

Material Safety Data Sheet

1. Product and Company Identification

1.1 Product name	STANNOUS METHANE SULFONATE(300G/LT)
1.2 Application of the substance	No data available
1.3 Manufacturer/Supplier	
1.3.1 Manufacturer	
- Company	MK Chem & Tech Co., Ltd
- Address	778-7 wonsi-dong, Danwon-gu Ansan city, Gyunggido , Korea
- Telephone	82-31-491-7979
- Fax	82-31-492-7171
1.3.2 Supplier	
- Company	MK Chem & Tech Co., Ltd
- Address	778-7 wonsi-dong, Danwon-gu Ansan city, Gyunggido , Korea
- Telephone	82-31-491-7979
- Fax	82-31-492-7171

2. Hazards Identification

2.1 Hazard class	
- Physical hazards	Not classified
- Health hazards	Skin corrosion/irritation : Category 2
- Environmental hazard	Not classified
- Symbol	
- Signal word	Warning
- Hazard statement	H315 Causes skin irritation
- Precautionary statement	
1) Preventions	P264 Wash thoroughly after handling P280 Wear protective gloves/protective clothing/eye protection/face protection
2) Response	P302+P352 IF ON SKIN : Gently wash with plenty of soap and water P321 Specific treatment (see on this label) P332+P313 If skin irritation occurs : Get medical advice/

	attention
	P362 May cause harm to breast-fed children
3) Storage	Not Classified
4) Disposal	Not Classified

3. Composition/information on ingredients

Component	CAS #	Amount W/W(%)
Tin(II) Methanesulfonate	53408-94-9	78
Methane sulfonic acid	75-75-2	8
D. I. Water	7732-18-5	14

4. First-aid Measures

4.1 Eye Contact	As have a pain and be in danger of going blind, wash over 20 min with water immediately, see eye doctor
4.2 Skin contact	As have a pain corrode skin, remove polluted wear wash with plenty of water or warm water with soap immediately, see doctor painful, see doctor.
4.3 Inhalation	As have a slight irritation, move fresh air place and keep quiet.
4.4 Ingestion	Keep quiet, arrange to see doctor immediately, In case of stop breath, loosen wear, wipe and remove residue around mouth, and practice artificial respiration. In case of little quantity, get to vomit by drinking water or salty water or baking soda water then get to drink milk or the white of an egg.
4.5 Note to Physician	No data available

5. Fire Fighting Measures

5.1 Extinguishing Media	Water, CO2 gas , foam , powder.
5.2 Unusual Fire and Explosion Hazards	Non-inflammable. However, in case of fire, remove the containers to the safety place at the windward, and extinguish fire with plenty of water.
5.3 Special Protective Equipment for firefighters	Wear protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance

8.3 Personal Protection

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|--------------------------|------------------------------|
| - Respiratory Protection | Protective mask |
| - Eye Protection | Chemical goggles |
| - Hand Protection | Rubber gloves |
| - Skin Protection | Protective clothes and boots |

9. Physical and Chemical Properties

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|--------------------------------|--|
| 9.1 Physical state | : Lemon yellow ~ transparent yellow liquid |
| 9.2 Odor | : No data available |
| 9.3 pH | : Acidic |
| 9.4 Flash Point | : No data available |
| 9.5 Autoignition Temperature | : No data available |
| 9.6 Vapor Pressure | : No data available |
| 9.7 Boiling Point | : No data available |
| 9.8 Vapor density | : No data available |
| 9.9 Specific Gravity | : 1.49~1.59 |
| 9.10 Freezing/Melting Point | : No data available |
| 9.11 Solubility in Water | : No data available |
| 9.12 Decomposition Temperature | : No data available |
| 9.13 Kinematic Viscosity | : No data available |

10. Stability and Reactivity

- | | |
|---|---|
| 10.1 Chemical Stability | Stable under the normal circumstance,
During thermal decomposition of sulfur oxides to create. |
| 10.2 Conditions to Avoid | Heat, sparks, flames |
| 10.3 Incompatibilities with Other Materials | Metal, Combustible materials, a reducing substance |
| 10.4 Hazardous Decomposition Products | Corrosive / toxic fumes
Irritating and toxic gases |

11. Toxicological Information

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| 11.1 Acute Toxicity | |
| - Oral | Methane sulfonic acid : LD50 200mg/kg Rat |
| - Dermal | Methane sulfonic acid : LD50 2000mg/kg 200mg/kg Rabbit |
| - Inhalation | Methane sulfonic acid : LC50 1.5885 mg/l 4hr Rat (vapours) |
| 11.2 Skin corrosion/irritation | Methane sulfonic acid : corrosive |
| 11.3 Serious eye damage/eye irritation | Methane sulfonic acid : corrosive |
| 11.4 Respiratory or skin sensitisation | No data available |

11.5	Carcinogenicity	No data available
11.6	Germ cell mutagenicity	Methane sulfonic acid : Micronucleus assay : negative
11.7	Reproductive toxicity	No data available
11.8	Specific target organ toxicity (single exposure)	No data available
11.9	Specific target organ toxicity (repeated exposure)	No data available
11.10	Aspiration hazard	No data available

12. Toxicological Information

12.1	Hazardous to the aquatic environment	
-	Fish	Methane sulfonic acid : LC50 73 mg/l 96 hr Oncorhynchus mykiss
-	Crustacea	Methane sulfonic acid : EC50 1.7 mg/l 24 hr Daphnia magna
-	Algae	Methane sulfonic acid : EC50 7.2 mg/l 48 hr Selenastrum capricornutum
12.2	Persistence & Resolvability	Methane sulfonic acid : -4.98 log Kow
12.3	Bioaccumulation	Methane sulfonic acid : 3.16
12.4	Soil mobility	No data available
12.5	Other harmful influence	No data available

13. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations.

Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator

14. Transport Information

14.1	UN No.	1760
14.2	Technical Name	CORROSIVE LIQUID, N.O.S.
14.3	Hazard Class	8
14.4	Packing Group	III
14.5	Environmental Hazard	Not Classified
14.6	EMS NO.	F-A, S-B

15. Regulatory Information

15.1	occupation safety and health acts (KOR)	Harmful Agent Required to work environment monitoring Harmful Agent Required to manage Harmful Agent Required to exposure limit
15.2	The Act on the Registration and Evaluation of Chemicals (KOR)	Poisonous substances Methane sulfonic acid : Existing chemicals subject to Registration(KOR)
15.3	Safety control of dangerous substances act (KOR)	Not Classified
15.4	Wastes Control act (KOR)	Controlled wastes
15.5	Other regulations	Not Classified

16. Other Information

16.1	Reference	Ministry of Government Legislation of Korea Korea Occupational Safety & Health Agency IMDG CODE Manual
16.2	Created	JAN. 16. 2013
16.3	Last Updated	2/ SEP. 10. 2015