Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: February 10, 2020

1 Identification

· **Product identifier**

· **Trade name: Chloride Reagent**
· **Product code:** MN9269SS
· **CAS Number:**
67-56-1

· **Recommended use and restriction on use**
· **Recommended use:** Laboratory chemicals
· **Restrictions on use:** No relevant information available.

· **Details of the supplier of the Safety Data Sheet**
· **Manufacturer/Supplier:**
AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331 USA
Tel +1 (717)632-1291
Toll-Free: (866)632-1291
info@aquaphoenixsci.com
· **Distributor:**
AquaPhoenix Scientific
860 Gitts Run Road,
Hanover, PA 17331
(717) 632-1291

· **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

· **Classification of the substance or mixture**

Flam. Liq. 2	H225	Highly flammable liquid and vapor.
Acute Tox. 3	H301	Toxic if swallowed.
Acute Tox. 3	H311	Toxic in contact with skin.
Acute Tox. 3	H331	Toxic if inhaled.
STOT SE 1	H370	Causes damage to the central nervous system and optic nerve.

· **Label elements**
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms:**

GHS02 GHS06 GHS08

· **Signal word:** Danger
· **Hazard statements:**

H225	Highly flammable liquid and vapor.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.

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H370 Causes damage to the central nervous system and optic nerve.

· **Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P330 Rinse mouth.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.
P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.
P337+P313 If eye irritation persists: Get medical advice/attention.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use for extinction: Alcohol resistant foam or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
67-56-1 Methanol

· **Components:**

67-56-1	Methanol Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370	99.45%
538-62-5	1,5-diphenylcarbazone	0.50%
115-39-9	tetrabromophenol blue	0.05%

4 First-aid measures

· **Description of first aid measures**
· **General information:**

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Immediately remove any clothing soiled by the product.
Take affected persons out into the fresh air.

· **After inhalation:**
Supply fresh air.
Seek immediate medical advice.
Provide oxygen treatment if affected person has difficulty breathing.
If experiencing respiratory symptoms: Call a poison center/doctor.

· **After skin contact:**
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation is experienced, consult a doctor.

· **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**
Breathing difficulty
Nausea in case of ingestion.
Coughing
Causes eye irritation.
Causes mild skin irritation.
Gastric or intestinal disorders when ingested.
Acidosis
Nausea
Blindness
Disorientation
Unconsciousness

· **Danger:**
Danger of impaired breathing.
Toxic if swallowed, in contact with skin or if inhaled.
Causes damage to the central nervous system and optic nerve.

· **Indication of any immediate medical attention and special treatment needed:**
Medical supervision for at least 48 hours.
If necessary oxygen respiration treatment.
Later observation for pneumonia and pulmonary edema.
If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**
Alcohol resistant foam
Carbon dioxide
Fire-extinguishing powder
Gaseous extinguishing agents
Water fog / haze

· **For safety reasons unsuitable extinguishing agents:** Water stream.

· **Special hazards arising from the substance or mixture**
Highly flammable liquid and vapor.

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Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

· **Additional information:**
Eliminate all ignition sources if safe to do so.
Use large quantities of foam as it is partially destroyed by the product.
Cool endangered receptacles with water in flooding quantities.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Keep away from ignition sources.
Protect from heat.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.

· **Methods and material for containment and cleaning up**
Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).
Send for recovery or disposal in suitable receptacles.

· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling**

· **Precautions for safe handling:**
Prevent formation of aerosols.
Avoid splashes or spray in enclosed areas.
Use only in well ventilated areas.

· **Information about protection against explosions and fires:**
Highly flammable liquid and vapor.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
Flammable gas-air mixtures may be formed in empty containers/receptacles.

· **Conditions for safe storage, including any incompatibilities**

· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Avoid storage near extreme heat, ignition sources or open flame.

· **Information about storage in one common storage facility:**
Store away from foodstuffs.

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Store away from oxidizing agents.

· **Further information about storage conditions:**
Keep containers tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

· **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
67-56-1 Methanol	
PEL (USA)	Long-term value: 260 mg/m³, 200 ppm
REL (USA)	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV (USA)	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI
EL (Canada)	Short-term value: 250 ppm Long-term value: 200 ppm Skin
EV (Canada)	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
LMPE (Mexico)	Short-term value: 250 ppm Long-term value: 200 ppm PIEL, IBE

· **Ingredients with biological limit values:**	
67-56-1 Methanol	
BEI (USA)	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

· **Exposure controls**

· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

· **Engineering controls:** Provide adequate ventilation.

· **Breathing equipment:**
Use suitable respiratory protective device when high concentrations are present.
NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used.

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· **Protection of hands:**

Protective gloves

· **Material of gloves**
Neoprene gloves
Nitrile rubber, NBR
Fluorocarbon rubber (Viton)
· **Not suitable are gloves made of the following materials:** PVA gloves
· **Eye protection:**

Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.
· **Body protection:** Protective work clothing
· **Limitation and supervision of exposure into the environment**
No relevant information available.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **Appearance:**	
Form:	Liquid
Color:	Colorless
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Melting point/Melting range:**	-98 °C (-144.4 °F)
· **Boiling point/Boiling range:**	64.7 °C (148.5 °F)
· **Flash point:**	11 °C (51.8 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Auto-ignition temperature:**	455 °C (851 °F)
· **Decomposition temperature:**	Not determined.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
· **Explosion limits**	
Lower:	5.5 Vol %
Upper:	44 Vol %
· **Oxidizing properties:**	Non-oxidizing.
· **Vapor pressure at 20 °C (68 °F):**	128 hPa (96 mm Hg)
· **Density at 20 °C (68 °F):**	0.79 g/cm³ (6.59 lbs/gal)
· **Relative density:**	Not determined.

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· **Vapor density:**	Not determined.
· **Evaporation rate:**	Not determined.
· **Solubility in / Miscibility with Water:**	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Other information**	No relevant information available.

10 Stability and reactivity

· **Reactivity:** No relevant information available.
· **Chemical stability:** Stable under normal temperatures and pressures.
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
· **Possibility of hazardous reactions**
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Highly flammable liquid and vapor.
Reacts violently with oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
· **Conditions to avoid**
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
· **Incompatible materials** Oxidizing agents.
· **Hazardous decomposition products**
Under fire conditions only:
Carbon monoxide and carbon dioxide

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
Toxic in contact with skin.
Toxic if inhaled.
Toxic if swallowed.

· **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)		
Oral	LD50	101 mg/kg
Dermal	LD50	302 mg/kg
Inhalative	LC50/4h	3.02 mg/l

· **Primary irritant effect:**
· **On the skin:** Based on available data, the classification criteria are not met.

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· **On the eye:** Causes eye irritation.
· **Sensitization:** Based on available data, the classification criteria are not met.

· **IARC (International Agency for Research on Cancer):**
None of the ingredients are listed.

· **NTP (National Toxicology Program):**
None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**
None of the ingredients are listed.

· **Probable route(s) of exposure:**
Ingestion.
Inhalation.
Eye contact.
Skin contact.
· **Acute effects (acute toxicity, irritation and corrosivity):**
Toxic if swallowed, in contact with skin or if inhaled.
Causes mild skin irritation.
Causes eye irritation.
Causes damage to the central nervous system and optic nerve.
· **Repeated dose toxicity:** No relevant information available.
· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
· **Carcinogenicity:** Based on available data, the classification criteria are not met.
· **Reproductive toxicity:** Based on available data, the classification criteria are not met.
· **STOT-single exposure:** Causes damage to the central nervous system and optic nerve.
· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
· **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity** No relevant information available.
· **Persistence and degradability** No relevant information available.
· **Bioaccumulative potential:** No relevant information available.
· **Mobility in soil:** No relevant information available.
· **Additional ecological information**
· **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Other adverse effects** No relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

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Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**
· **DOT, ADR/RID/ADN, IMDG, IATA** UN1230

· **UN proper shipping name**
· **DOT** Methanol mixture
· **ADR/RID/ADN** METHANOL
· **IMDG, IATA** METHANOL mixture

· **Transport hazard class(es)**

· **DOT**

· **Class** 3
· **Label** 3, 6.1

· **ADR/RID/ADN**

· **Class** 3 (FT1)
· **Label** 3+6.1

· **IMDG**

· **Class** 3
· **Label** 3/6.1

· **IATA**

· **Class** 3
· **Label** 3 (6.1)

· **Packing group**
· **DOT, ADR/RID/ADN, IMDG, IATA** II

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· **Environmental hazards**	Not applicable.
· **Special precautions for user**	Warning: Flammable liquids
· **Hazard identification number (Kemler code):**	336
· **EMS Number:**	F-E,S-D
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **United States (USA)**

· **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

All ingredients are listed.

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

67-56-1	Methanol

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **Canadian Domestic Substances List (DSL):**

None of the ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· **Abbreviations and acronyms:**
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
OSHA: Occupational Safety & Health Administration
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

· **Sources**
Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
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