Fluoryx Labs

Safety Data Sheet

FC21-08

3-(Perfluorooctyl)propyl Epoxide

Revised 16-November-2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name	3-(Perfluorooctyl)propyl epoxide
Catalog Number	FC21-08
Brand	Fluoryx Labs
CAS no.	38565-53-6

Relevant identified uses of the Substance or mixture and uses advised against

Identified uses:	Laboratory chemicals; manufacture of substances

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

2. HAZARDS INFORMATION

Emergency Overview

OSHA Hazards	No known OSHA hazards
GHS Classification	Not a dangerous substance according to GHS.

GHS Label elements, including precautionary statements

Pictogram	None
Signal word	None

Hazard statement(s)

None

Precautionary statement(s)

None

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms

(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadeca-fluorononyl)oxirane;
(Perfluoro-*n*-octyl)propenoxide;
Perfluorooctyl-1,2-epoxypropane;
Oxirane,(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononyl);
(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-Heptadecafluorononyl)oxirane;
1,2-Epoxy-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoroundecane;
3-(2-Perfluoro-*n*-octyl)-1,2-epoxypropane;

3-(Perfluorooctyl)-1,2-propenoxide;
3-(Perfluorooctyl)propylene oxide;
3-Perfluorooctyl-1,2-epoxypropane;
DAIKIN E-1830™

Chemical formula $C_{11}H_5F_{17}O$
$CF_3CF_2CF_2CF_2CF_2CF_2CF_2CF_2CH_2CH(O)CH_2$

Components

Material	Molecular Weight	CAS #	EC #	TSCA
3-(Perfluorooctyl)propyl epoxide	476.13	38565-53-6	254-006-5	Not listed

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.

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, carbonyl fluoride.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions — Avoid inhalation of vapor, mist, dust, or gas.

Environmental precautions — Prevent further leakage or spillage. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up — Absorb into dry earth or sand. Transfer to a closable, labeled salvage container for disposal by an appropriate method.

7. HANDLING AND STORAGE

Precautions for Safe Handling — 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

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection — Respiratory protection is not required. Where protection from nuisance levels of vapors are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards

	such as NIOSH (US) or CEN (EU).
Hand protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye protection	Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin and body protection	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	Liquid, clear
Color	Colorless
Safety Data	
pH	No data available
Melting Point/Freezing Point	12 °C
Boiling Point	176 °C @ 760 mm Hg
Flash Point	> 102 °C (closed cup)
Ignition Temperature	No data available
Auto-ignition Temperature	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Thermal Decomposition Temperature	No data available
Vapor Pressure	No data available
Density	1.72 g/mL @ 20 °C
Water Solubility	Negligible
Partition Coefficient (*n*-octanol/water)	No data available
Relative Vapor Density (Air = 1)	> 1
Odor	No data available
Odor Threshold	No data available
Evaporation Rate	No data available

10. STABILITY AND REACTIVITY

Storage stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Polymerization will not occur. Reacts exothermically with amines.

Conditions to avoid	Keep away from open flames and heated surfaces above 200 °C (392 °F).
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions - carbon oxides, hydrogen fluoride, carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	No data available.
Skin corrosion/irritation	No data available.
Serious eye damage/eye irritation	No data available.
Respiratory or skin sensitization	No data available.
Germ cell mutagenicity	No data available.
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
Specific target organ toxicity (Globally Harmonized System)	
Single exposure	No data available
Repeated exposure	No data available
Aspiration Hazard	No data available
Potential Health Effects	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eyes irritation.
Ingestion	May be harmful if swallowed.
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Synergistic Effects	No data available
Additional Information	No data available

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 surplus and 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

OSHA Hazards	No known OSHA hazards
TSCA Status	On the inventory or in compliance with the inventory.
DSL Status	Not listed
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	(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-Heptadecafluoro-nonyl)oxirane CAS-No. 38565-53-6
New Jersey Right To Know Components	(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-Heptadecafluoro-nonyl)oxirane CAS-No. 38565-53-6
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