

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Manganese(Formaldoxime spectrophotometery) Reagent M1-A

Supplier: Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen

City, P.RC 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

Emergency telephone: +86 (755) 82127315 (Mon-Fri 08:30- 18:00)

Chemical Name: Not applicable

CAS No.: Not applicable

Chemical Formula: Not applicable **Chemical Family:** Not applicable

PIN: NA

Intended Use: Determination of Ozone

Date of MSDS Preparation:

Day: 21
Month: June
Year: 2020

2 - COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content
Hydroxylamine	226 709 2	5470-11-1	> 0 Γ 0/
hydrochloride	226-798-2	5470-11-1	>95%

Hazard Symbols: XN N

Risk Phrases: 22 36/38 43 50 48/22

Section 3 - HAZARDS IDENTIFICATION

CHS Classification

Most Important Hazards

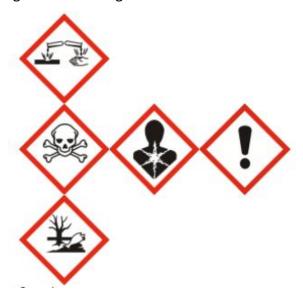
According to ABNT NBR 14725-2

Corrosive to metals	Category 1
Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2
Acute aquatic toxicity	Category 1

Shenzhen Sinsche Technology Co.,Ltd

Label elements

Signal word - Danger



Hazard statements

- H290 May be corrosive to metals
- H301 Toxic if swallowed
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H351 Suspected of causing cancer
- H373 May cause damage to organs through prolonged or repeated exposure
- H400 Very toxic to aquatic life

Precautionary statements

- P270 Do not eat, drink or smoke when using this product
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor
- P405 Store locked up
- P501 Dispose of contents/ container to an approved waste disposal plant
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P302 + P352 IF ON SKIN: Wash with plenty of water and soap
- P312 Call a POISON CENTER or doctor if you feel unwell
- P362 + P364 Take off contaminated clothing and wash it before reuse
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to
- do. Continue rinsing
- P337 + P313 If eye irritation persists: Get medical advice/attention
- P272 Contaminated work clothing should not be allowed out of the workplace
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention
- P201 Obtain special instructions before use



P308 + P313 - IF exposed or concerned: Get medical advice/attention

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

P391 - Collect spillage

P234 - Keep only in original packaging

P390 - Absorb spillage to prevent material damage

Other Hazards Known

Not applicable

Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Notes to Physician:

Absorption of this product into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood. Cleansing of the entire contaminated area of the body is of utmost importance.

Antidote: Methylene blue, alone or in combination with oxygen is indicated as a treatment in nitrite induced methemoglobinemia.

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Exposure to heat may promote violent decomposition.

Use water spray to keep fire-exposed containers cool. Use extinguishing media appropriate to the surrounding fire. May explode if heated above 115¶C.

Extinguishing Media:

Use 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:

Clean up spills immediately, observing precautions in the Protective Equipment section. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Do not allow contact with water. Use only in a chemical fume hood.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Do not store above 65¶C.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 5470-11-1: Personal Protective Equipment Eyes: Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystals

Color: white

Odor: alcohol-like pH: Not available.

Vapor Pressure: Negligible. Viscosity: Not available. Boiling Point: 305.6 deg C

Freezing/Melting Point: 155.00 - 157.00 deg C



Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: Not available.

Solubility in water: IN WATER: 560 G/L (20¶C)

Specific Gravity/Density: 1.6700g/cm3

Molecular Formula: H3NO.HCl Molecular Weight: 69.49

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable. When confined and heated to 115¶C or higher may decompose violently with explosive force.

Conditions to Avoid:

Incompatible materials, moisture, exposure to air, temperatures above 100¶C.

Incompatibilities with Other Materials:

Substance reacts violently with oxidizing agents (such as sodium chlorate, ordinary combustibles, and organic compounds). Combustible and flammable materials (e.g alkyl resins, asphalt, gasoline, grease, methyl acetone, polystyrene, polyurethane.) Hazardous Decomposition Products:

Hydrogen chloride, nitrogen oxides, ammonia and/or derivatives.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 5470-11-1: NC3675000 LD50/LC50:

CAS# 5470-11-1: Oral, mouse: LD50 = 408 mg/kg; Oral, rat: LD50 = 141 mg/kg.

Oral, rat:LD50 = Carcinogenicity:

Hydroxylamine hydrochloride - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Other No information available.

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Vinsche .

Shenzhen Sinsche Technology Co.,Ltd

Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.*

Hazard Class: 8 UN Number: 3260 Packing Group: III

IMO

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Hazard Class: 8 UN Number: 3260 Packing Group: III

RID/ADR

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Hazard Class: 8 UN Number: 3260 Packing group: III

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitization by skin contact.

R 48/22 Harmful: danger of serious damage to health

by prolonged exposure if swallowed.

R 50 Very toxic to aquatic organisms.

Safety Phrases:

S 22 Do not breathe dust.

S 24 Avoid contact with skin.

S 37 Wear suitable gloves.

S 61 Avoid release to the environment. Refer to

special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 5470-11-1: 2

Canada

CAS# 5470-11-1 is listed on Canada's DSL List.

CAS# 5470-11-1 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 5470-11-1 is listed on the TSCA inventory.



_

16 Other information

Rev. No./Repl. SDS Generated

version 1

DISCLAIMER

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Manganese(Formaldoxime spectrophotometery) Reagent M1-B

Supplier: Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen

City, P.RC 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

Emergency telephone: +86 (755) 82127315 (Mon-Fri 08:30- 18:00)

Chemical Name: Not applicable

CAS No.: Not applicable

Chemical Formula: Not applicable **Chemical Family:** Not applicable

PIN: NA

Intended Use: Determination of Ozone

Date of MSDS Preparation:

Day: 21
Month: June
Year: 2020

2 - COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content
Formaldehyde	200-001-8	50-00-0	<20%
Demineralized Water	231-791-2	7732-18-5	>80%

Hazard Symbols: T C

Risk Phrases: 10 23/24/25 34 43 45

3 - HAZARDS IDENTIFICATION

CHS Classification

Most Important Hazards

According to ABNT NBR 14725-2

Flammable liquids	Category 4
Acute toxicity - Ora	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Acute aquatic toxicity	Category 2



Label elements

Signal word - Danger

Hazard statements

H227 - Combustible liquid

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H331 - Toxic if inhaled

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H370 - Causes damage to organs

H372 - Causes damage to organs through prolonged or repeated exposure

H401 - Toxic to aquatic life

H335 - May cause respiratory irritation



Skull and crossbones Health hazard Corrosion

Precautionary statements

P270 - Do not eat, drink or smoke when using this product

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

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

P310 - Immediately call a POISON CENTER or doctor

P363 - Wash contaminated clothing before reuse

P362 + P364 - Take off contaminated clothing and wash it before reuse

P272 - Contaminated work clothing should not be allowed out of the workplace



P201 - Obtain special instructions before use

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor

P273 - Avoid release to the environment

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P403 - Store in a well-ventilated place

P271 - Use only outdoors or in a well-ventilated area

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Other Hazards Known

Not applicable

Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Skin:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Section 6 - ACCIDENTAL RELEASE MEASURES

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



Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Do not breathe vapor or mist. Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep containers tightly closed.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. See 29CFR 1910.1048 for regulatory requirements pertaining to all occupational exposures to formaldehyde, i.e., from formaldehyde gas, its solutions, and materials that release formaldehyde.

Exposure Limits CAS# 50-00-0: United Kingdom, WEL - TWA: 2 ppm TWA; 2.5 mg/m3 TWA United Kingdom, WEL - STEL: 2 ppm STEL; 2.5 mg/m3 STEL United States OSHA: ; 0.75 ppm TWA; 2 ppm STEL; 0.5 ppm Action Le (Irritant and potential cancer ha zard - see 29 CFR 1910.1048) Belgium -STEL: 0.3 ppm VLE; 0.38 mg/m3 VLE France - VME: 0.5 ppm VME France - VLE: 1 ppm VLE Germany: 0.5 ppm TWA; 0.62 mg/m3 TWA Germany: Skin absorber Japan: 0.5 ppm OEL; 0.61 mg/m3 OEL Malaysia: 0.3 ppm Ceiling; 0.37 mg/m3 Ceiling Netherlands: 2 ppm STEL; 3 mg/m3 STEL Netherlands: 1 ppm MAC; 1.5 mg/m3 MAC Russia: 0.5 mg/m3 TWA Spain: 0.3 ppm VLA-EC; 0.37 mg/m3 VLA-EC CAS# 67-56-1: United Kingdom, WEL - TWA: 200 ppm TWA; 266 mg/m3 TWA United Kingdom, WEL - STEL: 250 ppm STEL; 333 mg/m3 STEL United States OSHA: 200 ppm TWA; 260 mg/m3 TWA Belgium - TWA: 200 ppm VLE; 266 mg/m3 VLE Belgium - STEL: 250 ppm VLE; 333 mg/m3 VLE France - VME: 200 ppm VME; 260 mg/m3 VME France - VLE: 1000 ppm VLE; 1300 mg/m3 VLE Germany: 200 ppm TWA; 270 mg/m3 TWA Germany: Skin absorber Japan: 200 ppm OEL; 260 mg/m3 OEL Malaysia: 200 ppm TWA; 262 mg/m3 TWA Netherlands: 200 ppm MAC; 260 mg/m3 MAC Russia: 5 mg/m3 TWA Spain: 200 ppm VLA-ED; 266 mg/m3 VLA-ED Spain: 250 ppm VLA-EC; 333 mg/m3 VLA-EC CAS# 7732-18-5: Personal Protective Equipment Eyes: Wear chemical splash goggles and face shield.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Shenzhen Sinsche Technology Co.,Ltd

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: colorless Odor: pungent odor pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available. Boiling Point: 101 deg C

Freezing/Melting Point: 32 deg F

Autoignition Temperature: Not applicable.

Flash Point: 50 deg C (122.00 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: Not available.

Solubility in water: Soluble.

Specific Gravity/Density: Not available.

Molecular Formula: Mixture Molecular Weight: Not available

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Ignition sources, excess heat, confined spaces.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 50-00-0: LP8925000 CAS# 67-56-1: PC1400000 CAS# 7732-18-5: ZC0110000 LD50/LC50: CAS# 50-00-0: Draize test, rabbit, eye: 750 ug/24H Severe; Draize test, rabbit, eye: 750 ug Severe; Draize test, rabbit, eye: 10 mg Severe; Draize test, rabbit, eye: 37% Severe; Draize test, rabbit, skin: 2 mg/24H Severe; Draize test, rabbit, skin: 50 mg/24H Moderate; Inhalation, mouse: LC50 = 454 mg/m3/4H; Inhalation, mouse: LC50 = 505 mg/m3/2H; Inhalation, rat: LC50 = 203 mg/m3;



Inhalation, rat: LC50 = 578 mg/m3/2H; Inhalation, rat: LC50 = 250 ppm/2H; Oral, mouse: LD50 = 42 mg/kg; Oral, mouse: LD50 = 385 mg/kg; Oral, mouse: LD50 = 500 mg/kg; Oral, rat: LD50 = 500 mg/kg; Skin, rabbit: LD50 = 270 uL/kg; Skin, rabbit: LD50 = 270 mg/kg.

CAS# 67-56-1: Draize test, rabbit, eye: 40 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 20 mg/24H Moderate; Inhalation, rabbit: LC50 = 81000 mg/m3/14H; Inhalation, rat: LC50 = 64000 ppm/4H; Oral, mouse: LD50 = 7300 mg/kg; Oral, rabbit: LD50 = 14200 mg/kg; Oral, rat: LD50 = 5600 mg/kg; Skin, rabbit: LD50 = 15800 mg/kg. CAS# 7732-18-5: Oral, rat: LD50 = 990 mL/kg.

Carcinogenicity:

Formaldehyde - ACGIH: A2 - Suspected Human Carcinogen California: carcinogen, initial date 1/1/88 (gas) NTP: Suspect carcinogen IARC: Group 1 carcinogen Methyl alcohol - Not listed by ACGIH, IARC, or NTP.

Water - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Section 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: FORMALDEHYDE, SOLUTIONS, FLAMMABLE

Hazard Class: 3 UN Number: 1198 Packing Group: III

IMO

Shipping Name: FORMALDEHYDE, SOLUTIONS, FLAMMABLE

Hazard Class: 3 UN Number: 1198 Packing Group: III

RID/ADR

Shipping Name: FORMALDEHYDE, SOLUTIONS, FLAMMABLE

Hazard Class: 3 UN Number: 1198 Packing group: III

USA RQ: CAS# 50-00-0: 100 lb final RQ; 45.4 kg final RQ USA RQ: CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ

(insche)

Shenzhen Sinsche Technology Co.,Ltd

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T C

Risk Phrases:

R 45 May cause cancer.

R 10 Flammable.

R 23/24/25 Toxic by inhalation, in contact with skin

and if swallowed.

R 34 Causes burns.

R 43 May cause sensitization by skin contact.

Safety Phrases:

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 51 Use only in well-ventilated areas.

WGK (Water Danger/Protection)

CAS# 50-00-0: 2

CAS# 67-56-1: 1

CAS# 7732-18-5: No information available.

Canada

CAS# 50-00-0 is listed on Canada's DSL List.

CAS# 67-56-1 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 50-00-0 is listed on Canada's Ingredient Disclosure List.

CAS# 67-56-1 is listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 50-00-0 is listed on the TSCA inventory.

CAS# 67-56-1 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory

16 Other information

Rev. No./Repl. SDS Generated

version 1

Shenzhen Sinsche Technology Co.,Ltd

DISCLAIMER

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Manganese(Formaldoxime spectrophotometery) Reagent M2

Supplier: Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F, T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen

City, P.RC 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

Emergency telephone: +86 (755) 82127315 (Mon-Fri 08:30- 18:00)

Chemical Name: Not applicable

CAS No.: Not applicable

Chemical Formula: Not applicable **Chemical Family:** Not applicable

PIN: NA

Intended Use: Determination of Ozone

Date of MSDS Preparation:

Day: 21
Month: June
Year: 2020

2 - COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content
Ammonium Chloride		12125-02-9	<10%
Ammonia hydroxide	231-635-3	1336-21-6	<60%
Demineralized Water	231-791-2	7732-18-5	<30%

Hazard Symbols: C N Risk Phrases: 34 50

3 - HAZARDS IDENTIFICATION

CHS Classification

Most Important Hazards

According to ABNT NBR 14725-2

Corrosive to metals	Category 1
Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 1

Label elements

Signal word - Danger

Hazard statements

H290 - May be corrosive to metals



- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H335 May cause respiratory irritation
- H400 Very toxic to aquatic life



Precautionary statements

- P270 Do not eat, drink or smoke when using this product
- P501 Dispose of contents/ container to an approved waste disposal plant
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
- 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
- P310 Immediately call a POISON CENTER or doctor
- P363 Wash contaminated clothing before reuse
- P405 Store locked up
- P271 Use only outdoors or in a well-ventilated area
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed
- P273 Avoid release to the environment
- P391 Collect spillage
- P234 Keep only in original packaging
- P390 Absorb spillage to prevent material damage

Other Hazards Known

Not applicable



Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Get medical aid immediately. Wash clothing before reuse.

Ingestion:

If swallowed, do NOT induce vomiting. Get medical aid immediately.

If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation:

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

Notes to Physician:

After inhalation exposure, observe for 24 to 72 hours as pulmonary edema may be delayed.

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated.

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Ammonium hydroxide itself is non-combustible. However concentrated ammonia solutions may give off ammonia vapours. Ammonia gas is generally not considered a serious fire or explosion hazard because ammonia/air mixtures are difficult to ignite. A relatively high concentration of ammonia gas must be present in order for ignition to occur. However, a large and intense energy source may cause ignition and/or explosion in a confined space.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire.

Section 6 - ACCIDENTAL RELEASE MEASURES

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

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.



Neutralize spill with a weak acid such as vinegar or acetic acid. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Approach spill from upwind.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Discard contaminated shoes. Do not breathe vapor. Use only with adequate ventilation.

Storage

Do not store in direct sunlight. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Isolate from oxidizing materials and acids. Walls, floors, shelving, fittings, lighting and ventilation systems in storage area should be made from carbon steel or stainless steel which do not react with ammonium hydroxide.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits CAS# 1336-21-6: CAS# 7664-41-7: United Kingdom, WEL - TWA: 25 ppm TWA (anhydrous); 18 mg/m3 TWA (anhydrous) United Kingdom, WEL - STEL: 35 ppm STEL (anhydrous); 25 mg/m3 STE (anhydrous) United States OSHA: 50 ppm TWA; 35 mg/m3 TWA Belgium - TWA: 20 ppm VLE; 14 mg/m3 VLE Belgium - STEL: 50 ppm VLE; 36 mg/m3 VLE France - VME: 25 ppm VME; 18 mg/m3 VME France - VLE: 50 ppm VLE; 36 mg/m3 VLE Germany: 50 ppm TWA; 35 mg/m3 TWA Japan: 25 ppm OEL; 17 mg/m3 OEL Malaysia: 25 ppm TWA; 17 mg/m3 TWA Netherlands: 50 ppm STEL; 36 mg/m3 STEL Netherlands: 20 ppm MAC; 14 mg/m3 MAC Russia: 20 mg/m3 TWA Spain: 20 ppm VLA-ED; 14 mg/m3 VLA-ED Spain: 50 ppm VLA-EC; 36 mg/m3 VLA-EC CAS# 7732-18-5: Personal Protective Equipment Eyes: Wear chemical splash goggles and face shield. Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.



Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: colorless

Odor: strong odor - ammonia-like

pH: 13.6

Vapor Pressure: 557 mm Hg @ 21 deg C

Viscosity: Not available. Boiling Point: 27 deg C

Freezing/Melting Point: -69 deg C

Autoignition Temperature: 651 deg C (1,203.80 deg F)

Flash Point: Not available. Explosion Limits, lower: 15% Explosion Limits, upper: 28%

Decomposition Temperature: Not available.

Solubility in water: Soluble.

Specific Gravity/Density: Not available.
Molecular Formula: Not available.
Molecular Weight: Not available.

.....

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures. Ammonium hydroxide is actually a solution of ammonia in water. Therefore the flammable properties of ammonia apply.

Conditions to Avoid:

High temperatures, confined spaces, Ammonia solutions are corrosive to copper, zinc, aluminum and their alloys..

Incompatibilities with Other Materials:

Strong oxidizing agents, acids, acrolein, halogens, mercury, hypochlorite, silver nitrate, acrylic acid, dimethyl sulfate, silver oxide.

Hazardous Decomposition Products:

Nitrogen oxides (NOx) and ammonia (NH3).

Hazardous Polymerization: Will not occur.



Section 11 - TOXICOLOGICAL INFORMATION RTECS#: CAS# 1336-21-6: BQ9625000 CAS# 7664-41-7: BO0875000 CAS# 7732-18-5: ZC0110000 LD50/LC50: CAS# 1336-21-6: Draize test, rabbit, eye: 250 ug Severe; Draize test, rabbit, eye: 44 ug Severe; Oral, rat: LD50 = 350 mg/kg. CAS# 7664-41-7: Inhalation, mouse: LC50 = 4230 ppm/1H; Inhalation, mouse: LC50 = 4600 mg/m3/2H; Inhalation, rabbit: LC50 = 7 gm/m3/1H; Inhalation, rat: LC50 = 2000 ppm/4H; Inhalation, rat: LC50 = 18600 mg/m3/5M; Inhalation, rat: LC50 = 7040 mg/m3/30M; Skin, rat: LD50 = 112000 mg/m3/15M; Skin, rat: LD50 = 71900 mg/m3/30M; Skin, rat: LD50 = 4840 mg/m3/60M. CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg. Carcinogenicity: Ammonium hydroxide - Not listed by ACGIH, IARC, or NTP. Ammonia - Not listed by ACGIH, IARC, or NTP. Water - Not listed by ACGIH, IARC, or NTP. Other: See actual entry in RTECS for complete information. Section 12 - ECOLOGICAL INFORMATION **Ecotoxicity:** Fish: Rainbow trout: LC50 = 0.008 mg/L; 24 Hr.; UnspecifiedFish: Fathead Minnow: LC50 = 8.2 mg/L; 96 Hr.; UnspecifiedFish: Bluegill/Sunfish: LC50 = 0.024-0.093 mg/L; 48 Hr.; UnspecifiedWater flea Daphnia: EC50 =0.66 mg/L; 48 Hr.; 22 degrees C Section 13 - DISPOSAL CONSIDERATIONS Dispose of in a manner consistent with federal, state, and local regulations. ______ Section 14 - TRANSPORT INFORMATION



IATA

Shipping Name: AMMONIA SOLUTION

Hazard Class: 8 UN Number: 2672 Packing Group: III

IMO

Shipping Name: AMMONIA SOLUTION

Hazard Class: 8 UN Number: 2672 Packing Group: III

RID/ADR

Shipping Name: AMMONIA SOLUTION

Hazard Class: 8 UN Number: 2672 Packing group: III

USA RQ: CAS# 1336-21-6: 1000 lb final RQ; 454 kg final RQ USA RQ: CAS# 7664-41-7: 100 lb final RQ; 45.4 kg final RQ

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C N

Risk Phrases:

R 34 Causes burns.

R 50 Very toxic to aquatic organisms.

Safety Phrases:

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 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 1336-21-6: 2 CAS# 7664-41-7: 2

CAS# 7732-18-5: No information available.

Canada

CAS# 1336-21-6 is listed on Canada's DSL List.



CAS# 7664-41-7 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 1336-21-6 is listed on Canada's Ingredient Disclosure List.

CAS# 7664-41-7 is listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 1336-21-6 is listed on the TSCA inventory.

CAS# 7664-41-7 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Manganese(Formaldoxime spectrophotometery) Reagent M3

Supplier: Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen

City, P.RC 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

Emergency telephone: +86 (755) 82127315 (Mon-Fri 08:30- 18:00)

Chemical Name: Not applicable

CAS No.: Not applicable

Chemical Formula: Not applicable **Chemical Family:** Not applicable

PIN: NA

Intended Use: Determination of Ozone

Date of MSDS Preparation:

Day: 21
Month: June
Year: 2020

2 -COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content
Hydroxylamine hydrochloride	226-798-2	5470-11-1	>50%
Disodium edetate dihydrate	205-358-3	6381-92-6	<50%

Hazard Symbols: XN N

Risk Phrases: 22 36/38 43 50 48/22

Section 3 - HAZARDS IDENTIFICATION

CHS Classification

Most Important Hazards

According to ABNT NBR 14725-2

Corrosive to metals	Category 1
Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2
Acute aquatic toxicity	Category 1

Shenzhen Sinsche Technology Co.,Ltd

Label elements

Signal word - Danger



Hazard statements

- H290 May be corrosive to metals
- H301 Toxic if swallowed
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H351 Suspected of causing cancer
- H373 May cause damage to organs through prolonged or repeated exposure
- H400 Very toxic to aquatic life

Precautionary statements

- P270 Do not eat, drink or smoke when using this product
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor
- P405 Store locked up
- P501 Dispose of contents/ container to an approved waste disposal plant
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P302 + P352 IF ON SKIN: Wash with plenty of water and soap
- P312 Call a POISON CENTER or doctor if you feel unwell
- P362 + P364 Take off contaminated clothing and wash it before reuse
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to
- do. Continue rinsing
- P337 + P313 If eye irritation persists: Get medical advice/attention
- P272 Contaminated work clothing should not be allowed out of the workplace
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention
- P201 Obtain special instructions before use
- P308 + P313 IF exposed or concerned: Get medical advice/attention



P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

P391 - Collect spillage

P234 - Keep only in original packaging

P390 - Absorb spillage to prevent material damage

Other Hazards Known

Not applicable

Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Notes to Physician:

Absorption of this product into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood. Cleansing of the entire contaminated area of the body is of utmost importance.

Antidote: Methylene blue, alone or in combination with oxygen is indicated as a treatment in nitrite induced methemoglobinemia.

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Exposure to heat may promote violent decomposition.

Use water spray to keep fire-exposed containers cool. Use extinguishing media appropriate to the surrounding fire. May explode if heated above 115C.

Extinguishing Media:

Use dry chemical, carbon dioxide, or appropriate foam.

Shenzhen Sinsche Technology Co.,Ltd

Section 6 - ACCIDENTAL RELEASE MEASURES

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

Clean up spills immediately, observing precautions in the Protective Equipment section. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Do not allow contact with water. Use only in a chemical fume hood.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Do not store above 65C.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 5470-11-1: Personal Protective Equipment Eyes: Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystals

Color: white

Odor: alcohol-like pH: Not available.

Vapor Pressure: Negligible. Viscosity: Not available. Boiling Point: 305.6 deg C

Freezing/Melting Point: 155.00 - 157.00 deg C Autoignition Temperature: Not applicable.



Flash Point: Not applicable.

Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: Not available.
Solubility in water: IN WATER: 560 G/L (20C)
Specific Gravity/Density: 1.6700g/cm3

Molecular Formula: H3NO.HCl Molecular Weight: 69.49

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable. When confined and heated to 115C or higher may decompose violently with explosive force.

Conditions to Avoid:

Incompatible materials, moisture, exposure to air, temperatures above 100C.

Incompatibilities with Other Materials:

Substance reacts violently with oxidizing agents (such as sodium chlorate, ordinary combustibles, and organic compounds). Combustible and flammable materials (e.g alkyl resins, asphalt, gasoline, grease, methyl acetone, polystyrene, polyurethane.) Hazardous

Decomposition Products:

Hydrogen chloride, nitrogen oxides, ammonia and/or derivatives.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTFCS#

CAS# 5470-11-1: NC3675000 LD50/LC50:

CAS# 5470-11-1: Oral, mouse: LD50 = 408 mg/kg; Oral, rat: LD50 = 141 mg/kg.

Oral, rat:LD50 = Carcinogenicity:

Hydroxylamine hydrochloride - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Other No information available.

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

Shenzhen Sinsche Technology Co.,Ltd

IATA

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.*

Hazard Class: 8 UN Number: 3260 Packing Group: III

IMO

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Hazard Class: 8 UN Number: 3260 Packing Group: III

RID/ADR

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Hazard Class: 8 UN Number: 3260 Packing group: III

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitization by skin contact.

R 48/22 Harmful: danger of serious damage to health

by prolonged exposure if swallowed. R 50 Very toxic to aquatic organisms.

Safety Phrases:

S 22 Do not breathe dust.

S 24 Avoid contact with skin.

S 37 Wear suitable gloves.

S 61 Avoid release to the environment. Refer to

special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 5470-11-1: 2

Canada

CAS# 5470-11-1 is listed on Canada's DSL List.

CAS# 5470-11-1 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 5470-11-1 is listed on the TSCA inventory.



_

16 Other information

Rev. No./Repl. SDS Generated

version 1

DISCLAIMER

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.