

# SAFETY DATA SHEET

## Chloroform w/ Amylene

### 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

**Product Identifier:** High Purity Chemicals  
**Synonyms:** Trichloromethane; Methylidyne trichloride  
**Other means of identification:** CAS No. 67-66-3  
EINECS No. 200-663-8

#### Recommended use of the chemical and restrictions on use:

#### Supplier Details:

**Greenfield Global USA, Inc.**  
58 Vale Road, Brookfield,  
CT 06804, USA.  
Tel: 203.740.3471  
Fax: 203.740.3481  
CCN17213

**Greenfield Global USA, Inc.**  
1101 Isaac Shelby Drive, Shelbyville,  
KY 40065, USA.  
Tel: 502.232.7600  
Fax: 502.633.6100  
CCN17213

**Emergency Contact:** CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

### 2. HAZARDS IDENTIFICATION

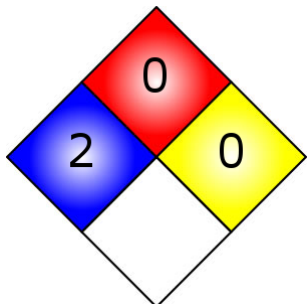
#### OSHA Hazards:

Carcinogen, Harmful by ingestion, Irritant, Target organ effect

#### Target Organs:

Blood, Cardiovascular system, Central nervous system, Kidney, Liver

#### NFPA



#### GHS label elements, including precautionary statements



**Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)  
+1.703.527.3887 (INT)**



**Signal Word:**

WARNING!

**Hazard statement(s)**

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

**Precautionary statement(s)**

P281	Use personal protective equipment as required.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P501	Dispose of contents and container to an approved waste disposal plant.

**GHS Classification(s)**

Acute Toxicity, Inhalation (Category 4)  
Reproductive toxicity (Category 2)  
Carcinogenicity (Category 2)  
Skin irritation (Category 2)  
Specific target organ toxicity - repeated exposure (Category 2)  
Specific target organ toxicity - single exposure (Category 3)  
Eye irritation (Category 2)  
Acute toxicity, Oral (Category 4)

**Other hazards which do not result in classification:**



**Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)**

**Potential Health Effects:**

**+1.703.527.3887 (INT)**

Organ	Description
Eyes	Causes eye irritation.
Ingestion	Harmful if swallowed.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	Harmful if absorbed through skin. Causes skin irritation.

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

<b>Chemical identity:</b>	Chloroform
<b>Common name / Synonym:</b>	Trichloromethane; Methylidyne trichloride
<b>CAS number:</b>	67-66-3
<b>EINECS number:</b>	200-663-8
<b>ICSC number:</b>	0027
<b>RTECS #:</b>	FS9100000
<b>UN #:</b>	UN1888
<b>EC #:</b>	602-006-00-4

% Weight	Material	CAS
<1	Amylene	109-67-1
>99	Chloroform	67-66-3

### 4. FIRST AID MEASURES

#### General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### Skin

Wash skin with soap and copious amounts of water. Seek medical attention.

#### Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

#### Eyes

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Keep rinsing while in transport to hospital.

#### Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.



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+1.703.527.3887 (INT)**

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## **5. FIRE FIGHTING MEASURES**

### **Suitable (and unsuitable) extinguishing media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):**

No data available.

### **Special protective equipment and precautions for firefighters:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

### **Classification**

Not flammable or combustible.

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## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Do not inhale vapors/mist/gas/dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

### **Environmental precautions:**

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

### **Methods and materials for containment and cleaning up:**

Absorb with an inert dry material and place in an appropriate waste disposal container. Keep disposal containers closed when finished.

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## **7. HANDLING AND STORAGE**

### **Precautions for safe handling:**

Do not get on skin or in eyes. Do not inhale vapor or mist. Take normal fire prevention measures.

### **Conditions for safe storage, including any incompatibilities:**

Store in a cool, dry, well ventilated location. Opened containers should be resealed and kept upright to prevent leakage.

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## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **Control parameters, e.g., occupational exposure limit values or biological limit values:**

**Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)  
Occupational Exposure Limits +1.703.527.3887 (INT)**

Component	Source	Type	Value	Note
Chloroform	US (ACGIH)	TWA	10 ppm, 49 mg/m <sup>3</sup>	ACGIH Threshold Limit Values
Chloroform	US (OSHA)	Ceiling	50 ppm, 240 mg/m <sup>3</sup>	29 CFR 1910.1000 Table Z-1 Limits for Air Contaminants

**Appropriate engineering controls:**

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

**Individual protection measures, such as personal protective equipment:**

**Respiratory protection:**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection:**

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

**Skin and body protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance (physical state, color, etc.)</b>	Liquid. Colorless, clear.
<b>Freezing point</b>	-64 °C (-83 °F)
<b>Initial boiling point and boiling range</b>	61°C (142 °F)
<b>Vapor pressure</b>	213.3 hPa (160.0 mmHg) at 20.0 °C (68.0 °F)
<b>Relative Density</b>	1.492 g/mL at 25 °C (77 °F)
<b>Formula (CHLOROFORM)</b>	CHCl <sub>3</sub>
<b>Molecular Weight (CHLOROFORM)</b>	119.38 g/mol



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**10. STABILITY AND REACTIVITY**

<b>Possibility of hazardous reactions</b>	No data available
<b>Conditions to avoid (e.g., static discharge, shock or vibration)</b>	No data available
<b>Incompatible materials</b>	Strong oxidizing agents, Strong bases, Magnesium, Sodium/sodium oxides, Lithium
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. - Carbon oxides, hydrogen chloride gas

**11. TOXICOLOGICAL INFORMATION**

• Chloroform 67-66-3

**Product Summary:**

Laboratory tests have shown mutagenic effects. No data available for the teratogenic or reproductive effects of the product.

**Acute Toxicity:**

LC50 (Inhalation)	Rat	47,702 mg/m3	4 hours
LD50 (Dermal)	Rabbit	>20,000 mg/kg	
LD50 (Oral)	Rat	695 mg/kg	

**Irritation:**

**Eyes**

Rabbit - Irritating to eyes - 24 hours

**Skin**

Rabbit - Severe skin irritation - 24 hours

**Carcinogenicity**

IARC: Group 2B: Possibly carcinogenic to humans

NTP: Reasonably anticipated to be a human carcinogen

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Other Hazards**

<b>Organ</b>	<b>Description</b>
Eyes	Irritating to the eyes.
Ingestion	Harmful if ingested.



**Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)**

Inhalation	May be harmful if inhaled. Irritating to the respiratory tract.	<b>+1.703.527.3887 (INT)</b>
Skin	Harmful if absorbed through skin. Irritating to skin.	

• Amylene 109-67-1

**Product Summary:**

No data available for the mutagenic, teratogenic, or reproductive effects of the product.

**Acute Toxicity:**

No data available			
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**Irritation:**

**Eyes**

Causes eye irritation.

**Skin**

Causes skin irritation.

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Other Hazards**

Organ	Description
Eyes	Irritating to the eyes.
Ingestion	May be harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage.
Inhalation	May be harmful if inhaled. Irritating to the respiratory tract.
Skin	May be harmful if absorbed through skin. Irritating to the skin.

**12. ECOLOGICAL INFORMATION**

• Chloroform 67-66-3



**Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)**

**Ecotoxicity (aquatic and terrestrial, where available):**

**+1.703.527.3887 (INT)**

**Acute Fish Toxicity (CHLOROFORM)**

LC50 / 48 hours Golden Orfe - 162 mg/L

**Acute Fish Toxicity (CHLOROFORM)**

LC100 / 48 hours Golden Orfe - 220 mg/L

**Acute Fish Toxicity (CHLOROFORM)**

NOEC / 96 hours Rainbow Trout - 24 mg/L

**Persistence and degradability:**

No data available

**Bioaccumulative potential:**

Bioaccumulation: Bluegill - 14 days, Bioconcentration factor (BCF): 6

• Amylene 109-67-1

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**Ecotoxicity (aquatic and terrestrial, where available):**

**Ecotoxicity**

No data available

**Persistence and degradability:**

No data available

**Bioaccumulative potential:**

No data available

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### 13. DISPOSAL CONSIDERATIONS

**Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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### 14. TRANSPORT INFORMATION

**Description of waste residues and information on their safe handling and methods of disposal:**





**Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)**

<b>UN number</b>	UN1888
<b>UN proper shipping name</b>	Chloroform
<b>Transport hazard class(es)</b>	6.1
<b>Packing group (if applicable)</b>	III

**Reportable Quantity**

10 lbs.

**IMDG**

UN-Number: UN1888 Class: 6.1 Packing Group: III

EMS-No: F-A, S-A

Proper shipping name: CHLOROFORM

Marine pollutant: No

**IATA**

UN-Number: UN1888 Class: 6.1 Packing Group: III

Proper shipping name: Chloroform

**15. REGULATORY INFORMATION**

**Safety, health and environmental regulations specific for the product in question:**

**OSHA Hazards**

Carcinogen, Harmful by ingestion, Irritant, Target organ effect

All ingredients are on the following inventories or are exempted from listing

<b>Country</b>	<b>Notification</b>
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

**SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:

CHLOROFORM CAS-No. 67-66-3 Revision Date 2007-07-01

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

CHLOROFORM CAS-No. 67-66-3 Revision Date 2007-07-01

**SARA 311/312 Hazards**



**PHARMCO**  
by Greenfield Global

**Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)**

Acute Health Hazard

**+1.703.527.3887 (INT)**

Chronic Health Hazard

**CERCLA**

Chloroform CAS-No. 67-66-3, RQ: 10 lbs.

**Massachusetts Right To Know Components**

Chloroform CAS-No. 67-66-3 Revision Date 2007-07-01

**Pennsylvania Right To Know Components**

Chloroform CAS-No. 67-66-3 Revision Date 2007-07-01

**New Jersey Right To Know Components**

Chloroform CAS-No. 67-66-3 Revision Date 2007-07-01

**California Prop 65 Components**

WARNING! This product contains a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm: CHLOROFORM CAS-No. 67-66-3 Revision Date 2008-10-10

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## **16. OTHER INFORMATION: INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS**

**Disclaimer**

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