

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SOLDERON TIN CONCENTRATE 300G/L

Supplier Rohm and Haas Electronic Materials Korea Ltd.
736 Backsuk-Dong
Chonan Chungnam 330- 220 Korea
Telephone: +82-41-529-5628

Emergency telephone number

Asia-Pacific +800-2537-8747

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a preparation.

Component	CAS-No.	EINECS-No.	Concentration	Classification
Tin(II) methanesulphonate	53408-94-9		40.0 - < 60.0 %	C R22, R34, R43
Methanesulphonic acid	75-75-2	200-898-6	10.0 - < 12.5 %	C R34

The full text of each R phrase is listed in section 16.

3. HAZARDS IDENTIFICATION

Harmful if swallowed.

Causes burns.

May cause sensitization by skin contact.

Classified as hazardous according to regulatory criteria.

4. FIRST AID MEASURES

Inhalation: Remove from exposure. If there is difficulty in breathing, give oxygen. Immediate medical attention is required

Skin contact: Immediately flush the skin with large quantities of water, preferably under a shower. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Continue washing for at least 20 minutes. Contaminated clothing should be washed or dry- cleaned before re-use. Immediate medical attention is required

Eye contact: Immediately flush the eye with plenty of water for at least 20 minutes, holding the eye open. Immediate medical attention is required

Ingestion: Do not induce vomiting. Wash out mouth with water. Have victim drink 1-3 glasses of water to dilute stomach contents. Immediate medical attention is required. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.

Notes to physician

Treat symptomatically. Treat skin burns conventionally.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use water spray, foam, dry chemical or carbon dioxide.

Specific hazards during fire fighting: This product may give rise to hazardous vapors in a fire.

Special protective equipment for fire-fighters: Wear full protective clothing and self-contained breathing apparatus.

Further information: May emit corrosive vapor or mist.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective clothing.

Wear respiratory protection.

Environmental precautions

Prevent the material from entering drains or water courses.

Do not discharge directly to a water source.

Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

Methods for cleaning up

Cover with absorbent or contain. Collect and dispose.

7. HANDLING AND STORAGE

Handling

Use local exhaust ventilation. Avoid contact with eyes, skin and clothing. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Avoid breathing vapor. Keep container tightly closed.

Further information on storage conditions: Practice good personal hygiene to prevent accidental exposure.

Storage

Storage conditions: Store in original container. Storage area should be: cool dry well ventilated out of direct sunlight away from incompatible materials

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s)

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value
Tin(II) methanesulphonate	ACGIH	TWA	0.1 mg/m ³ , as Sn
	ACGIH	STEL	0.2 mg/m ³ , as Sn
	ACGIH	SKIN_DES	, as Sn

Component	Regulation	Type of listing	Value
Methanesulphonic acid	Rohm and Haas	TWA	1 mg/m ³
	Rohm and Haas	STEL	2 mg/m ³

Exposure controls

Eye protection: Chemical goggles and face shield.

Hand protection: Neoprene gloves. Other chemical resistant gloves may be recommended by your safety professional. Gauntlet sleeves.

Skin and body protection: rubber or neoprene apron

Respiratory protection: Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

Engineering measures: Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Colour	Colorless to yellow
Odour	mild
pH	1
Flash point	Nonflammable
Vapour pressure	Similar to water
Relative vapour density	Heavier than air.
Water solubility	completely soluble
Relative density	1.55
Evaporation rate	Slower than ether
VOC's	0 g/l

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Hazardous reactions Stable under normal conditions.

Conditions to avoid contact with incompatible materials High temperatures

Materials to avoid cyanides Carbonates sulfides Strong oxidizing agents metals bases

Hazardous decomposition products polymerization Carbon monoxide, carbon dioxide, oxides of sulfur, CONTACT WITH METALS MAY EVOLVE FLAMMABLE HYDROGEN GAS., Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Component: **Methanesulphonic acid**

Acute oral toxicity LDLo rat 200 mg/kg

Component: **Methanesulphonic acid**

Acute oral toxicity LD50 rat 2,000 mg/kg

Component: **Methanesulphonic acid**

Acute dermal toxicity LD50 rabbit <2,000 mg/kg

Component: **Methanesulphonic acid**

Skin irritation A single 4h semi-occlusive application to intact rabbit skin produced burns (full thickness destruction of skin).

Component: **Methanesulphonic acid**

Eye irritation Single application to the rabbit eye produced severe conjunctival irritation and corneal damage.

Component: **Methanesulphonic acid**

Sensitization Did not cause sensitization on laboratory animals.

Component: **Methanesulphonic acid**

Teratogenicity

Did not show teratogenic effects in animal experiments.

Component: **Methanesulphonic acid**

Mutagenicity

Not mutagenic when tested in bacterial or mammalian systems.

12. ECOLOGICAL INFORMATION

Ecotoxicological information on this product or its components appear in this section when such data is available.

13. DISPOSAL CONSIDERATIONS

Environmental precautions: Prevent the material from entering drains or water courses.

Do not discharge directly to a water source.

Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

Disposal

Dispose in accordance with all local, state (provincial), and federal regulations.

Do not remove label until container is thoroughly cleaned. Empty containers may contain hazardous residues. This material and its container must be disposed of in a safe way.

14. TRANSPORT INFORMATION

Classification for ROAD and Rail transport:

Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(Sulfonic acid)
UN-No	UN 3265
Class	8
Packing group	II

Classification for SEA transport (IMO-IMDG):

Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(Sulfonic acid)
UN-No	UN 3265
Class	8
Packing group	II

Classification for AIR transport (IATA/ICAO):

Consult current IATA regulations prior to shipping by air.

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations

15. REGULATORY INFORMATION

Label

Classification and labeling have been performed according to regulations.

Hazard symbol and Indication of danger

C Corrosive

Contains: Tin(II) methanesulphonate; Methanesulphonic acid

R-phrases(s)

R22	Harmful if swallowed.
R34	Causes burns.
R43	May cause sensitization by skin contact.

S-phrases(s)

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S60	This material and its container must be disposed of as hazardous waste.

Korea. Toxic Chemical Control Law (TCCL) List (KOREA) All intentional components are listed on the inventory, are exempt, or are supplier certified.

US. Toxic Substances Control Act (TSCA) All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

Full text of the R-phrases given in Section 2

R22	Harmful if swallowed.
R34	Causes burns.
R43	May cause sensitization by skin contact.

Emergency telephone number

Asia-Pacific	+800 2537 8747
Asia-Pacific	+65 6542 9595
India	+800-650-1166
Indonesia	+803-65-7576
Pakistan	+800-11065-2-6542-7115
Sri Lanka (in Colombo)	+430-800-2-6542-7115
United States of America	+1-215-592-3000
European Region	+33 (0) 140025045

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior MSDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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