

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: 210131G Issue date: 09.02.2016 Revision date: 18.12.2023 Version: 1.1

SECTION 1: Identification			
1.1. Identification			
Product form Substance name CAS-No. Product code Formula Synonyms Other means of identification	: 1545-59- : 2101-3-10 : C13H5F2	1,2H-Perfluorotrid 1 G 330 5,6,6,7,7,8,8,9,9, <sup>-</sup>	ecan-1-ol 10,10,11,11,12,12,13,13,13-Tricosafluorotridecan-1-ol
1.2. Recommended use and restriction	ns on use		
Use of the substance/mixture	Manufact	y chemicals ure of substances research and dev	
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 <b>1.4. Emergency telephone number</b>	.com		
Emergency number		-4086 (3E Compa	any - Account 10069)
SECTION 2: Hazard(s) identificati	on		
2.1. Classification of the substance o	r mixture		
GHS US classification			
Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Specific target organ toxicity – Single exposu Respiratory tract irritation Full text of H statements : see section 16		H315 H319 H335	Causes skin irritation Causes serious eye irritation May cause respiratory irritation
2.2. GHS Label elements, including p	recautionary stat	ements	
GHS US labeling			
Hazard pictograms (GHS US)	</td <td></td> <td></td>		
Signal word (GHS US)	: Warning		

Precautionary statements (GHS US)



: P261 - Avoid breathing dust, mist, spray. P264 - Wash skin thoroughly after handling

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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 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
1H,1H,2H,2H-Perfluorotridecan-1-ol (Main constituent)	CAS-No.: 1545-59-1		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 ef	ffects (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.

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#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures				
5.1. Suitable (and unsuitable) extinguis	hing 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 c	hemical			
Fire hazard	: Thermal decomposition generates: Carbon oxides. Hydrogen fluoride.			
5.3. Special protective equipment and p	precautions for fire-fighters			
Firefighting instructions Protection during firefighting	<ul> <li>In case of fire: Evacuate area.</li> <li>Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>			

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 dust.		
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".		

#### **6.2. Environmental precautions**

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for contain	ment and cleaning up
For containment Methods for cleaning up Other information	<ul> <li>Stop leak if safe to do so.</li> <li>Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.</li> <li>For disposal of solid materials or residues refer to section 13 : "Disposal considerations".</li> </ul>

#### 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 dust, mist, spray. Wear personal protective equipment. Avoid contact with skin and eyes.	
Hygiene measures	<ul> <li>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.</li> </ul>	

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7.2. Conditions for safe storage	e, including any incompatibilities
Technical measures Storage conditions	<ul><li>Comply with applicable regulations.</li><li>Keep container closed when not in use.</li></ul>
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. C	ontrol	paran	neters
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1H,1H,2H,2H-Perfluorotridecan-1-ol (154	5-59-1)
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.
8.3. Individual protection measures/Pers	onal protective equipment
Hand protection:	
protective gloves. 29 CFR 1910.138: Hand Prote	action
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):



#### Other information:

Safety shoes. 29 CFR 1910.136: Foot Protection.

SECTION 9: Physical and chemical properties		
9.1. Information on basic ph	ysical and chemical properties	
Physical state	: Solid	
Color	: No data available	
Odor	: No data available	
Odor threshold	: No data available	
рН	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: No data available	

Flash point

: No data available

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Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20 °C Relative density Molecular mass Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature Viscosity, kinematic Viscosity, dynamic Explosion limits Explosive properties Oxidizing properties	<ul> <li>No data available</li> <li>614,14 g/mol</li> <li>No data available</li> </ul>
Oxidizing properties	: No data available

#### 9.2. Other information

No additional information available

## **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** 

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 toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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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		
1H,1H,2H,2H-Perfluorotridecan-1-ol (1545-59-1)		
Persistence and degradability	Not readily biodegradable. May cause long-term adverse effects in the environment. PBT - Persistent, Bioaccumulative and Toxic.	

#### 12.3. Bioaccumulative potential

1H,1H,2H,2H-Perfluorotridecan-1-ol (1545-59-1)		
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 Waste treatment methods Sewage disposal recommendations Product/Packaging disposal recommendations Additional information Ecology - waste materials Image: Sewage disposal recommendations Product/Packaging disposal recommendations Sewage materials Image: Sewage disposal recommendations Sewage disposal recommendations Product/Packaging disposal recommendations Sewage materials

: 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.

# **SECTION 14: Transport information**

#### 14.1. UN number

Not regulated for transport

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14.2. UN proper shipping name		
Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> </ul>	
14.3. Transport hazard class(es)		
DOT Transport hazard class(es) (DOT)	: Not applicable	
<b>TDG</b> Transport hazard class(es) (TDG)	: Not applicable	
IMDG Transport hazard class(es) (IMDG)	: Not applicable	
IATA Transport hazard class(es) (IATA)	: Not applicable	
14.4. Packing group		
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> </ul>	
14.5. Environmental hazards		
Other information	: No supplementary information available.	
14.6. Special precautions for user		
DOT No data available		
TDG No data available		
IMDG No data available		
IATA No data available		
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
Not applicable		
SECTION 15: Regulatory information		

# 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:		
1H,1H,2H,2H-Perfluorotridecan-1-ol	CAS-No. 1545-59-1	100%

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#### **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 haza		3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA fire hazard	:	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	:	2 Moderate Hazard - Temporary or minor injury may occur
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