## SAFETY DATA SHEET

Version: v1 Revision Date: 2024-01-26 Print Date: 2024-02-02

## SECTION 1:Identification of the substance/mixture and of the company/undertaking

## 1.1 Product identifiers

: 1-Chloro-2,2,2-trifluoroethyl Difluoromethyl Ether
: C153359
: aladdin
: 26675-46-7

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	:	Laborator	chemicals,Manufacture of substances.	
		Laborator	onernicale, manaractare or cabotanees.	

## 1.3 Company

Company	: ALADDIN SCIENTIFIC CORPORATION
Address	: 14078 Meridian Parkway,
Riverside, CA. 92518	
Telephone	: +1 (833) 552-7181
Fax	: no data available

## 1.4 Emergency telephone number

CHEMTREC®, Inside the USA	: 1-800-424-9300
CHEMTREC®, Outside the USA	:

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Cardio-vascular system, Central nervous system, H373

## 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Hazard statement(s) H336 Precautionary statement(s)



May cause drowsiness or dizziness



P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

## SECTION 3: Composition/information on ingredients

## 3.1 Substances

Synonyms	: Isoflurane;2-Chloro-2-(difluoromethoxy)-1,1,1-trifluoroethane, 1-Chloro-1-
(difluoromethoxy)-2,2,2-trifluoroethane	e, 1-Chloro-2,2,2-trifluoroethyl difluoromethyl ether,
Formula	: C3H2CIF50
Molecular weight	: 184.49
CAS No.	: 26675-46-7
EC-NO.	: no data available

Component	Classification	Concentration
1-Chloro-2,2,2-trifluoroethyl Difluoromethyl Ether		
	no data available	>98.0%(GC)

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

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

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

no data available

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## 4.3 Indication of any immediate medical attention and special treatment needed

no data available

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media no data available

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides Hydrogen chloride gas Hydrogen fluoride

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

no data available

## SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

Avoid inhalation of vapor or mist.

## 7.2 Conditions for safe storage, including any incompatibilities

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. Store in cool place.

## 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

## 8.2 Exposure controls

#### 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

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(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. The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.

**Body Protection** 

Complete suit protecting against chemicals, Flame retardant antistatic protective 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 fullface particle respirator type N100 (US) or type P3 (EN 143) 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

no data available

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a) Appearance	no data available
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available

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g) Flash point		no data	available
h) Evaporation rate	)	no data	available
i) Flammability (so	lid, gas)	no data	available
j) Upper/lower flam	nmability or		
explosive limits		no data	available
k) Vapour pressure	1	no data	available
l) Vapour density		no data	available
m) Relative density	,	no data	available
n) Water solubility		no data	available
o) Partition coeffic	ient: n-octanol/water	no data	available
p) Auto-ignition ten	nperature	no data	available
q) Decomposition t	temperature	no data	available
r) Viscosity		no data	available
s) Explosive proper	ties N	no data	available
t) Oxidizing proper	ties N	no data	available

## 9.2 Other safety information

no data available

## **SECTION 10: Stability and reactivity**

10.1 Reactivity

no data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

no data available

## SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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LD50 Oral - Rat - 4.770 mg/kg

Remarks: (External MSDS)

LC50 Inhalation - Rat - 4 h - 11475 ppm

Remarks: Behavioral:Somnolence (general depressed activity).

Behavioral:Excitement.

Respiratory disorder

Dermal: No data available

Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure May cause drowsiness or dizziness. Aspiration hazard no data available Additional Information RTECS: KN6799000

Inhalation of high concentrations may cause:, hypotension, Coma, respiratory difficulties, apnea, Seizures.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **SECTION 12: Ecological information**

12.1 Toxicity

no data available

## 12.2 Persistence and degradability

no data available

#### 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment no data available

#### 12.6 Other adverse effects

no data available

## SECTION 13:

## 13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

DOT (US)		
UN number: -	Packing group: -	Class: -
Proper shipping name: Not dangerous	Reportable Quantity(RQ): no data	Poison Inhalation Hazard: no data
goods (Aviation regulated liquid, n.o.s	. available	available
((±)-Isoflurane))		
Environmental Hazards: no		
IMDG		
UN number: -	Packing group: -	EMS-No: no data available
Proper shipping name: Not dangerous	goods (Aviation regulated liquid, n.o.s.	((±)-Isoflurane))
ΙΑΤΑ		
UN number: -	Packing group: -	Class: -
Proper shipping name: Not dangerous	goods (Aviation regulated liquid, n.o.s.	((±)-lsoflurane))

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## **SECTION 16: Other information**

Prepared By	Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com
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