



ADVANCED POLYMER, INC.

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APFS-16

APFS-16 is a nonionic fluorochemical solution designed to impart leveling and wetting to solvent based systems. APFS-16 will also produce stable foams in low polarity hydrocarbon liquids such as kerosene and diesel fuel.

FOAMING PROPERTIES

In a typical test, 0.5% APFS-16 (on a volume basis) was added to 30ml of diesel fuel. The container was then agitated. The foam produced was very consistent, dry foam with a good measurable half-life. The foam had small bubble diameter that was evenly distributed.

PACKAGING

APFS-16 is available in 4 oz samples and 331-lb drums.

TYPICAL PROPERTIES

Appearance:	Light yellow transparent solution
Solid Content:	22%
Specific Gravity (@ 25°C):	0.83
Solvent:	Mineral Spirits 78.0%

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I want to know more!

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Revised June 23, 2010

APFS-16

Section I Product Identity

Product Name: APFS-16
Chemical Name/Family: Perfluoroalkyl acrylate copolymer solution
CAS Registry: Mixture
24 Hour Emergency Number 800-424-9300
24 Hour Chemtrec Number 800-424-9300

All ingredients are listed in EPA's TSCA list of chemical substances

Section II Hazardous Components/Composition Information

CHEMICAL :	Synthetic Isoparaffinic Hydrocarbon			
CAS #: 64742-48-9	USOS: 100 ppm	TWA: 100 ppm	ACGIH TLV: 100 ppm	PERCENT: 78
CHEMICAL :	Perfluoroalkyl acrylate copolymer			
CAS #: Not listed	USOS: Not listed	TWA: N.D.	ACGIH TLV: N.D.	PERCENT: 22

Section III Physical and Chemical Properties

Boiling Point	150-200°C (Mineral Spirits)
Specific Gravity (H ₂ O=1)	0.83
Vapor Pressure	N.D.
Vapor Density (Air=1)	N.D.
Percent Volatile By Weight	78
Evaporation Rate (BuAc=1)	N.D.
Solubility in Water	Insoluble
Appearance and Odor	Pale yellow liquid with slight petroleum odor.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	104°F (TAG Closed Cup)
Flammable Limits in Air (% By Volume)	N.D.
Extinguishing Media	Foam, dry chemical, CO ₂ . Water may be ineffective.
Special Fire Fighting Procedures:	Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment.
Unusual Fire and Explosion Hazard	Heating above 395°F in a fire situation may cause toxic decomposition.

Section V Reactivity Data

Stability	Stable
Conditions to Avoid	Strong acids and alkalis
Incompatibilities	Strong acids and alkalis
Hazardous Decomposition or By Products	May produce HF, CO ₂ , CO and other toxic products
Hazardous Polymerization	May Not Occur

Section VI Health Hazard Data

Primary Routes of Entry	Inhalation: Yes	Dermal: Yes	Ingestion: Yes
Acute Health Hazard	See below		
Other Potential Hazards	Mutagenicity (AMES ASSAY):	N.A.	
	Acute oral toxicity (LD50):	Mineral Spirits: Rat=>2000 mg/kg Polymer: N.A.	
	Acute inhalation toxicity(LD50):	Mineral Spirits: Rat: >2000 mg/L Polymer: N.A.	
Chronic Health Hazard	No information available		
Carcinogenicity	No information available		
NTP: No	IARC Monograph: No	OSHA Regulated: No	

Signs and Symptoms of Exposure:

Skin Contact	Slight skin irritation is expected.
Eye Contact	The vapor or mist from APX-659 may irritate eyes.
Ingestion	Harmful. If this product is swallowed, vomiting will occur.
Inhalation	If vapor or mist is inhaled, respiratory irritation may occur. Symptoms such as anesthesia and acute lung edema may occur.

Medical Condition Generally Aggravated by Exposure

No information available.

Emergency First Aid Procedures

Eyes	Immediately flush eyes with plenty of water. Call a physician.
Skin	Immediately wash with soap and water. Wash contaminated clothing before reuse.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Inhalation	Immediately remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Please note: Symptoms may be delayed; prompt medical attention may be required. Call a physician.

Section VII Precautions for Safe Handling and Use

Steps to be Taken in Case the Material is Released or Spilled:

Soak up with sawdust, sand, oil dry or other absorbent material..

Waste Disposal Method:

As in accordance with EPA and local regulations.

Section VIII Special Precautions

Precautions to be Taken in Handling and Storage:

Store at temperatures between 40oF (4.4oC) to 110oF (43.3oC). Store in a tightly closed container. Store in a well ventilated area. Store away from oxidizing agents, sources of heat, direct sunlight or rain. No smoking in area of storage. *****Agitate contents of container before using.*****

Section IX Control Measures

Respiratory Protection

Ventilation	Local exhaust	Required
	Mechanical	Adequate ventilation system
	Special	Protective mask with organic vapor cartridge for organic vapor above exposure limits.
	Other	None

Eye Protection Safety glasses, goggles or face shield should be worn

Protective Gloves Rubber or plastic gloves should be worn

Protective Clothing Rubber apron

Other Protective Equipment NIOSH approved respirator as needed. Eye wash equipment.

Other Precautions Wash hands thoroughly after handling material

Section X SARA Title III

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of SECTION 331 of the EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 and of 40 CFR 371

CAS #

Chemical Name

Percent by Weight

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL

TSCA INVENTORY: Eligible for exempt polymer status. Mineral spirits is registered.

EINECS 1987 LIST: All components are registered

Section XI Transportation Information

Land Transport (DOT, ADR, RID): In containers of 119 gallons or less this product is not regulated by DOT. Shipments in containers of more than 119 gallons, this product is regulated by DOT and must ship as flammable liquid.

DOT Proper Shipping Name: Petroleum Distillates, N.O.S. , Combustible Liquid, UN1268, PGIII

Sea Transport (IMDG):

Air Transport (ICAO, IATA): International shipments and shipment by air must ship as flammable liquid.
IMO Proper Shipping Name: Petroleum Distillates, N.O.S. , 3, UN1268, PGIII

Hazard Ratings

Health	1
Flammability	2
Reactivity	0

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Prepared By API

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