

# Fisher Scientific MATERIAL SAFETY DATA SHFFT

## Section 1 - Chemical Product and Company Identification

MSDS Name: Chloroform

Catalog AC167730000, AC167730010, AC167730025, AC167735000, AC268320000, Numbers: AC268320010 AC268320010, AC268320025, AC326670000, AC326670010,

AC326670025, AC326820000 AC326820000, AC326820010, AC326821000, AC364320000, AC364320010, AC364321000 AC364321000, AC383760000, AC383760010, AC383760025, AC383760050, AC383770000 AC383770000.

AC383770010. AC383770025

Synonyms:

Company Identification: Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel. Belgium

Company Identification: (USA) **Acros Organics** 

One Reagent Lane Fair Lawn, NJ 07410 800-ACROS-01

For information in the US, call: For information in Europe, call: +32 14 57 52 11 **Emergency Number, Europe:** +32 14 57 52 99 **Emergency Number US:** 201-796-7100 **CHEMTREC Phone Number, US:** 800-424-9300 **CHEMTREC Phone Number, Europe:** 703-527-3887

#### Section 2 - Composition, Information on Ingredients

CAS#: 67-66-3 Chemical Name: Chloroform %: >99% EINECS#: 200-663-8

**Hazard Symbols:** XN



**Risk Phrases:** 22 38 40 48/20/22

#### Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Light sensitive. Target Organs: Kidneys, heart, central nervous system, liver.

## **Potential Health Effects**

Eve: Vapors may cause eye irritation. Contact produces irritation, tearing, and burning pain. May

cause conjunctivitis. Causes redness and pain.

Skin: Prolonged and/or repeated contact may cause irritation and/or dermatitis. May cause severe

skin irritation with possible burns, especially if skin is wet or moist. Causes redness and

pain.

Ingestion: Harmful if swallowed. May cause central nervous system depression, kidney damage, and

liver damage. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May

cause cardiac disturbances.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by

nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract

irritation. May cause liver and kidney damage. May cause cardiac sensitization and possible

failure. May cause narcotic effects in high concentration.

Possible cancer hazard based on tests with laboratory animals. Prolonged or repeated skin Chronic:

contact may cause dermatitis. Prolonged or repeated exposure may cause adverse

reproductive effects. May cause liver and kidney damage.

#### Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting

the upper and lower evelids. Get medical aid immediately. Do NOT allow victim to rub

eves or keep eves closed.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes.

Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink Ingestion:

2-4 cupfuls of milk or water. Wash mouth out with water.

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: Substance is noncombustible.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Temperature: Not available

Flash Point: Not available Explosion Limits: Lower: Not available Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 0; instability: 0;

#### Section 6 - Accidental Release Measures

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

Information:

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in

suitable container.

# Section 7 - Handling and Storage

Handling: Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Do not ingest

or inhale. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container.

#### **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.

| +                           | -+     | +     |       |              |        |
|-----------------------------|--------|-------|-------|--------------|--------|
| Chemical Name<br>Final PELs | I      | ACGIH | I     | NIOSH        | OSHA - |
|                             |        |       | -   - |              |        |
|                             |        |       |       |              |        |
| Chloroform                  | 10 ppm |       |       | 500 ppm IDLH | 50 ppm |
| Ceiling;                    |        |       |       |              |        |
| 1                           |        |       |       |              | 240    |

mg/m3 |Ceiling

OSHA Vacated PELs: Chloroform: 2 ppm TWA; 9.78 mg/m3 TWA

**Personal Protective Equipment** 

Wear chemical splash goggles. Eves:

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: Clear liquid Color: APHA: 10 max Odor: sweetish odor pH: Not available

Vapor Pressure: 213mbar @20 deg C

Vapor Density: 4.12 (Air=1)

Evaporation Rate: 11.6 (Butyl acetate=1) Viscosity: 0.56 mPa s @20 deg C

Boiling Point: 61 deg C @760mmHg ( 141.80°F)

Freezing/Melting Point: -63 deg C ( -81.40°F)

**Decomposition Temperature:** Not available Solubility in water: 8 g/l (20°C) Specific Gravity/Density: 1.480

> Molecular Formula: CHCI3 Molecular Weight: 119.38

#### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage

and handling conditions.

**Conditions to Avoid:** High temperatures, incompatible materials, light.

**Incompatibilities with Other** 

**Materials** 

Not available

**Hazardous Decomposition** 

**Products** 

Hydrogen chloride, carbon monoxide, carbon dioxide, chlorine,

phosgene gas.

**Hazardous Polymerization** Will not occur.

## Section 11 - Toxicological Information

RTECS#: CAS# 67-66-3: FS9100000

LD50/LC50: RTECS:

CAS# 67-66-3: Draize test, rabbit, eye: 148 mg; Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, skin: 500 mg/24H Mild; Inhalation, mouse: LC50 = 17200 mg/m3/2H; Inhalation, mouse: LC50 = 6000 mg/m3/6H: Inhalation, rat: LC50 = 47702 mg/m3/4H; Inhalation, rat: LC50 = 6000 mg/m3/6H;

Oral, mouse: LD50 = 36 mg/kg; Oral, rat: LD50 = 695 mg/kg; Oral, rat: LD50 = 1250 mg/kg; Skin, rabbit: LD50 = >20 gm/kg; Carcinogenicity: Chloroform - ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to

humans California: carcinogen, initial date 10/1/87 NTP: Suspect carcinogen IARC:

Group 2B carcinogen

**Other:** See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

**Ecotoxicity:** Fish: Rainbow trout: >1000 ppm

Bacteria: Pseudomonas putida: >1000 ppm

## **Section 13 - Disposal Considerations**

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

#### **Section 14 - Transport Information**

**US DOT** 

Shipping Name: CHLOROFORM

Hazard Class: 6.1 UN Number: UN1888 Packing Group: III Canada TDG

Shipping Name: Not available

Hazard Class: UN Number: Packing Group:

USA RQ: CAS# 67-66-3: 10 lb final RQ; 4.54 kg final RQ

#### **Section 15 - Regulatory Information**

#### **European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 38 Irritating to skin.

R 40 Limited evidence of a carcinogenic effect.

R 48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)

CAS# 67-66-3: 3

Canada

CAS# 67-66-3 is listed on Canada's DSL List Canadian WHMIS Classifications: D2A, D2B, D1B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 67-66-3 is listed on Canada's Ingredient Disclosure List

TSCA
CAS# 67-66-3 is listed on the TSCA
Inventory.

## **Section 16 - Other Information**

MSDS Creation Date: 6/09/1999 Revision #5 Date 2/10/2006

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.