

FC07-06

2-(Perfluorohexyl)ethyl Methacrylate

Revised 19-November-2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name	2-(Perfluorohexyl)ethyl methacrylate
Catalog Number	FC07-06
Brand	Fluoryx Labs
CAS Number	2144-53-8

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)**

Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), respiratory system, H335

GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning

Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/ physician if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Synonyms	1H,1H,2H,2H-Tridecafluorooctyl-1-methacrylate; 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl methacrylate
Formula:	CH ₂ =C(CH ₃)C(O)OCH ₂ CH ₂ (CF ₂ CF ₂) ₃ F C ₁₂ H ₉ F ₁₃ O ₂
Molecular weight	432.18 g/mol
CAS number	2144-53-8
EC number	218-407-9

Hazardous components

Component	Classification	Concentration
2-(Perfluorohexyl)ethyl methacrylate	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335	≤100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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. FIRE FIGHTING 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	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental Precautions	Do not discharge into drains or rivers.
Clean-Up Procedures	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection.
Storage Conditions:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: 2 - 8 °C

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters	Contains no substances with occupational exposure limit values.
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment	
Eye/face 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 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.

Body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form

Liquid, clear

Color

Colorless

Safety Data

pH

No data available

Melting Point/Freezing Point

-33 °C

Boiling Point

96 °C @ 10 mm Hg

Flash Point

113 °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

Vapor Density

>1 (air = 1)

Density

1.50 @ 20 °C

Water Solubility

No data available

Partition Coefficient (*n*-octanol/water)

No data available

Relative Vapor Density (Air = 1)

> 1

Odor

Acrylic

Odor Threshold

No data available

Evaporation Rate

No data available

Oxidizing Properties

No data available

Viscosity

No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions:

Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often adding to melted bulk liquid if needed.

Conditions to avoid	Heat, light.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	In combustion, emits toxic fumes including carbon monoxide, carbon dioxide, and hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Oral LD50 No data available Inhalation LC50 No data available Dermal LD50 No data available Other information on 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
Teratogenicity	No data available
Specific target organ toxicity (Globally Harmonized System)	
Single exposure	Inhalation – may cause respiratory irritation.
Repeated exposure	No data available
Aspiration hazard	No data available
Signs and Symptoms of Exposure:	No data available
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	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

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.
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 Inventory	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	
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl methacrylate CAS-No. 2144-53-8 Revision Date	
New Jersey Right To Know Components	
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl methacrylate CAS-No. 2144-53-8 Revision Date	
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

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	Eye irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity - single exposure

HMIS Classification

Health hazard	1
Flammability	0
Physical hazards	0

NFPA Rating

Health hazard	1
Fire	0
Reactivity hazard	0

Further information

For R&D use only. 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