# **MATERIAL SAFETY DATA SHEET**



by Tyco Fire Suppression & Building Products

# **HALON 1211**

Issue Date: 10-14-2011

1. Product and Company Identification

**Material** name

**HALON 1211** 

Version #

01

**Revision date** 

10-14-2011

CAS#

353-59-3

Product use

Fire extinguishing agent

Manufacturer / Importer /

Supplier

Name Address Tyco Fire Protection Products

One Stanton Street

Marinette, WI 54143-2542

Phone Internet

715-735-7411 http://www.ansul.com

**Emergency Phone Number** 

CHEMTREC 800-424-9300 or 703-527-3887

## 2. Hazards Identification

**Emergency overview** 

DANGER

Contents under pressure. Heat may cause the containers to explode.

**OSHA** regulatory status

This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).

Fire Extinguisher

HALAH

Potential health effects

Routes of exposure

Inhalation.

Eyes

None known.

Skin

None known.

Inhalation

Suffocation (asphyxiant) hazard - if allowed to accumulate to concentrations that reduce oxygen

below safe breathing levels.

Ingestion

Not a likely route of entry.

Potential environmental effects

Ecological injuries are not known or expected under normal use.

## 3. Composition / Information on Ingredients

Components	CAS#	Percent
HALON 1211	353-59-3	90 - 100

#### 4. First Aid Measures

First aid procedures

Eye contact

Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Skin contact Inhalation Rinse with water.

Ingestion

Remove to fresh air.

General advice

Not likely, due to the form of the product.

If you feel unwell, seek medical advice (show the label where possible).

## 5. Fire Fighting Measures

Flammable properties

The product is not flammable. No unusual fire or explosion hazards noted.

**Extinguishing media** 

media

Suitable extinguishing

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

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Protection of firefighters

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Specific methods

None known.

# 6. Accidental Release Measures

Personal precautions

None known.

**Environmental precautions** 

No special environmental precautions required.

Methods for containment

Move the cylinder to a safe and open area if the leak is irreparable.

Methods for cleaning up

Not applicable.

Other information

Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

Handling

Handle and open container with care.

Storage

Contents under pressure. Use care in handling/storage.

## 8. Exposure Controls / Personal Protection

#### Personal protective equipment

Eye / face protection

Not normally needed.

Skin protection

No special protective equipment required.

Respiratory protection

No personal respiratory protective equipment normally required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical & Chemical Properties

## **Appearance**

Color

Not available.

Odor

Not available.

Physical state

Gas

Hq

3.2 - 3.7 The pH of saturated CO2 solutions varies from 3.7 at 101 kPa (1 atm) to 3.2 at 2370

kPa (23.4 atm)

**Melting point** 

-256 °F (-159.5 °C)

Freezing point

-256 °F (-159.5 °C)

**Boiling point** 

24.8 °F (-3.7 °C)

Flash point

Not available.

**Evaporation rate** 

Not available.

Flammability limits in air, upper, Not available.

% by volume

Flammability limits in air, lower, Not available.

% by volume

Vapor pressure

Vapor density

275.98 kPa 1.522 at 21°C

Specific gravity

1.512

Relative density

Not available.

Solubility (water)

2 g/l

Partition coefficient

Not available

(n-octanol/water)

**Auto-ignition temperature** 

Not available.

**Decomposition temperature** 

Under certain conditions, fluorocarbon vapors may decomp on contact with flames or hot

surfaces, creating potential hazard of inhalation of toxic decomp products.

When heated to decomp, emits very toxic fumes of hydrogen bromide, hydrogen chloride and

hydrogen fluoride.

VOC

Not available.

Molecular weight

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165.36 g/mol

Molecular formula

C-Br-CI-F2

## 10. Chemical Stability & Reactivity Information

**Chemical stability** 

Material is stable under normal conditions.

Conditions to avoid

Excessive heat.

Hazardous decomposition

products

Hydrogen fluoride.

# 11. Toxicological Information

**Chronic effects** 

Prolonged inhalation may be harmful.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

## 12. Ecological Information

**Ecotoxicity** 

This product has no known eco-toxicological effects.

Persistence and degradability

Not available.

## 13. Disposal Considerations

**Disposal instructions** 

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

Waste from residues / unused

products

Not applicable.

Contaminated packaging

Not applicable.

## 14. Transport Information

## Basic shipping requirements:

**UN number** 

UN1974

Proper shipping name

Chlorodifluorobromomethane

Hazard class

2.2

Subsidiary hazard class Additional information:

2.2

Special provisions

T50

Packaging exceptions Packaging non bulk

306 304

Packaging bulk

314, 315

**ERG** number

126



## 15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

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1.0 %

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#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

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Listed

## **CERCLA (Superfund) reportable quantity**

None

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** 

Acute Health - No Chronic Health - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

Section 302 extremely

hazardous substance

Section 311 hazardous

chemical

No

Clean Water Act (CWA)

Toxic pollutant

#### **Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

#### State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

## US - New Jersey Community RTK (EHS Survey): Reportable threshold

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United States & Puerto Rico

500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

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Listed.

## 16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 0 Flammability: 0 Physical hazard: 0

**NFPA** ratings

Health: 0 Flammability: 0 Instability: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any

other materials or in any process, unless specified in the text.

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Yes