

1. Identification				
Product identifier				
Product name	COPPER ACID, HIGH-SPEED			
Product number	5260			
Recommended use of the cl	nemical and restrictions on use			
Application	Industrial Use			
Details of the supplier of the safety data sheet				
Supplier	SIFCO Applied Surface Concepts 5708 E. Schaaf Road Independence, Ohio 44131 U.S.A. Tel.: +1 216-524-0099 Fax: +1 216-524-6331 E-Mail: info@sifcoasc.com			
Emergency telephone numb	er			
Emergency telephone	CHEMTREC (United States) (800) 424-9300; CHEMTREC (International) +1 703-527-3887			
2. Hazard(s) identification				
Classification of the substan	ce or mixture			
Physical hazards	Not Classified			
Health hazards	Acute Tox. 4 - H302 Skin Corr. 1A - H314 Eye Dam. 1 - H318			
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			
Label elements				
Pictogram				
Signal word	Danger			
Hazard statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.			

Precautionary statements	 P260 Do not breathe vapor/ spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 If swallowed: Immediately call a poison center/ doctor. P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P302+P352 If on skin: Wash with plenty of water.
Contains	COPPER(II) METHANESULFONATE, METHANESULPHONIC ACID

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

COPPER(II) METHANESULFONATE		25-30%
CAS number: 54253-62-2		
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification		
Acute Tox. 4 - H302		
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		
METHANESULPHONIC ACID		1-5%
CAS number: 75-75-2		
Classification		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention.		
Ingestion	Get medical attention immediately. Do not induce vomiting.		
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes and get medical attention.		
Eye contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.		
Most important symptoms and affects, both cauts and delayed			

Most important symptoms and effects, both acute and delayed

Inhalation

Coughing, chest tightness, feeling of chest pressure.

Ingestion	May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.		
Skin contact	May cause serious chemical burns to the skin.		
Eye contact	Causes severe burns. May cause serious eye damage.		
Indication of immediate medical attention and special treatment needed			
Notes for the doctor	No specific recommendations.		
5. Fire-fighting measures			
Extinguishing media			
Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.		
Special hazards arising from t	he substance or mixture		
Specific hazards	Corrosive gases or vapors.		
Advice for firefighters			
Protective actions during firefighting	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.		
Special protective equipment for firefighters	Use protective equipment appropriate for surrounding materials.		
6. Accidental release measure	3S		
Personal precautions, protecti	ive equipment and emergency procedures		
Personal precautions	Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapors. Provide adequate general and local exhaust ventilation.		
Environmental precautions			
Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).		
Methods and material for cont	ainment and cleaning up		
Mothodo for clooping up			
Methods for cleaning up	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and dispose of spillage as indicated in Section 13. Wash thoroughly after dealing with a spillage.		
Reference to other sections	clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and dispose of spillage as		
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Reference to other sections 7. Handling and storage	 clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and dispose of spillage as indicated in Section 13. Wash thoroughly after dealing with a spillage. Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. See Section 12 for additional information on 		
Reference to other sections 7. Handling and storage Precautions for safe handling	 clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and dispose of spillage as indicated in Section 13. Wash thoroughly after dealing with a spillage. Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13. Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapors and spray/mists. Provide adequate general and local exhaust ventilation. 		
Reference to other sections 7. Handling and storage Precautions for safe handling Usage precautions	 clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and dispose of spillage as indicated in Section 13. Wash thoroughly after dealing with a spillage. Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13. Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapors and spray/mists. Provide adequate general and local exhaust ventilation. 		
Reference to other sections 7. Handling and storage Precautions for safe handling Usage precautions Conditions for safe storage, in	 clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and dispose of spillage as indicated in Section 13. Wash thoroughly after dealing with a spillage. Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13. Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapors and spray/mists. Provide adequate general and local exhaust ventilation. store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from 		

Specific end use(s)	The identified uses for this product are detailed in Section 1.			
8. Exposure Controls/personal protection				
Ingredient comments	No exposure limits known for ingredient(s).			
Exposure controls				
Protective equipment				
Appropriate engineering controls	As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapor or mist.			
Eye/face protection	Tight-fitting safety glasses.			
Hand protection	It is recommended that chemical-resistant, impervious gloves are worn. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. It is recommended that gloves are made of the following material: Nitrile rubber.			
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.			
Hygiene measures	Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.			
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.			
9. Physical and Chemical P	roperties			

9. Physical and Chemical Properties

Information on basic physical and chemical properties			
Appearance	Liquid.		
Color	Blue.		
Odor	No characteristic odor.		
рН	pH (concentrated solution): .05-1.5		
Relative density	1.26-1.274 @ 20°C		
Other information	Not available.		
10. Stability and reactivity			
Reactivity	Reacts with alkalis and generates heat.		
Stability	Stable at normal ambient temperatures and when used as recommended.		
Possibility of hazardous reactions	Not determined.		
Conditions to avoid	Avoid excessive heat for prolonged periods of time.		

Materials to avoid	Strong alkalis.		
Hazardous decomposition products	None at ambient temperatures.		
11. Toxicological information			
Information on toxicological e	octs		
Acute toxicity - oral ATE oral (mg/kg)	1,706.48		
Inhalation	Vapors irritate the respiratory system.		
Ingestion	Causes severe burns. May cause chemical burns in mouth, esophagus and stomach.		
Skin Contact	May cause serious chemical burns to the skin.		
Eye contact	Causes serious eye damage. Immediate first aid is imperative.		
Acute and chronic health hazards	May cause burns in mucous membranes, throat, esophagus and stomach.		
Route of entry	Ingestion Inhalation Skin and/or eye contact		
Toxicological information on ingredients.			
COPPER(II) METHANESULFONATE			
Acute toxicity -	<u>u</u>		
ATE oral (mg/kg	500.0		
	METHANESULPHONIC ACID		
Acute toxicity -	<u>u</u>		
Acute toxicity of mg/kg)	(LD₅₀ 1.158		
Species	Rat		
ATE oral (mg/kg	500.0		
Acute toxicity -	mal		
Acute toxicity do mg/kg)	n al (LD₅ 1,000.0		
Species	Rabbit		
ATE dermal (m	g) 1,100.0		
Acute toxicity -	alation		
Acute toxicity in (LC₅₀ vapours n			
Species	Rat		
12. Ecological Information			

Ecotoxicity

The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Toxicity	No data available.			
Ecological information on ingredients.				
			COPPER(II) METHANESULFONATE	
	Acute aquatic to	cicity		
	LE(C)50		$0.1 < L(E)C50 \le 1$	
	M factor (Acute)		1	
	Chronic aquatic t	oxicity		
	M factor (Chronic)	1	
			METHANESULPHONIC ACID	
	Acute toxicity - fig	sh	IC₅₀, 96 hour: 73 mg/l, Onchorhynchus mykiss (Rainbow trout)	
	Acute toxicity - ad invertebrates	quatic	Slightly irritating. EC₅₀, 48 hours: 260 mg/l, Daphnia magna	
	Acute toxicity - a plants	quatic	IC₅₀, 72 hours: 12-24 mg/l, Algae, Selenastrum capricornutum	
	Acute toxicity - microorganisms		EC₅₀, 3 hours: 560 mg/l, Activated sludge	
Persistence	e and degradability			
Persistence	e and degradability	No data	available.	
Bioaccumulative potential				
Bio-Accum	ulative Potential	The pro	duct does not contain any substances expected to be bioaccumulating.	
Mobility in a	soil			
Mobility		The pro	duct is soluble in water.	
Other adve				
Other adve	rse effects	Not dete	ermined.	
13. Disposa	al considerations			
-	tment methods			
General inf	comply v		I of this product, process solutions, residues and by-products should at all times with the requirements of environmental protection and waste disposal legislation and al authority requirements.	
Disposal m	ethods		of waste to licensed waste disposal site in accordance with the requirements of the aste Disposal Authority.	
14. Transp	ort information			
UN Numbe	r			
UN No. (TE	DG)	1760		
UN No. (IM	DG)	1760		
UN No. (IC	AO)	1760		
UN No. (DO	OT)	1760		

UN proper shipping name

Proper shipping name (TDG)	CORROSIVE LIQUID, N.O.S. (METHANESULPHONIC ACID)
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (METHANESULPHONIC ACID)
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (METHANESULPHONIC ACID)
Proper shipping name (DOT)	CORROSIVE LIQUID, N.O.S. (METHANESULPHONIC ACID)
Transport hazard class(es)	

TDG class	8
TDG label(s)	8
IMDG Class	8
ICAO class/division	8

Transport labels



Packing group

TDG Packing Group	
IMDG packing group	
ICAO packing group	III
DOT packing group	III

Environmental hazards

Environmentally Hazardous Substance



Special precautions for user

EmS

F-A, S-B

Transport in bulk according to No information required. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities Exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA) Exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities Exempt.

SARA 313 Emission Reporting

Copper(II) Methanesulfonate

CAA Accidental Release Prevention

Exempt.

SARA (311/312) Hazard Categories

Acute Chronic

OSHA Highly Hazardous Chemicals Exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins Exempt.

California Directors List of Hazardous Substances Exempt.

Inventories

US - TSCA All ingredients are present.

16. Other information

Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Carc. = Carcinogenicity Eye Dam. = Serious eye damage Eye Irrit. = Eye irritation Flam. Liq. = Flammable liquid Muta. = Germ cell mutagenicity Resp. Sens. = Respiratory sensitisation Skin Corr. = Skin corrosion Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation STOT RE = Specific target organ toxicity-repeated exposure STOT SE = Specific target organ toxicity-single exposure
Revision date	10/18/2017
Revision	3
Hazard statements in full	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
NFPA - instability hazard	Normally stable. (0)
NFPA - health hazard	Extremely hazardous, serious injury. (3)
NFPA - flammability hazard	Will not burn. (0)

The Information in this data sheet is believed to be correct but neither we nor our employees or agents give any warranty or make any representation to the accuracy thereof and accept no liability for any loss, injury or damage which may result in it's use. The sole purpose of this data sheet is to provide guidance on the safe handling and use of the products to which it relates. It does not form part of any product specification nor part of any contract. It is not practical for the guidance and information in this data sheet to cover every conceivable application of a product and as we may not be aware of the use to which the products covered by this data sheet are to be put it remains the responsibility of the user to conduct it's own tests and to satisy itself as to the suitability of the product.