

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: 2107K04 Issue date: 07.01.2015 Revision date: 18.12.2023 Version: 1.1

SECTION 1: Identification		
1.1. Identification		
Product form Substance name CAS-No. Product code Formula Other means of identification	<ul> <li>Substance</li> <li>2-Heptafluoropropoxy-4-iodo-1,1,1,2-tetrafluoropentane</li> <li>243128-39-4</li> <li>2107-K-04</li> <li>C8H6F11IO</li> <li>MFCD00155936</li> </ul>	
1.2. Recommended use and restrictions o	n 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		
1.4. Emergency telephone number		
Emergency number	: (844) 523-4086 (3E Company - Account 10069)	
SECTION 2: Hazard(s) identification		
2.1. Classification of the substance or mix	cture	
GHS US classification		
Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Specific target organ toxicity – Single exposure, Ca Respiratory tract irritation Full text of H statements : see section 16	H315Causes skin irritationH319Causes serious eye irritationategory 3,H335May cause respiratory irritation	
2.2. GHS Label elements, including preca	utionary statements	
GHS US labeling Hazard pictograms (GHS US)		
Signal word (GHS US) Hazard statements (GHS US)	<ul> <li>Warning</li> <li>H315 - Causes skin irritation</li> <li>H319 - Causes serious eye irritation</li> <li>H335 - May cause respiratory irritation</li> </ul>	
Precautionary statements (GHS US)	<ul> <li>P261 - Avoid breathing fumes, mist, spray, vapors.</li> <li>P264 - Wash skin thoroughly after handling</li> </ul>	

## Safety Data Sheet

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

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.
P337+P313 - If eye irritation persists: 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.
DE01 Dispace of contents (containents on companyed waste dispace) plant

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
2-Heptafluoropropoxy-4-iodo-1,1,1,2-tetrafluoropentane (Main constituent)	CAS-No.: 243128-39- 4		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.

## Safety Data Sheet

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

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

Treat symptomatically.

SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguish	<ul> <li>extinguishing media         <ul> <li>Alcohol resistant foam. Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire.</li> </ul> </li> <li>from the chemical         <ul> <li>Thermal decomposition generates: Carbon oxides. Hydrogen fluoride. Hydrogen iodide.</li> <li>Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed containers.</li> </ul> </li> <li>pment and precautions for fire-fighters         <ul> <li>In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.</li> </ul> </li> </ul>	
Suitable extinguishing media		
5.2. Specific hazards arising from the ch	nemical	
Fire hazard Explosion hazard	: Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed	
5.3. Special protective equipment and protecti	recautions for fire-fighters	
Firefighting instructions Protection during firefighting	<ul> <li>In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.</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 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.	

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

6.2. Environmental precautions

## Safety Data Sheet

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

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	<ul> <li>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.</li> <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>	
7.2. Conditions for safe storage, incl	uding any incompatibilities	
Technical measures Storage conditions Incompatible materials Storage area	<ul> <li>Comply with applicable regulations.</li> <li>Keep container closed when not in use.</li> <li>Refer to Section 10 on Incompatible Materials.</li> <li>Store in dry, cool, well-ventilated area.</li> </ul>	

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

2-Heptafluoropropoxy-4-iodo-1,1,1,2-tetrafluoropentane (2	042129_20_4)
	243120-33-4)

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/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):



#### Other information:

Safety shoes. 29 CFR 1910.136: Foot Protection.

## Safety Data Sheet

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

9.1. Information on basic physical and	chemical properties	\$
Physical state	: Liquid	
Color	: No data availa	ble
Odor	: No data availa	ble
Odor threshold	: No data availa	ble
рН	: No data availa	ble
Melting point	: No data availa	ble
Freezing point	: No data availa	ble
Boiling point	: No data availa	ble
Flash point	: No data availa	ble
Relative evaporation rate (butyl acetate=1)	: No data availa	ble
Flammability (solid, gas)	: No data availa	ble
Vapor pressure	: No data availa	ble
Relative vapor density at 20 °C	: No data availa	ble
Relative density	: No data availa	ble
Molecular mass	: 454,02 g/mol	
Solubility	: No data availa	ble
Partition coefficient n-octanol/water (Log Pow)	: No data availa	ble
Auto-ignition temperature	: No data availa	ble
Decomposition temperature	: No data availa	ble
Viscosity, kinematic	: No data availa	ble
Viscosity, dynamic	: No data availa	ble
Explosion limits	: No data availa	ble
Explosive properties	: No data availa	ble
Oxidizing properties	: No data availa	ble

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.

## Safety Data Sheet

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

SECTION 11: Toxicological information 11.1. Information on toxicological effects		
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	
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. and/or in section 11.	

## SECTION 12: Ecological information

### 12.1. Toxicity

### No additional information available

### 12.2. Persistence and degradability

2-Heptafluoropropoxy-4-iodo-1,1,1,2-tetrafluoropentane (243128-39-4)	
<b>c</b> ,	Not readily biodegradable. May cause long-term adverse effects in the environment. PBT - Persistent, Bioaccumulative and Toxic.

### 12.3. Bioaccumulative potential

2-Heptafluoropropoxy-4-iodo-1,1,1,2-tetrafluoropentane (243128-39-4)				
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	<ul> <li>Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.</li> <li>See the EPA's Interim Guidance on PFAS Destruction and Disposal.</li> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>Recycle the material as far as possible.</li> </ul>			

## Safety Data Sheet

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

Ecology - waste 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	on
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)	<ul> <li>Not applicable</li> <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> <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

## Safety Data Sheet

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

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:						
2-Heptafluoropropoxy-4-iodo-1,1,1,2- tetrafluoropentane	CAS-No. 243128-39-4	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**

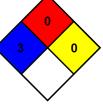
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date : 18.12.2023

sand.

Full text of H-phrases				
H315	Causes skin irritation	Causes skin irritation		
H319	Causes serious eye irritation	Causes serious eye irritation		
H335	May cause respiratory irritation			
NFPA health h	nazard	: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.		
NFPA fire haz	ard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and	3 0	

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating Health Flammability Physical

- : 2 Moderate Hazard Temporary or minor injury may occur : 0 Minimal Hazard - Materials that will not burn
- 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