

IDO Operating, Inc.

44 Old Ridgebury Road Suite 300 Danbury, CT 06810 Tel. 1-203-205-2900

1. Product And Company Identification

Product Name:

IDQ AF-22

Refrigerant 134A Automotive

Responsible Party:

IDQ Operating, Inc. 44 Old Ridgebury Road AC SYSTEM ONLY

Suite 300

Danbury, CT 06810

Interdynamic Inc.

Information Phone Number: +1 203-205-2900

Emergency Phone Number:

For Medical Emergencies, call 1-866-949-6465 / +1 303-389-1332 (Outside US and Canada) For Transportation Emergencies, call 1-800-424-9300 (Chemtrec) +1-703-527-3887 for

Outside US and Canada (call collect)

SDS Date Of Preparation: 05/25/2015

Product Use and Uses Advised Against: Automotive maintenance product - For consumer and professional use

2. Hazards Identification

Note: This product is a consumer product and is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.

GHS Classification:

Physical:	Health:	
Gases Under Pressure: Compressed Gas	Skin Irritant Category 2	
	Reproductive Toxicity Category 1B	
•	Carcinogen Category 1B	
	Simple Asphyxiant	

GHS Label Elements:







Danger!

Statements of Hazard	Prevention
Contains gas under pressure; may explode if	Obtain special instructions before use.
heated.	Do not handle until all safety precautions have been read
Causes skin irritation.	and understood.
May damage fertility or the unborn child.	Wash thoroughly after handling.
May cause cancer.	Wear protective gloves.
Simple Asphyxiant: May displace oxygen and cause	IF ON SKIN: Wash with plenty of soap and water.



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rapid suffocation.	If skin irritation occurs: Get medical attention.
	Take off contaminated clothing and wash it before reuse.
	IF exposed or concerned: Get medical attention.
	Store locked up.
	Protect from sunlight. Do not exposure to temperatures
	exceeding 50°C / 122°F.
	Dispose of contents and container in accordance with
	local and national regulations.

3. Composition/Information On Ingredients

Component	CAS No.	Amount
1,1,1,2-tetrafluoroethane	811-97-2	80-85%
Polyalkylene glycol monobutyl ether	Proprietary	5-15%
Additive Package	Proprietary	1-10%
Oil Additive	Proprietary	<1%
Methylene chloride	75-09-2	<1%

The exact concentrations are a trade secret.

4. First Aid Measures

Inhalation: If symptoms of exposure develop, remove to fresh air. Seek medical attention if breathing problem or irritation persists.

Skin Contact: Wash exposed skin with soap and water. If skin irritation or redness develops, seek medical attention.

Eye Contact: Flush eyes with large amounts of water for several minutes. If irritation or other symptoms develop, seek medical attention.

Ingestion: Ingestion is an unlikely route exposure for aerosol products.

Most Important Symptoms: May cause mild eye irritation. Mists may cause mild respiratory irritation. Exposure to high concentrations can induce anesthetic effects progressing from dizziness, weakness, nausea, to unconsciousness. Causes skin irritation. May damage fertility or the unborn child. May cause cancer.

Indication of Immediate Medical Attention/Special Treatment: None known.

5. Firefighting Measures

Suitable (and Unsuitable) Extinguishing Media: Use extinguishing media suitable for surrounding fire. Cool fire exposed containers with water.

Specific Hazards Arising from the Chemical: Contents under pressure. Exposure of containers to heat and flames can cause them to rupture often with violent force. Burning may produce oxides of carbon and fluoride; and hydrogen fluoride.

Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against

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bursting cans.

6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures: Ventilate the area. Wear appropriate protective clothing and equipment.

Methods and Materials for Containment and Clean-Up: Place leaking can in a pail in a well-ventilated area until pressure has dissipated. Collect residual liquid using inert absorbents and place into a suitable container for disposal.

Environmental Precautions: Report release as required by local and national regulations.

7. Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes and skin. Avoid breathing aerosol or gas. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Contents under pressure, do not puncture or incinerate containers. Refer to OSHA 1910.1052 (methylene chloride standard) for additional requirements.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F.

8. Exposure Controls / Personal Protection

Exposure Guidelines:

CHEMICAL	EXPOSURE LIMIT
1,1,1,2-tetrafluoroethane	1000 ppm TWA AIHA WEELs
Polyalkylene glycol monobutyl ether	None established
Additive Package	None established
Oil Additive	None established
Methylene chloride	50 ppm TWA ACGIH TLV
	25 ppm TWA, 125 STEL OSHA PEL

Appropriate Engineering Controls: General ventilation should be adequate for normal use. For operations where the exposure limits may be exceeded, forced ventilation such as local exhaust may be needed to maintain exposures below applicable limits.

Personal Protective Equipment

Respiratory Protection: None under normal use conditions. For operations where the exposure limits may be exceeded, a NIOSH approved supplied air respirators recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and 1910.1052; all applicable laws and regulations; and good industrial hygiene practice.

Gloves: Wear impervious gloves to avoid skin contact.

Eye Protection: Safety glasses are recommended if eye contact is possible.



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Other Protective Equipment/Clothing: None required.

9. Physical and Chemical Properties

Appearance And Odor: Clear liquid in aerosol can with ethereal odor.

Physical State: Liquid-based aerosol	Odor Threshold: Not available
pH: < 7	Specific Gravity: Not determined
Initial Boiling Point/Range: -26.5°C @ 736 mm Hg (1,1,1,2-tetrafluoroethane)	Vapor Pressure: 4277 mm Hg at 20°C
Melting/Freezing Point: -15.7 °F (<-26.5°C)	Vapor Density: (Air = 1) 3.5
Solubility In Water: Water solubility <15%	Percent Volatile: 85%
Viscosity: Not determined	Evaporation Rate: >1
Decomposition Temperature: Not available	VOC Content: Not determined
Coefficient Of Water/Oil Distribution: Not determined	Autoignition Temp: 752°F (>400°C)
Flash Point: Non-Flammable	Flame extension: Not determined
Flammability Limits: LEL: Not determined UEL: Not determined	Flammability (solid, gas): Not applicable

10. Stability and Reactivity

Reactivity: Not normally reactive

Chemical Stability: Stable under normal storage and handling conditions

Conditions to Avoid: Keep away from excessive heat, and open flames. Containers may rupture at temperatures

> 120°F (48.8°C)

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Burning may produce oxides of carbon and fluoride; and hydrogen fluoride.

11. Toxicological Information

Potential Health Effects:

Acute Hazards:

Inhalation: Mist can irritate the throat and respiratory tract. Exposure to high concentrations can induce anesthetic effects progressing from dizziness, weakness, nausea, to unconsciousness.

Skin Contact: Causes skin irritation.

Eye Contact: Direct contact may cause mild eye irritation with redness, and tearing.

Ingestion: Ingestion is an unlikely route exposure for aerosol products. Swallowing may cause gastrointestinal disturbances.

Chronic Effects: Oil additive contains components that may damage fertility or the unborn child.



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Safety Data Sheet

Carcinogenicity Listing: Contains methylene chloride which is classified as an OSHA carcinogen, ACGIH - Confirmed animal carcinogen with unknown relevance to humans, NTP - Reasonably anticipated to be a human carcinogen, and IARC 2B - Possibly carcinogenic to humans. None of the other components listed at 0.1% or greater is a carcinogen or potential carcinogen by IARC, NTP, ACGIH or OSHA

Numerical Measures of Toxicity:

1,1,1,2-tetrafluoroethane:

LC50 Inhalation Rat: >500,000/4h

Polyalkylene glycol monobutyl ether:

Not acutely toxic.

Additive Package:

LD50 Oral Rat > 5,000 mg/kg

LD50 Dermal Rabbit > 10,000 mg/kg LD50 Oral Rat 5.140 mg/kg

Oil Additive:

Methylene Chloride:

LD50 Oral Rat >2,000 mg/kg LD50 Dermal Rat >2,000 mg/kg

12. Ecological Information

Ecotoxicity: No ecotoxicity data is currently available for product.

Persistence and Degradability: No data available for product.

Bio accumulative Potential: No data available for product. Will not bio concentrate in fish and aquatic organisms.

Mobility in Soil: No data available for product. If released to soil, 1,1,1,2-tetrafluoroethane will rapidly volatilize from either moist or dry soil to the atmosphere. It will display moderate to high mobility in soil.

Other Adverse Effects: Products of decomposition will be highly dispersed and hence will have a very low concentration. It is not a significant contributor to photochemical smog and is not considered to be a VOC. It is not considered as an ozone depleting chemical.

13. Disposal Considerations

Dispose of in accordance with all local, state/provincial and federal regulations. Offer empty containers for recycling.

14. Transport Information

DOT Hazardous Materials Description:

Proper Shipping Name: CONSUMER COMMODITY

Hazard Class: ORM-D **Identification Number:** NA

IMDG Dangerous Goods Description:

Proper Shipping Name: AEROSOLS, NON-FLAMMABLE

Hazard Class: 2.2

Identification Number: UN1950



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15. Regulatory Information

United States:

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA Section 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Methylene Chloride (<1% maximum) of 1,000 lbs., is 100000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Sudden Release of Pressure, Acute Health, Chronic Health

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): Methylene Chloride CAS# 75-09-2 at < 1%

16. Other Information

NFPA Rating (NFPA 704):

Health: 1

Fire: 0

Instability: 0

HMIS Rating:

Health: 1*

Fire: 0

Physical Hazard: 0

REVISION SUMMARY: New SDS

DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH