



HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	

LEAR CHEMICAL RESEARCH CORP.
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MATERIAL SAFETY DATA SHEET

Emergency Telephone Number: 800-256-2548 905-890-3466 (night)905-564-7077
Poison Control Center: Poisons Alert System
Dangerous Goods Emergency: CANUTEC 613-996-6666 & CCOHS 905-572-2981

SECTION I - PRODUCT IDENTIFICATION & USE

Product Name: ACF-50® NON-FLAMMABLE AEROSOL
Product Code: 10013
Company ID: Manufacturer-Lear Chemical Research Corp.
Application: ACF-50® is an industrial product designed to prevent and treat corrosion on non-ferrous and ferrous metals, protect electronic equipment, and to lubricate/penetrate mechanized parts.

SECTION II - COMPOSITION

Chemical Composition: ACF-50 is a proprietary blend of ultra pure synthetic and organic hydrocarbons. ACF-50 has been tested as a complete complex mixture (prior to aerosolizing) and is considered Non-toxic by EPA/OECD guidelines. Inhalation was not performed and a suggested exposure limit is listed below. All other untested components are listed in Section III.

SECTION III - HAZARDOUS COMPONENTS

Chemical Names:	CAS #	OSHA/ACGIH	% vol
ACF-50 (Oil mist)	NA	5 mg/m ³ TWA (suggested)	90-95
Tetrafluoroethane 1,1,1,2 (propellant)	811-97-2	PEL/TLV None established 1000 ppm TWA (suggested)	5-10

SECTION IV - PHYSICAL/ CHEMICAL CHARACTERISTICS

Boiling Point:	>212 F ° (aerosol concentrate)	Specific Gravity (H ² O=1):	.90
Vapor Pressure:	NA	Melting Point (Deg F)	not applicable
Vapor Density:	Heavier than air (Air=1)	Evaporation Rate:	Slower (Butyl acetate=1)
Solubility:	Slight emulsification with H ₂ O	Odor:	Non-descript Scent
Appearance:	Purple Aerosol Liquid	pH:	not determined

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Product:	Non-flammable Aerosol	Auto-ignition Temp.	>410 F°
Flash Point:	Flame extension 0 cm		
Flammable Limits:	Not applicable		
Extinguishing Media:	Use media appropriate for surrounding material.		
Fire Fighting Procedures:	Cool containers with water spray to prevent pressure build-up, auto-ignition or explosion. Self Contained Breathing Apparatus (SCBA) may be required if containers rupture under thermal conditions.		
Fire Explosion Hazards:	Aerosol cans are an explosion risk when exposed to fire.		
Fire Hazard Identification:	NFPA NPCA-HMIS Health - 1 Flammability - 0 Reactivity - 1		

SECTION VI - REACTIVITY DATA

Stability:	Stable
Incompatibility:	Avoid Oxidizing materials (Liquid or compressed oxygen, peroxides, chlorine), strong alkalis.
Hazardous Decomposition:	Thermal conditions produce normal products of combustion including: Hydrogen fluoride, Carbon Oxides (CO- CO ²), Nitrogen oxides (NO ² -NO), Sulfur oxides (SO ² SO ₃).
Polymerization:	Will not occur

SECTION VII - TOXICOLOGICAL PROPERTIES

ACF-50 Bulk Liquid has been tested (oral, eye, dermal) as a complete mixture and is considered “Non-Toxic” according to EPA/OECD and FHSA guidelines.

Primary Routes of entry:

Acute Oral:	LD50 > 5000 mg/kg	Acute Eye:	LC50 > 5000 mg/kg
Acute Dermal:	LD50 > 5000 mg/kg	Acute Vapor (est.)	LC50 > 5000 ppm -Rat-Aliphatic hydrocarbon LC50 > 5000 ppm -Rat-Petroleum distillate

Tetrafluoroethane 1, 1, 1, 2

Acute Dermal:	None determined	Acute Inhal.	LC50 > 500,000 ppm (Rat)
Acute Eye:	None determined		
Carcinogenicity:	ACF-50 Liquid Ingredients: Tetrafluoroethane 1, 1, 1, 2:		Non-carcinogenic, according to NTP, IARC, OSHA or ACGIH. Non-carcinogenic, according to NTP, IARC, OSHA or ACGIH.
Sensitization:	Non-sensitizer		
Mutagenic effects:	No	Tetragenic:	No
Reproductive:	No	Developmental:	No

POTENTIAL EFFECTS OF OVEREXPOSURE:

Inhalation: May cause headache, nausea, or dizziness. Overexposure to vapor may cause CNS depression or confusion. Tetrafluoroethane is rapidly equilibrated in tissue after inhalation and eliminated with expelled air. May act as simple asphyxiant if air is displaced by vapor.

Skin: May cause drying, chapping of skin. Chilling sensation with liquid evaporation.

Eyes: May cause redness of eyes and tearing. Chilling sensation with liquid evaporation.

Ingestion: Not likely to occur. However should small amounts be ingested then liquid may cause irritation to mouth & throat. Aspiration into the lungs may cause chemical pneumontis, which can be fatal.

SECTION VIII - EMERGENCY AND FIRST AID PROCEDURES

Skin: Remove excess by wiping, followed by washing with soap and water.

Eyes: Copious warm water flush for 15 minutes, lifting upper and lower lids. If irritation persists contact a physician.

Inhalation: Evacuate to fresh air. If breathing is difficult administer oxygen. If breathing stops apply CPR and call a physician.

Ingestion: Not likely to occur. However should it occur: **DO NOT INDUCE VOMITING.** Give 1/2 pint of milk to drink. If vomiting takes place, naturally, lean victim forward to prevent aspiration into lungs. Aspiration into the lungs may cause chemical pneumontis, which can be fatal. Physician’s assessment is mandatory. Note to Physician: Consult standard literature for Hydrocarbon poison.

SECTION IX - PREVENTIVE MEASURES

Spills-Leaks : Absorb using inert material (dry clay, commercial sorbents) and collect residue into suitable disposal container.

Waste Disposal: Dispose in approved landfill site or incinerate at licensed waste reclaimer facility. Follow all Local, State and Federal Requirements. See **Section X** for further instructions.

Storage: Contents under pressure. Do not store above 120 F. Store in well ventilated area.

Respiratory Protection: None normally needed - Unless atomizing in enclosed space, then use approved NIOSH organic mist/vapor respirator.

Protective Equipment: Not applicable for aerosol containers.

Hygienic Practices: Wash hands and face with soap and water after use. Launder soiled clothing.

SECTION X - REGULATORY INFORMATION

U.S. Federal Regulations: Tetrafluoroethane 1, 1, 1, 2

TSCA Inventory: All components Listed

SARA Extreme Hazard: NO

CERCLA: NO

SARA Toxic Chemical: NO

TITLE III Hazard Classification Section 311, 312:

Fire:	No	Chronic:	Yes	Pressure:	Yes
Reactivity:	No	Acute:	Yes		

SECTION XI - TRANSPORTATION INFORMATION

TDG Road / Rail Classification: CONSUMER COMMODITY

DOT/IMO Label: NON-FLAMMABLE GAS

HAZARD CLASS: 2.2

AIR-IATA Class:	Aerosols, non-flammable, n.o.s.	2.2	UN1950	Non-flammable gas (Hazard label)
	(each not exceeding 1L capacity)			

Lear Chemical and its affiliates assume no responsibility for injury to anyone caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Lear Chemical Research Corp. and affiliates assume no responsibility for injury to anyone caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee and third persons assume the risk in their use of the material.

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Prepared by: Lear Chemical Research Corp.