

Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Chloroform, ACS	
NCL Catalog Number	C-9	
Product Description	Laboratory chemical	
Manufacturer	EMD Chemicals Inc.	PO Box 70, 480 Democrat Road Gibbstown, NJ 08027
Supplier	NCL of Wisconsin, Inc. Telephone: 1-800-648-7836 Email: nclabs@nclabs.com	PO Box 8, Birnamwood, WI 54414 Fax: 715-449-2454 Emergency Contact: 1-800-424-9300 (Chemtrec)

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Acute Toxicity	Oral Category 4
Acute Toxicity	Inhalation Category 4
Skin Irritation	Category 2
Eye Irritation	Category 2A
Carcinogenicity	Category 2
Reproductive Toxicity	Category 2
Specific Target Organ Toxicity	Single exposure Category 3
Specific Target Organ Toxicity	Repeated exposure Category 2



Signal Word

Warning

Hazard Statements

H302+H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs (Liver, Kidney) through prolonged or repeated exposure.

Precautionary Statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist/vapors/spray.
P264	Wash exposed skin 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+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312	Call a POISON CENTER or doctor if you feel unwell.
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.
P312	Call a POISON CENTER or doctor if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Formula CHCl₃
Common Names Trichloromethane, Methylidyne Trichloride.

Substance

Name	CAS #	Approximate %
Chloroform	67-66-3	100

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.

If Inhaled Remove person to fresh air and keep comfortable for breathing. Allow victim to rest. Get medical attention if you feel unwell.

In Case of Skin Contact Remove contaminated clothing and wash exposed skin with mild soap and water. Rinse with warm water. Get medical attention if irritation develops.

In Case of Eye Contact Immediately flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops.

If Swallowed Rinse mouth. Do NOT induce vomiting. Get medical attention if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed

No additional information

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical advice if you feel unwell.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Foam. Dry powder. Sand. Carbon dioxide. Water spray.

Unsuitable Extinguishing Media Do not use high pressure water stream.

Special Hazards Arising from the Chemical No additional information available.

Special Protective Actions for Fire-Fighter Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment (see section 8). Safety glasses, gloves. Evacuate area of non-essential personnel. Eliminate ignition sources.

Environmental Precautions Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up Clean up spill with inert absorbent material. Collect spillage. Store away from other materials. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

**Conditions for Safe Storage
Including any Incompatibilities**

Keep in a tightly closed container, stored in a cool, dry, well-ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chloroform (67-66-3)		
USA ACGIH	ACGIH TWA	10 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	240 mg/m ³
USA OSHA	OSHA PEL (Ceiling) (ppm)	50 ppm

Appropriate Engineering Controls

Material should be handled or transferred in a fume hood or with equivalent ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures

Avoid all unnecessary exposure.

Eye/Face Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

Skin Protection

Protective gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection

Wear appropriate mask.

Other Information

Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colorless
Odor	Ether odor
Odor Threshold	Not determined
pH	Not determined
Melting Point/Freezing Point	-63°C
Initial Boiling Point and Boiling Range	60.5-61.5°C
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Solubility	Not determined
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Harmful if swallowed or if inhaled.
Chloroform (67-66-3)	
LD50 oral rat	695 mg/kg
LD50 dermal rabbit	>20000 mg/kg
LC50 inhalation rat	18 mg/l/4h
Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Causes serious eye irritation.
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Suspected of causing cancer. IARC: 2B - Group 2B - Possibly carcinogenic to humans.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure)	Inhalation may cause drowsiness or dizziness.
Specific Target Organ Toxicity (Repeated Exposure)	May cause damage to organs (liver, kidneys) through prolonged or repeated exposure.
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	Harmful if swallowed.
Likely Routes of Exposure	Skin and eye contact.
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Ecology – Water Toxicity	No data available.
Persistence and Degradability	No data available.
Bioaccumulative Potential	Not established
Mobility in Soil	Not established
Other Adverse Effects	Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations	Dispose of contents/containers in accordance with local, state federal regulations.
Other Information	Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	1888
UN Shipping Name	Chloroform
Transport Hazard Class(es)	Not applicable
Packing Group	III
Environmental Hazards	Not applicable

Transport in Bulk Not applicable
Other Precautions Not applicable

SECTION 15: REGULATORY INFORMATION

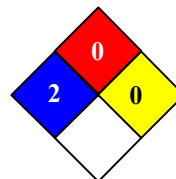
Chloroform (67-66-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: OTHER INFORMATION

Revision Date: 04/06/2015

NFPA Hazards

Health Hazard 2: Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury.
Fire Hazard 0: Materials that will not burn.
Reactivity/Instability 0: Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health 2: Temporary or minor injury may occur.
Flammability 0: Materials that will not burn.
Physical Hazard 0: Materials that are normally stable.
Personal Protection H

C-9	
Health	2
Flammability	0
Physical Hazard	0
Personal Protection	H

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END OF SAFETY DATA SHEET