



Be Right™

SAFETY DATA SHEET

Issue Date 13-05-2019

Revision Date 26-Jan-2024

Version 4.3

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1. IDENTIFICATION

Product identifier

Product Name Chloroform

Other means of identification

Product Code(s) 1445817

Safety data sheet number M00190

UN/ID no UN1888

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory Use. Solvent.

Uses advised against Consumer use.

Restrictions on use For Laboratory Use Only.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

Danger



Hazard statements

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H331 - Toxic if inhaled
- H351 - Suspected of causing cancer
- H361 - Suspected of damaging fertility or the unborn child
- H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements

- P270 - Do not eat, drink or smoke when using this product
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P330 - Rinse mouth
- P501 - Dispose of contents/ container to an approved waste disposal plant
- P271 - Use only outdoors or in a well-ventilated area
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P311 - Call a POISON CENTER or doctor/physician
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
- P405 - Store locked up
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P332 + P313 - If skin irritation occurs: Get medical attention
- P362 - Take off contaminated clothing and wash before reuse
- P280 - Wear protective gloves, protective clothing, eye protection, and face protection
- 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 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

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name Chloroform
Chemical Family Halogenated hydrocarbons.
Formula CHCl₃
CAS No 67-66-3
Chemical nature Organic solvents and additives.

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Chloroform	67-66-3	100%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice	IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
Inhalation	Get medical attention immediately if symptoms occur. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapor or mist.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	Caution: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	No information available.
Hazardous combustion products	This material will not burn.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

U.S. Notice Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Remove contaminated clothing and shoes. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Chloroform CAS#: 67-66-3	TWA: 10 ppm	(vacated) TWA: 2 ppm (vacated) TWA: 9.78 mg/m ³ Ceiling: 50 ppm Ceiling: 240 mg/m ³	IDLH: 500 ppm STEL: 2 ppm 60 min STEL: 9.78 mg/m ³ 60 min

Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures, such as personal protective equipment

Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hand Protection	Impervious gloves. Wear suitable gloves. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016. Barrier creams may help to protect the exposed areas of skin.
Eye/face protection	If splashes are likely to occur, wear safety glasses with side-shields.
Skin and body protection	Long sleeved clothing. Wear suitable protective clothing.
General Hygiene Considerations	Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.
Thermal hazards	None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	clear	Liquid	Color	colorless
Appearance	Ether-like		Odor threshold	200 ppm

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	119.37 g/mole	
pH	No data available	
Melting point / freezing point	-64 °C / -83.2 °F	
Initial boiling point and boiling range	61 °C / 141.8 °F	
Evaporation rate	0.6 (ether = 1)	
Vapor pressure	159.016 mm Hg / 21.2 kPa at 20 °C / 68 °F	
Relative vapor density	4.36	
Specific gravity - VALUE 1	1.49	
Partition coefficient	log K _{ow} = 1.97	
Soil Organic Carbon-Water Partition Coefficient	log K _{oc} = 1.71	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	No data available	

Kinematic viscosity No data available

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	8000 mg/L	20 °C / 68 °F

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
Ethyl alcohol	Soluble	> 1000 mg/L	25 °C / 77 °F
Benzene	Soluble	> 1000 mg/L	25 °C / 77 °F
Carbon disulfide	Soluble	> 1000 mg/L	25 °C / 77 °F
Carbon tetrachloride	Soluble	> 1000 mg/L	25 °C / 77 °F
Ether	Soluble	> 1000 mg/L	25 °C / 77 °F

Other information

Metal Corrosivity

Steel Corrosion Rate No data available
Aluminum Corrosion Rate No data available

Volatile Organic Compounds (VOC) Content

This Product is by Weight 100% an Individual Pure Chemical Substance See ingredients information below

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Chloroform	67-66-3	100%	X

Explosive properties

Upper explosion limit Not applicable
Lower explosion limit Not applicable

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limit: No data available
Lower flammability limit: No data available

Oxidizing properties

No data available.

Bulk density

Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

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Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Excessive heat.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

Phosgene. Hydrogen chloride. Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract. Toxic by inhalation.
Eye contact Irritating to eyes. Causes serious eye irritation.
Skin contact Causes skin irritation.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.

Symptoms Redness. May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing.

Acute toxicity

Harmful if swallowed
Toxic if inhaled

Mixture

If available, see ingredient data below.

Ingredient Acute Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Rat LD ₅₀	695 mg/kg	None reported	None reported	GESTIS

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
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Chloroform (100%) CAS#: 67-66-3	Rat LC ₅₀	47.702 mg/L	4 hours	None reported	RTECS
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Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

Not applicable

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

Classification based on data available for ingredients. Irritating to skin.

Mixture

If available, see ingredient data below.

Ingredient Skin Corrosion/Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Standard Draize Test	Rabbit	None reported	None reported	Skin irritant	ECHA

Serious eye damage/irritation

Classification based on data available for ingredients. Irritating to eyes.

Mixture

If available, see ingredient data below.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Standard Draize Test	Rabbit	20 mg	24 hours	Eye irritant	RTECS

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Mixture

If available, see ingredient data below.

Ingredient Sensitization Data

Test data reported below.

Skin Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	OECD Test No. 406: Skin Sensitization	Guinea pig	Not confirmed to be a skin sensitizer	ECHA

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture

If available, see ingredient data below.

Ingredient Specific Target Organ Toxicity Single Exposure Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Man LD _{Lo}	2514 mg/kg	None reported	Kidney, Ureter, or Bladder Changes in tubules (including acute renal failure, acute tubular necrosis)	RTECS

Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Human TC _{Lo}	171 mg/L	4 hours	Behavioral Hallucinations, Distorted perceptions	RTECS

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Mixture

If available, see ingredient data below.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Rat TD _{Lo}	540 mg/kg	3 days	Biochemical Intermediary metabolism (other proteins) Kidney, Ureter, or Bladder Changes in tubules (including acute renal failure, acute tubular necrosis)	RTECS

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Rat TC _{Lo}	90 mg/L	90 days	Kidney, Ureter, or Bladder Changes in tubules (including acute renal failure, acute tubular necrosis)	RTECS

				Liver Hepatitis (hepatocellular necrosis), diffuse Nutritional and Gross Metabolic Weight loss or decreased weight gain	
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Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Human TC _{Lo}	0.010 mg/L	365 days	Gastrointestinal Nausea or vomiting Other changes	RTECS

Carcinogenicity

Classification based on data available for ingredients. Contains a known or suspected carcinogen.

Mixture

If available, see ingredient data below.

Ingredient Carcinogenicity Data

Test data reported below.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Chloroform	67-66-3	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)	Group 2B - Possibly Carcinogenic to Humans
NTP (National Toxicology Program)	Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA	X - Present

Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Mouse NOAEL	5 mg/L	2 years	Kidney, Ureter, or Bladder Kidney tumors	ECHA

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro Data

If available, see ingredient data below.

Substance invitro Data

Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Mutation in microorganisms	<i>Salmonella typhimurium</i>	5%	24 hours	Negative	ECHA

Mixture in vivo Data

If available, see ingredient data below.

Substance in vivo Data

Test data reported below.

Oral Exposure Route

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Micronucleus test	Rat	480 mg/kg	5 days	Negative test result for mutagenicity	ECHA

Reproductive toxicity

Classification based on data available for ingredients. Contains a known or suspected reproductive toxin. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Mouse NOAEL	15.9 mg/kg	Multiple generations	Effects on Fertility Male fertility index (e.g. # males impregnating females per # males exposed to fertile nonpregnant females) Spermatogenesis (including genetic material, sperm morphology, motility, and count)	ECHA

Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	Rat NOAEL	3 mg/L	9 days	Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus)	ECHA

Aspiration hazard

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Based on available data, the classification criteria are not met.

Unknown aquatic toxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Mixture

Aquatic Acute Toxicity

If available, see ingredient data below.

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Aquatic Chronic Toxicity

If available, see ingredient data below.

Substance

Aquatic Acute Toxicity

Test data reported below.

Aquatic Chronic Toxicity

Test data reported below.

Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Chloroform (100%) CAS#: 67-66-3	14 days	<i>Oryzias latipes</i>	NOEC	1.463 mg/L	ECHA

Persistence and degradability

Mixture

No data available.

Bioaccumulation

MATERIAL DOES NOT BIOACCUMULATE

Mixture

No data available.

Partition coefficient

$\log K_{ow} = 1.97$

Mobility

Soil Organic Carbon-Water Partition Coefficient

$\log K_{oc} = 1.71$

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

US EPA Waste Number

U044 D022

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Chloroform 67-66-3	U044	Included in waste streams: F024, F025, F039, K009, K010, K019, K020, K021, K029, K073, K116, K149, K150, K151, K158	6.0 mg/L regulatory level	U044

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
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Chloroform 67-66-3	Category I - Volatiles	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	Toxic waste waste number K021 Waste description: Aqueous spent antimony catalyst waste from fluoromethanes production.
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Special instructions for disposal Dispose of material in an E.P.A. approved hazardous waste facility.

14. TRANSPORT INFORMATION

DOT

UN/ID no UN1888
 Proper shipping name Chloroform
 Transport hazard class(es) 6.1
 Packing Group III
 Reportable Quantity (RQ) Chloroform: RQ kg= 4.54
 Emergency Response Guide Number 151

TDG

UN/ID no UN1888
 Proper shipping name Chloroform
 Transport hazard class(es) 6.1
 Packing Group III

IATA

UN number or ID number UN1888
 Proper shipping name Chloroform
 Transport hazard class(es) 6.1
 Packing group III
 ERG Code 6A

IMDG

UN number or ID number UN1888
 Proper shipping name Chloroform
 Transport hazard class(es) 6.1
 Packing Group III
 EmS-No F-A, S-A

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.
 If the item is part of a reagent set or kit the classification would change to the following:
 UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.
 If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories

TSCA Complies
 DSL/NDL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
TCSI - Taiwan Chemical Substances Inventory
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Chloroform (CAS #: 67-66-3)	0.1

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chloroform 67-66-3	10 lb	X	X	X

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chloroform 67-66-3	10 lb 1 lb	10 lb	RQ 10 lb final RQ RQ 4.54 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues

Chemical name	U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues
Chloroform (100%) CAS#: 67-66-3	Release - Toxic

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Chloroform (CAS #: 67-66-3)	Carcinogen Developmental



WARNING: This product can expose you to chemicals including Chloroform, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
 For more information, go to <http://www.P65Warnings.ca.gov>

IMERC: Not applicable

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Chloroform 67-66-3	X	X	X

U.S. EPA Label Information

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

NFPA and HMIS Classifications

NFPA	Health hazards - 3	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 3 - *	Flammability - 0	Physical hazards - 0	Personal protection - X - I

Key or legend to abbreviations and acronyms used in the safety data sheet

- | | |
|-------|---|
| ACGIH | ACGIH (American Conference of Governmental Industrial Hygienists) |
| ATSDR | ATSDR (Agency for Toxic Substances and Disease Registry) |
| CCRIS | CCRIS (Chemical Carcinogenesis Research Information System) |
| CDC | CDC (Center for Disease Control) |
| CEPA | CEPA (Canadian Environmental Protection Agency) |
| CICAD | CICAD (Concise International Chemical Assessment Documents) |
| ECHA | ECHA (The European Chemicals Agency) |

EEA	EEA (European Environment Agency)
EPA	EPA (Environmental Protection Agency)
ERMA	ERMA (New Zealand's Environmental Risk Management Authority)
ECOSARS	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™
FDA	FDA (Food & Drug Administration)
GESTIS	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
HSDB	HSDB (Hazardous Substances Data Bank)
INERIS	INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM	IPCS INCHEM (International Programme on Chemical Safety)
IUCLID	IUCLID (The International Uniform Chemical Information Database)
NITE	Japan National Institute of Technology and Evaluation (NITE)
NIH	NIH (National Institutes of Health)
NIOSH	NIOSH (National Institute for Occupational Safety and Health)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
NDF	no data
NICNAS	Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH IDLH	Immediately Dangerous to Life or Health
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEEN	PEEN (Pan European Ecological Network)
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS	SIDS (Screening Information Dataset) for High Volume Chemicals
SYKE	The Finnish Environment Institute (SYKE)
USDA	USDA (United States Department of Agriculture)
USDC	USDC (United States Department of Commerce)
WHO	WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

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Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE

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End of Safety Data Sheet