skin.

R 42/43: May cause sensitization by inhalation and skin contact.

R 61: May cause harm to the unborn child.

Safety Description:

S 22: Do not breathe dust.

S 24/25: Avoid contact with skin and eyes.

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 53: Avoid exposure - obtain special instructions before use.

Section 16 - Additional Information

Issue Time: 2009-11-19

Issue Department: Technical department

Data review unit:

Modification record:

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Other Information:

ACGIH: (American Conference of Governmental Industrial Hygienists) ; CAS: (Chemical Abstracts Service) ; DSL: (the Domestic Substances List of Canada) ; EC: (European Commission) ; IARC: (International Agency for Research on Cancer) ; IATA: (International Air Transport Association) ; IECSC: (Inventory of Existing Chemical Substances in China) ; IMDG: (International Maritime Dangerous Goods) ; LD50: (Lethal dose, 50 percent kill) ; MAC: (Maximum allowable concentration) ; NDSL: (the Non-domestic Substances List of Canada) ; NIOSH: (US National Institute for Occupational Safety and Health) ; NTP: (US National Toxicology Program) ; OSHA: (US Occupational Safety and Health) ; PEL: (Permissible Exposure Level) ; REL: (Recommended Exposure Limit) ; RTECS: (Registry of Toxic Effects of Chemical Substances) ; STEL: (Short Term Exposure Limit) ; TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations) ; TSCA: (Toxic Substances Control Act of USA) ; TWA: (Time Weighted Average) ; TLV: (Threshold Limit Value)