

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

PRODUCT FORM: MIXTURE

PRODUCT NAME: ACCUFOAM CC-HFO, ACCUFOAM CC-HFO WINTER, ACCUFOAM CC-HFO REGULAR, ACCUFOAM CC-HFO SUMMER, ACCUFOAM CC-HFO SUMMER PLUS

PRODUCT CODE: CCW-HFO

SYNONYMS: WALL, POLYURETHANE, AND FOAM

1.2 INTENDED USE OF THE PRODUCT

Use of the Substance/Mixture: Spray foam insulation for commercial and residential use.

1.3 NAME, ADDRESS, AND TELEPHONE OF THE RESPONSIBLE PARTY COMPANY

Creative Polymer Solutions, LLC.
2720 Southeastern Circle, Birmingham, AL 35215
205-440-4996
www.accufoam.com

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Number: Within USA and Canada: 1-800-424-9300 or +1-703-527-3887 (collect calls accepted) CHEMTREC

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE


GHS-US Classification

Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation Category 2	H319
Reproductive toxicity Category 2	H361
Specific target organ toxicity (repeated exposure(oral)) Category 2	H373

Full text of hazard classes and H-statements: see section 16

2.2 LABEL ELEMENTS

GHS-US Labeling

HAZARD PICTOGRAMS (GHS-US)	
SIGNAL WORD (GHS-US)	Danger
HAZARD STATEMENTS (GHS-US)	H302 - Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 - Causes serious eye damage H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral route of exposure)

PRECAUTIONARY STATEMENTS (GHS-US)

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do not induce vomiting.

P302+P361+P354 - IF ON SKIN: Take off immediately all contaminated clothing, immediately rinse with water for several minutes.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P354 + P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P316 Get emergency medical help immediately.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 OTHER HAZARDS

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4 UNKNOWN ACUTE TOXICITY (GHS-US)

No Available Data

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCE

Not Applicable

3.2 MIXTURE

CHEMICAL NAME	CAS NUMBER	%
Proprietary Polyester Resin (75-95%) 2,2'-oxybisethanol; diethylene glycol	Proprietary Polyester Resin 111-46-6	35-45
Polyether polyol (65-85%) Polyether Polyol (15-45%)	9049-71-2 25791-96-2	10-20
Oxirane, 2-methyl-, polymer with oxirane ether with 2,6-bis[[bis-(2-hydroxyethyl)amino]methyl]-4- branched nonylphenol	940912-28-7 34354-45-5	10-20
Tris(1-chloro-2-propyl) phosphate	13674-84-5	2-12
2-Dimethylaminoethanol	108-01-0	1-10
Ethane-1,2-diol, 1,1,3,3-Tetramethylguanidine, Succinic acid, Glutaric acid	107-21-1 80-70-6 110-15-6 110-94-1	2-12
Triethyl phosphate	78-40-0	1-10
Tertiary amine catalyst (>25%), ethylene glycol (>25%)	Not Available 107-21-1	0-10

Full text of H-phrases: see section 16

*The exact percentage of composition has been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

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).

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

First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.

First-aid Measures After Eye Contact: Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED

Symptoms/Injuries: May cause damage to organs through prolonged or repeated exposure. Suspected of damaging fertility or the unborn child. Causes skin irritation. Suspected of causing cancer. Causes serious eye damage.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of damaging fertility or the unborn child. May cause damage to organs(kidneys) through prolonged or repeated exposure(oral).

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

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

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 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: Carbon oxides (CO, CO₂). Nitrogen oxides. Phosphorous oxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

6.1.1 FOR NON-EMERGENCY PERSONNEL

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

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2 FOR EMERGENCY PERSONNEL

Protective Equipment:

Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the

area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3 METHODS AND MATERIALS 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: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4 REFERENCE TO OTHER SECTIONS

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do NOT breathe (dust, vapor, mist, gas). Avoid contact with skin, eyes and clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. reactive metals (Al, K, Zn ...). Isocyanates.

7.3 SPECIFIC END USE(S)

Closed cell insulation, for professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

(E)-1-CHLORO-3,3,3-TRIFLUOROPROP-1-ENE (102687-65-0)		
USA AIHA	WEEL TWA [ppm]	800 ppm (trans-1-Chloro-3,3,3-trifluoro-propylene)
TRIETHYL PHOSPHATE (78-40-0)		
USA AIHA	WEEL TWA	7.45 mg/m ³

ETHYLENE GLYCOL (107-21-1)		
USA ACGIH	ACGIH OEL TWA [ppm]	25 ppm (vapor fraction)
USA ACGIH	ACGIH OEL STEL	10 mg/m ³ (inhalable particulate matter, aerosol only)
USA ACGIH	ACGIH OEL STEL [ppm]	50 ppm (vapor fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
DIETHYLENE GLYCOL (111-46-6)		
USA AIHA	WEEL TWA	10 mg/m ³

8.2 EXPOSURE CONTROLS

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

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



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen-deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Light brown resin
Odor	Slight amine
Odor Threshold	No Data Available
pH	9 –10
Relative Density	1.1 – 1.2 (Water=1)
Viscosity (cPs)	600 – 800
Flash Point (F)	137.3

9.2 OTHER INFORMATION

No Additional Information available

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY:

Hazardous reactions will not occur under normal conditions.

10.2 CHEMICAL STABILITY:

Stable under recommended handling and storage conditions (see section 7).

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Hazardous polymerization will not occur.

10.4 CONDITIONS TO AVOID:

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5 INCOMPATIBLE MATERIALS:

Strong acids, strong bases, strong oxidizers.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Not expected to decompose under ambient conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

(E)-1-Chloro-3,3,3-trifluoroprop-1-ene (102687-65-0)	
LC50 Inhalation Rat	120000 ppm/4h
2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)	
LD50 Oral Rat	1500 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
LC50 Inhalation Rat	> 5.05 mg/l/4h
Triethyl phosphate (78-40-0)	
LD50 Oral Rat	1100 – 1600 mg/kg
LD50 Dermal Rabbit	> 20 g/kg
LC50 Inhalation Rat	> 8817 mg/m ³ (Exposure time: 4 h)
Glutaric acid (110-94-1)	
LD50 Oral Rat	2750 mg/kg
LD50 Dermal Rabbit	> 10000 mg/kg
Butanedioic acid (110-15-6)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 1.284 mg/l/4h (Read across: Fumaric Acid, no deaths at maximum technically feasible concentration)
Guanidine, N,N,N',N'-tetramethyl- (80-70-6)	
LD50 Oral Rat	835 mg/kg
Ethylene glycol (107-21-1)	
LD50 Dermal Rat	10600 mg/kg
Diethylene glycol (111-46-6)	
LD50 Oral Rat	1120 mg/kg
LD50 Dermal Rabbit	11890 mg/kg

LC50 Inhalation Rat	> 4600 mg/m ³ (Exposure time: 4 h)
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Skin Corrosion/Irritation: Causes skin irritation.

pH: 10 – 12

Serious Eye Damage/Irritation: Causes serious eye irritation.

pH: 10 – 12

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

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

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated exposure(oral)): May cause damage to organs(kidneys) through prolonged or repeated exposure(oral).

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of damaging fertility or the unborn child. May cause damage to organs(kidneys) through prolonged or repeated exposure(oral).

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY

Ecology-General: Not classified.

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

LC50 Fish 1	56.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 - Crustacea [1]	63 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
ErC50 (Algae)	82 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
NOEC Chronic Algae	6 mg/l

BUTANEDIOIC ACID (110-15-6)

LC50 Fish 1	> 100 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
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ETHYLENE GLYCOL (107-21-1)

LC50 Fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 - Crustacea [1]	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	14 – 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
NOEC Chronic Crustacea	4.2 mg/l

DIETHYLENE GLYCOL (111-46-6)

LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
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EC50 - Crustacea [1]	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
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DIETHYLENE GLYCOL (111-46-6)

LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2 PERSISTENCE AND DEGRADABILITY

Accufoam CC-HFO	
Bioaccumulative Potential	Not established

12.3 BIOACCUMULATIVE POTENTIAL

Accufoam CC-HFO	
Persistence and Degradability	Not established.

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

BCF Fish 1	1.9 – 4.6
Partition coefficient n-octanol/water (Log Pow)	2.59

Triethyl phosphate (78-40-0)

Partition coefficient n-octanol/water (Log Pow)	0.8 - 1.11
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ETHYLENE GLYCOL (107-21-1)

Partition coefficient n-octanol/water (Log Pow)	-1.93
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DIETHYLENE GLYCOL (111-46-6)

BCF Fish 1	100 – 180
Partition coefficient n-octanol/water (Log Pow)	-1.98 (at 25 °C)

12.4 MOBILITY IN SOIL

No additional information available

12.5 OTHER ADVERSE EFFECTS

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology- Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1 IN ACCORDANCE WITH DOT

Not regulate except in bulk. Bulk containers (>5,000 lbs) must be transported as: UN3083, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, N.O.S. (CONTAINS 1,4-DIOXANE), 9, PG III

14.2 IN ACCORDANCE WITH IMDG

Not regulated for transport

14.3 IN ACCORDANCE WITH IATA

Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US FEDERAL REGULATIONS

Accufoam CC-HFO

SARA Section 311/312 Hazard Classes	Health hazard - Reproductive toxicity Health hazard - Specific target organ toxicity (single or repeated exposure(oral)) Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation
(E)-1-Chloro-3,3,3-trifluoroprop-1-ene (102687-65-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
EPA TSCA Regulatory Flag	PMN - PMN - indicates a commenced PMN substance.
2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Triethyl phosphate (78-40-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Glutaric acid (110-94-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Butanedioic acid (110-15-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Guanidine, N,N,N',N'-tetramethyl- (80-70-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Ethylene glycol (107-21-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %
Siloxanes and silicones, dimethyl, 3-hydroxypropyl methyl, ethoxylated (68937-54-2)	

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.

SDS US (GHS HazCom)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
Ethylene oxide, polymer with 2,2'-iminodiethanol and propylene oxide (34354-45-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
Diethylene glycol (111-46-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	

15.2. US STATE REGULATIONS

Ethylene glycol (107-21-1)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
Diethylene glycol (111-46-6)
U.S. - Pennsylvania - RTK (Right to Know) List

California Proposition 65

WARNING: This product can expose you to Ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Ethylene glycol (107-21-1)		X		

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

DATE OF PREPARATION OR LATEST REVISION: 07/06/2022

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

H226	Flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs(kidneys) through prolonged or repeated exposure(oral)
H402	Harmful to aquatic life