

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: 1100634

SECTION 1: Identification

SECTION 1: Identification			
1.1. Identification			
Product form Substance name CAS-No. Product code Formula Other means of identification	 Substance 1,1,3,5,6-Pentachloroperfluorohexane 307-26-6 1100-6-34 C6CI5F9 MFCD00155908 		
1.2. Recommended use and restrictions	on use		
Use of the substance/mixture	: Laboratory chemicals Manufacture of substances Scientific research and development		
1.3. Supplier			
SynQuest Laboratories, Inc. Inc. P.O. Box 309 Alachua, FL, Alachua, 32615 United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs.com	ı <u>m</u>		
1.4. Emergency telephone number			
Emergency number	: (844) 523-4086 (3E Company - Account 10069)		
SECTION 2: Hazard(s) identificatior			
2.1. Classification of the substance or r	nixture		
GHS US classification			
Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Specific target organ toxicity – Single exposure, Respiratory tract irritation Full text of H statements : see section 16	H315 Causes skin irritation H319 Causes serious eye irritation Category 3, H335 May cause respiratory irritation		
2.2. GHS Label elements, including pre	cautionary statements		
GHS US labeling			
Hazard pictograms (GHS US)			
Signal word (GHS US) Hazard statements (GHS US)	: Warning : H315 - Causes skin irritation		

Precautionary statements (GHS US)

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

: P261 - Avoid breathing fumes, mist, spray, vapors. 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.

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P302+P352 - If on skin: Wash with plenty of soap and water
P304+P340 - If inhaled: Remove person to fresh air and keep 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.
P362+P364 - Take off contaminated clothing and wash it 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

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%	GHS US classification
1,1,3,5,6-Pentachloroperfluorohexane (Main constituent)	CAS-No.: 307-26-6	≤ 100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

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

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures		
4.1. Description of first aid measures		
First-aid measures general	: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Move the affected personnel away from the contaminated area.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Get medical advice/attention.	
First-aid measures after skin contact	: Wash with plenty of soap and water. Get medical advice/attention.	
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.	
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.	
4.2. Most important symptoms and effects (acute and delayed)		
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.	
4.3. Immediate medical attention and	special treatment, if necessary	

Treat symptomatically.

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SECTION 5: Fire-fighting measures			
5.1. Suitable (and unsuitable) extinguishing	media		
Suitable extinguishing media	: Alcohol resistant foam. Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire.		
5.2. Specific hazards arising from the chemical			
Fire hazard Explosion hazard	 Thermal decomposition generates: Carbon oxides. Hydrogen chloride. Hydrogen fluoride. Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed containers. 		
5.3. Special protective equipment and precautions for fire-fighters			
Firefighting instructions Protection during firefighting	 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection". 		

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment and emergency procedures			
General measures	: Evacuate unnecessary personnel. Ensure adequate air ventilation. Do not breathe gas, fumes, vapor or spray.		
6.1.1. For non-emergency personnel			
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.		
6.1.2. For emergency responders			
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
Emergency procedures	: Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.		

62	Enviro	nmontal	precautions
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Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up		
For containment	: Stop leak if safe to do so. Dike for recovery or absorb with appropriate material.	
Methods for cleaning up	: Take up large spills with pump or vacuum and finish with dry chemical absorbent. Use explosion- proof equipment. Take up small spills with dry chemical absorbent. Sweep or shovel spills into appropriate container for disposal. Ventilate area.	
Other information	: For disposal of solid materials or residues refer to section 13 : "Disposal considerations".	
6.4. Reference to other sections		

No additional information available

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe fumes, mist, spray, vapors. Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Comply with applicable regulations.
Storage conditions	: Keep container closed when not in use.
Incompatible materials	: Refer to Section 10 on Incompatible Materials.
Storage area	: Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,1,3,5,6-Pentachloroperfluorohexane (307-26-6)	
No additional information available	
8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Systems under pressure should be regularily checked for leakage. Oxygen detectors should be used when asphyxiating gases may be released.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

protective gloves. 29 CFR 1910.138: Hand Protection

Eye protection:

Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection

Personal protective equipment symbol(s):



Thermal hazard protection:

Cold insulating gloves.

Other information:

Safety shoes. 29 CFR 1910.136: Foot Protection.

SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties Physical state : Liquid Color : No data available Odor : No data available Odor threshold : No data available pH : No data available

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Melting point	: No data available
Freezing point	: No data available
Boiling point	: 90 °C (@ 10 mm Hg)
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,827 g/ml (@ 25 °C)
Molecular mass	: 420,32 g/mol
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

Refractive index

: 1,3937 (@ 25 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Keep away from heat, sparks and flame.

10.5. Incompatible materials

Alkali metals. Finely divided metals (Al, Mg, Zn). Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of fire, see Section 5.

SECTION 11: Toxicological information		
11.1. Information on toxicologic	cal effects	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Skin corrosion/irritation	: Causes skin irritation.	

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Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability		
1,1,3,5,6-Pentachloroperfluorohexane (307-26-6)		
Persistence and degradability	Not readily biodegradable. May cause long-term adverse effects in the environment. PBT - Persistent, Bioaccumulative and Toxic.	
12.3. Bioaccumulative potential		
1,1,3,5,6-Pentachloroperfluorohexane (307-26-6)		
Bioaccumulative potential	Perfluorinated alkanes (PFAs, "forever chemicals") are long lasting, widely used chemicals that break down slowly over time. The potential hazards of PFAs are under investigation and have not been established.	
12.4. Mobility in soil		
No additional information available		

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

 Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. See the EPA's Interim Guidance on PFAS Destruction and Disposal.
: Dispose of contents/container in accordance with licensed collector's sorting instructions.
: Recycle the material as far as possible.
: This material is considered to be a "Forever chemical". Prevent any possible release to the environment. Do not discharge into drains. Take all necessary measures to prevent accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems, or emergency response.

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SECTION 14: Transport information		
14.1. UN number		
Not regulated for transport		
14.2. UN proper shipping name		
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not regulated Not regulated Not regulated Not regulated 	
14.3. Transport hazard class(es)		
DOT Transport hazard class(es) (DOT)	: Not regulated	
TDG Transport hazard class(es) (TDG)	: Not regulated	
IMDG Transport hazard class(es) (IMDG)	: Not regulated	
IATA Transport hazard class(es) (IATA)	: Not regulated	
14.4. Packing group		
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not regulated Not regulated Not regulated Not regulated 	
14.5. Environmental hazards		
Other information	: No supplementary information available.	
14.6. Special precautions for user		
DOT Not regulated		
TDG Not regulated		
IMDG Not regulated		
IATA Not regulated		
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
Not applicable		

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SECTION 15: Regulatory information					
45.4 UO Es devel se endetien e					
15.1. US Federal regulations					
All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:					
1,1,3,5,6-Pentachloroperfluorohexane	CAS-No. 307-26-6	100%			
15.2. International regulations					
CANADA					
No additional information available					
EU-Regulations					
No additional information available					
National regulations					

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Full text of H-phrases			
H315	Causes skin irritation		
H319	Causes serious eye irritation		
H335	May cause respiratory irritation		
NFPA health hazar	rd	 3 - Materials that, under emergency conditions, can cause serious or permanent injury. 0 - Materials that will not burn under typical fire conditions, including 	
		intrinsically noncombustible materials such as concrete, stone, and sand.	
NFPA reactivity		: 0 - Material that in themselves are normally stable, even under fire conditions.	
Hazard Rating			
Health		: 1 Slight Hazard - Irritation or minor reversible injury possible	
Flammability		: 0 Minimal Hazard - Materials that will not burn	
Physical		 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. 	

Safety Data Sheet (SDS), USA