

FC04-N

2-(Perfluoroalkyl)ethyl Alcohols (Mixture)

Revised 20-November-2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product name	2-(Perfluoroalkyl)ethyl alcohols, mixture of chain lengths, C8-C14
Catalog number	FC04-N
Brand	Fluoryx Labs
CAS number	68391-08-2

Relevant Identified Uses of The Substance or Mixture and Uses Advised Against

Identified uses:	Laboratory chemicals. Manufacture of substances.
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Details of the Supplier of the Safety Data Sheet

Company	Fluoryx Labs 3650 Research Way, #22 Carson City, NV 89706 USA +1 (510) 329-9149 (Telephone) +1 (510) 686-8799 (Fax) www.fluoryx.com
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Emergency call (ChemTel):

+01-813-248-0585 (International)
+1-800-255-3924 (USA)

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Not a hazardous substance

GHS Label Elements, Including Precautionary Statements

Not a hazardous substance

Hazard statement(s)

Not a hazardous substance

Precautionary statement(s)

Not a hazardous substance

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms

1H,1H,2H,2H-Perfluoroalkyl alcohols;
 1H,1H,2H,2H -Perfluoro-1-alkanols;
 1H,1H,2H,2H-Perfluoroalkyl-1-ols;
 1H,1H,2H,2H -Perfluoro-*n*-alkanols;
 1H,1H,2H,2H -Perfluoroalkanols;
 1,1,2,2-Tetrahydroperfluoro-1-alkanols;

Perfluoro-C8-14-alkylalcohols;
Alcohols, C8-14, γ - ω -perfluoro;
Zonyl BA-NTM;
Fluowet EA 812TM

Formula	$F(CF_2)_xCH_2CH_2OH$, $x = 8, 10, 12, \dots$; >60% $x = 8$ $C_nH_4F_mO$; $n = 8, 10, 12$; $m = 2n-3$
Molecular Weight	~520 average
CAS Number	68391-08-2
EC Number	269-927-8

No components need to be disclosed according to the applicable regulations.

4. FIRST AID MEASURES

If Inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In Case of Skin Contact	Wash off with soap and plenty of water.
In Case of Eye Contact	Flush eyes with water as a precaution.
If Swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most Important Symptoms and Effects, Both Acute and Delayed - The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of Any Immediate Medical Attention and Special Treatment Needed - no data available

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special Protective Equipment for Firefighters	Wear self-contained breathing apparatus for fire fighting.
Hazardous Combustion Products	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid dust formation. Avoid breathing vapors, mist, or gas.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods for Cleaning Up	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Provide appropriate exhaust ventilation at places where dust is formed. Avoid formation of respirable particles. Normal measures for preventive fire protection.
Conditions for Safe Storage	Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Evaporation Rate	No data available
Oxidizing Properties	No data available

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	Polymerization will not occur. No other data available.
Conditions to Avoid	Keep away from open flames and heated surfaces above 300 °C.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, and carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	
Oral LD50	Oral ALD: 11,000 mg/kg in rats
Inhalation LC50	4 hour LC50: 35.3 mg/l in rats
Dermal LD50	No data available
Other information on acute toxicity	No data available
Skin Corrosion/Irritation	Not corrosive
Serious Eye Damage/Eye Irritation	No data available.
Respiratory or Skin Sensitization	The effects in animals exposed by inhalation to single high doses include irregular breathing, salivation, and discharge from the eyes and nose. Not a skin sensitizer in animals.
Germ Cell Mutagenicity	Negative in the Bacterial Reverse Mutation Test with an independent repeat assay. An In Vitro mammalian chromosome aberration test using human peripheral lymphocytes was negative.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive Toxicity	No data available
Teratogenicity	No data available
Specific Target Organ Toxicity (Globally Harmonized System)	
Single exposure	No data available

Repeated exposure	No data available
Aspiration Hazard	No data available
Signs and Symptoms of Exposure	
General:	Based on animal experiments, gross overexposure may cause abnormal liver or kidney function as detected by laboratory tests.
Inhalation:	Inhalation of spray or mist may cause nasal, throat, or lung irritation. Inhalation of large amounts of respirable particles may be toxic to the lungs. Symptoms may be modest initially, followed in hours by severe shortness of breath requiring prompt medical attention.
Skin contact:	May cause skin irritation with discomfort or rash. Data to evaluate the skin permeation hazard of this compound are insufficient. There are no reports of human sensitization.
Eye contact:	May cause eye irritation with discomfort, tearing, or blurring of vision.
Synergistic Effects	No data available
Additional Information	RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity	No data available
Persistence and Degradability	Does not readily degrade.
Bioaccumulative Potential	No data available
Mobility in Soil	No data available
PBT and vPvB Assessment	No data available
Other Adverse Effects	No data available

13. DISPOSAL CONSIDERATIONS

Product	Offer non-recyclable solutions to a licensed disposal company. Contact Fluoryx to return unused product.
Contaminated Packaging	Dispose of as unused product.

14. TRANSPORTATION INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

15. REGULATORY INFORMATION

TSCA Status	On the inventory.
DSL Status	This product contains the following components listed on the Canadian NDSL list: Alcohols, C8-14, γ - ω -perfluoro CAS-No. 68391-08-2

SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	No SARA hazards.
Massachusetts Right to Know Components	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right to Know Components	No components are subject to the Pennsylvania Right To Know Law
New Jersey Right to Know Components	No components are subject to the New Jersey Right To Know Law
California Prop. 65 Components	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Classification

Health hazard	0
Flammability	0
Physical hazards	0

NFPA Rating

Health hazard	0
Fire	0
Reactivity hazard	0

Further Information:

Not for drug, household, or other uses. The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. Unless noted to the contrary, the technical information applies only to pure product.

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End of SDS