



Reference Leak Bottle, R11

This document replaces Bacharach MSDS reference number 0099-0133.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 03/13/2014

Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Substance

Product Name: Reference Leak Bottle, R11

Intended Use of the Product

Use of the Substance/Mixture: Industrial use. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

Bacharach, Inc.

621 Hunt Valley Circle

New Kensington, PA 15068

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Emergency Telephone Number

Emergency number : 800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Simple Asphy

Repr. 2 H361

STOT SE 1 H370

STOT SE 3 H335

STOT SE 3 H336

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging fertility or the unborn child
H370 - Causes damage to organs
May displace oxygen and cause rapid suffocation

Precautionary Statements (GHS-US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe vapors, mist, spray, gas.
P264 - Wash hands, forearms, and other exposed areas 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, respiratory protection.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER/doctor/physician if you feel unwell.
P321 - Specific treatment (see section 4).
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

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P405 - Store locked up.

P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Thermal decomposition generates hydrofluoric acid, hydrochloric acid, phosgene, and carbonyl fluoride. These decomposition products are corrosive, toxic, and reactive take appropriate precautions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Name : Reference Leak Bottle, R11

Name	Product identifier	% (w/w)	Classification (GHS-US)
Trichlorofluoromethane	(CAS No) 75-69-4	100	Simple Asphy Repr. 2, H361 STOT SE 3, H336 STOT SE 3, H335 STOT SE 1, H370

Full text of H-phrases: see section 16

Mixture

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Gas can be toxic as a simple asphyxiant by displacing oxygen from the air. May cause damage to organs. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause drowsiness and dizziness. May cause respiratory irritation.

Inhalation: May cause respiratory irritation. Gas can be toxic as a simple asphyxiant by displacing oxygen from the air.

Skin Contact: Contact during a long period may cause slight irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Suspected of damaging fertility. Suspected of damaging the unborn child.

Indication of Any Immediate Medical Attention and Special Treatment Needed

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

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: May react with certain reactive or powdered metals causing a strong exothermic reaction or explosion.

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Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Hydrogen Fluoride . May liberate toxic gases. Hydrogen chloride. Fluorine compounds. Phosgene.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do NOT breathe (vapors, mist, spray, gas). Do not get in eyes, on skin, or on clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. When heated to decomposition, emits toxic fumes. Corrosive vapors are released.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high or low temperatures, ignition sources, direct sunlight, incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Reactive metals, barium.

Specific End Use(s)

Industrial use. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Trichlorofluoromethane (75-69-4)		
Mexico	OEL Ceiling (mg/m ³)	5600 mg/m ³
Mexico	OEL Ceiling (ppm)	1000 ppm
USA ACGIH	ACGIH Ceiling (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5600 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	5600 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	2000 ppm

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Alberta	OEL Ceiling (mg/m ³)	5620 mg/m ³
Alberta	OEL Ceiling (ppm)	1000 ppm
British Columbia	OEL Ceiling (ppm)	1000 ppm
Manitoba	OEL Ceiling (ppm)	1000 ppm
New Brunswick	OEL Ceiling (mg/m ³)	5620 mg/m ³
New Brunswick	OEL Ceiling (ppm)	1000 ppm
Newfoundland & Labrador	OEL Ceiling (ppm)	1000 ppm
Nova Scotia	OEL Ceiling (ppm)	1000 ppm
Nunavut	OEL STEL (mg/m ³)	7024 mg/m ³
Nunavut	OEL STEL (ppm)	1250 ppm
Nunavut	OEL TWA (mg/m ³)	5619 mg/m ³
Nunavut	OEL TWA (ppm)	1000 ppm
Northwest Territories	OEL STEL (mg/m ³)	7024 mg/m ³
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (mg/m ³)	5619 mg/m ³
Northwest Territories	OEL TWA (ppm)	1000 ppm
Ontario	OEL Ceiling (ppm)	1000 ppm
Prince Edward Island	OEL Ceiling (ppm)	1000 ppm
Québec	PLAFOND (mg/m ³)	5620 mg/m ³
Québec	PLAFOND (ppm)	1000 ppm
Saskatchewan	OEL Ceiling (ppm)	1000 ppm
Yukon	OEL STEL (mg/m ³)	7000 mg/m ³
Yukon	OEL STEL (ppm)	1250 ppm
Yukon	OEL TWA (mg/m ³)	5600 mg/m ³
Yukon	OEL TWA (ppm)	1000 ppm

Exposure Controls

Appropriate Engineering Controls: Alarm detectors should be used when toxic gases may be released. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Oxygen detectors should be used when asphyxiating gases may be released.

Personal Protective Equipment: Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Not available

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Colorless
Odor	: Not available
Odor Threshold	: Not available
pH	: Not available

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Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: 52 °C (125.6°F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: Not available
Solubility	: Not available
Partition coefficient: n-octanol/water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: May react with certain reactive or powdered metals causing a strong exothermic reaction or explosion.

Chemical Stability: Stable at standard temperature and pressure.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Incompatible materials.

Incompatible Materials: strong acids. Strong bases. Strong oxidizers. Reactive metals, barium.

Hazardous Decomposition Products: Not available

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): Causes damage to organs. May cause respiratory irritation. May cause drowsiness or dizziness.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. Gas can be toxic as a simple asphyxiant by displacing oxygen from the air.

Symptoms/Injuries After Skin Contact: Contact during a long period may cause slight irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Information on Toxicological Effects - Ingredient(s)

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LD50 and LC50 Data:

Trichlorofluoromethane (75-69-4)	
LD50 Oral Rat	> 15000 mg/kg
LC50 Inhalation Rat (ppm)	26200 ppm/4h

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Hazardous to the ozone layer.

Trichlorofluoromethane (75-69-4)	
EC50 Daphnia 1	130 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Persistence and Degradability

Reference Leak Bottle, R11	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Reference Leak Bottle, R11	
Bioaccumulative Potential	Not established.

Trichlorofluoromethane (75-69-4)	
Log Pow	2.5 (at 25 °C)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Trichlorofluoromethane)
Hazard Class : 9
Identification Number : UN3082
Label Codes : 9
Packing Group : III
Marine Pollutant : Marine Pollutant



14.2 In Accordance with IMDG

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trichlorofluoromethane)
Hazard Class : 9
Identification Number : UN3082
Packing Group : III
Label Codes : 9
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Marine Pollutant : Marine Pollutant



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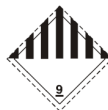
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14.3 In Accordance with IATA

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trichlorofluoromethane)
Packing Group : III
Identification Number : UN3082
Hazard Class : 9
Label Codes : 9
ERG Code (IATA) : 9L
Marine Pollutant : Marine Pollutant



14.4 In Accordance with TDG

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trichlorofluoromethane)
Packing Group : III
Hazard Class : 9
Identification Number : UN3082
Label Codes : 9
Marine Pollutant : Marine Pollutant



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Reference Leak Bottle, R11	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Trichlorofluoromethane (75-69-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %

US State Regulations

Trichlorofluoromethane (75-69-4)
U.S. - Colorado - Hazardous Wastes - Discarded Chemical Products, Off-Specification Species, Container and Spill Residues
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
U.S. - Delaware - Volatile Organic Compounds Exempt from Requirements
U.S. - Georgia - Drinking Water - Unregulated Volatile Organic Contaminants
U.S. - Idaho - Occupational Exposure Limits - TWAs
U.S. - Louisiana - Reportable Quantity List for Pollutants
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Right To Know List
U.S. - Massachusetts - Toxics Use Reduction Act
U.S. - Massachusetts - Volatile Organic Compounds Exempt From Requirements
U.S. - Michigan - Occupational Exposure Limits - Ceilings
U.S. - Michigan - Polluting Materials List
U.S. - Minnesota - Groundwater Health Risk Limits
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - Ceilings
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
U.S. - New Jersey - Environmental Hazardous Substances List

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U.S. - New Jersey - Excluded Volatile Organic Compounds
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Water Quality - Ground Water Quality Criteria
U.S. - New Jersey - Water Quality - Practical Quantitation Levels (PQLs)
U.S. - New York - Occupational Exposure Limits - TWAs
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
U.S. - North Carolina - Control of Toxic Air Pollutants
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 1-Hour
U.S. - North Dakota - Hazardous Wastes - Discarded Chemical Products, Off-Specification Species, Container and Spill Residues
U.S. - Oregon - Permissible Exposure Limits - TWAs
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 24-Hour
U.S. - Tennessee - Occupational Exposure Limits - Ceilings
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Vermont - Hazardous Waste - Hazardous Constituents
U.S. - Vermont - Permissible Exposure Limits - Ceilings
U.S. - Washington - Dangerous Waste - Dangerous Waste Constituents List
U.S. - Washington - Dangerous Waste - Discarded Chemical Products List
U.S. - Washington - Permissible Exposure Limits - Ceilings

Canadian Regulations

Reference Leak Bottle, R11

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects



Trichlorofluoromethane (75-69-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 04/09/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Repr. 2	Reproductive toxicity Category 2
Simple Asphy	Simple Asphyxiant
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs

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Party Responsible for the Preparation of This Document

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2