

1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

Page: 1

Compilation date: 27/03/2004

**Revision date:** 06/02/2018

Revision No: 3

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

#### 1.1. Product identifier

Product name: 1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

CAS number: 678-65-9
EINECS number: 211-650-1
Product code: PC3118

**Synonyms:** 3,3,4,4,5,5,6,6-OCTAFLUOROOCTA-1,7-DIENE

1,4-DIVINYLOCTAFLUOROBUTANE

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

## 1.3. Details of the supplier of the safety data sheet

Company name: Apollo Scientific Ltd

Units 3 & 4
Parkway
Denton
Manchester
M34 3SG
UK

**Tel:** 0161 337 9971 **Fax:** 0161 336 6932

Email: david.tideswell@apolloscientific.co.uk

## 1.4. Emergency telephone number

Emergency tel: -

#### Section 2: Hazards identification

# 2.1. Classification of the substance or mixture

Classification under CLP: STOT SE 3: H335; Aquatic Chronic 4: H413; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Flam.

Liq. 3: H226

Most important adverse effects: Flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. May

cause respiratory irritation. May cause long lasting harmful effects to aquatic life.

### 2.2. Label elements

Label elements:

Hazard statements: H226: Flammable liquid and vapour.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

Page: 2

H335: May cause respiratory irritation.

H413: May cause long lasting harmful effects to aquatic life.

Hazard pictograms: GHS02: Flame

GHS07: Exclamation mark





Signal words: Warning

Precautionary statements: P260: Do not breathe vapours.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection.

#### 2.3. Other hazards

**Other hazards:** In use, may form flammable / explosive vapour-air mixture.

PBT: This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

#### 3.1. Substances

Chemical identity: 1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

**CAS number:** 678-65-9 **EINECS number:** 211-650-1

## Section 4: First aid measures

#### 4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash

immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a

doctor.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

Page: 3

## Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

Extinguishing media: Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the

surrounding fire should be used.

## 5.2. Special hazards arising from the substance or mixture

Exposure hazards: Flammable. Forms explosive air-vapour mixture. In combustion emits toxic fumes of

carbon dioxide / carbon monoxide. Hydrogen fluoride (HF).

#### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

### Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from

downwind. If outside keep bystanders upwind and away from danger point. Mark out the

contaminated area with signs and prevent access to unauthorised personnel. Turn

leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of

ignition.

### 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

## 6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for

disposal by an appropriate method. Do not use equipment in clean-up procedure which

may produce sparks.

#### 6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

#### Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

Smoking is forbidden. Use non-sparking tools. Only use in fume hood.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Keep away from

sources of ignition. Prevent the build up of electrostatic charge in the immediate area.

Ensure lighting and electrical equipment are not a source of ignition. Light Sensitive.

Store under Argon. Air sensitive.

1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

Page: 4

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

## Section 8: Exposure controls/personal protection

## 8.1. Control parameters

Workplace exposure limits: No data available.

**DNEL/PNEC Values** 

**DNEL / PNEC** No data available.

#### 8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical

equipment are not a source of ignition.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

### Section 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

State: Liquid

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available.

Boiling point/range ℃: 61@10mmHg Melting point/range ℃: No data available.

Flammability limits %: lower: No data available. upper: No data available.

Flash point °C: No data available. Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available. Vapour pressure: No data available.

Relative density: Not applicable. pH: No data available.

VOC g/I: No data available.

### 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

## 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

Page: 5

## 10.2. Chemical stability

Chemical stability: Stable under normal conditions. Stable at room temperature.

## 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

#### 10.4. Conditions to avoid

Conditions to avoid: Heat. Hot surfaces. Sources of ignition. Flames. Air. Light.

## 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

## 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Hydrogen fluoride

(HF).

## **Section 11: Toxicological information**

## 11.1. Information on toxicological effects

#### Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

## Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

## Section 12: Ecological information

## 12.1. Toxicity

Ecotoxicity values: No data available.

# 12.2. Persistence and degradability

Persistence and degradability: No data available.

## 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

Page: 6

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

## Section 13: Disposal considerations

#### 13.1. Waste treatment methods

Disposal operations: MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND

FEDERAL REGULATIONS

Disposal of packaging: Dispose of as special waste in compliance with local and national regulations Observe

all federal, state and local environmental regulations.

NB: The user's attention is drawn to the possible existence of regional or national

regulations regarding disposal.

## **Section 14: Transport information**

## 14.1. UN number

UN number: UN1993

## 14.2. UN proper shipping name

Shipping name: FLAMMABLE LIQUID, N.O.S.

(1H,1H,2H,7H,8H,8H-Perfluoroocta-1,7-diene)

### 14.3. Transport hazard class(es)

Transport class: 3

## 14.4. Packing group

Packing group: |||

# 14.5. Environmental hazards

**Environmentally hazardous:** No **Marine pollutant:** No

# 14.6. Special precautions for user

**Special precautions:** No special precautions.

## **Section 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

1H,1H,2H,7H,8H,8H-PERFLUOROOCTA-1,7-DIENE

Page: 7

#### Section 16: Other information

#### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

2015/830.

\* Data predicted using computational software. The OECD QSAR-Toolbox for grouping chemicals into categories. Developed by LMC bulgaria.

http://echa.europa.eu/support/oecd-qsar-toolbox

~ Data predicted using computational software ACD/ToxSuite v 2.95.1 Copyright 1994-2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry Development, Inc (ACD/Labs). http://www.acdlabs.com/products/pc\_admet/tox/tox/

Phrases used in s.2 and s.3: H226: Flammable liquid and vapour.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H413: May cause long lasting harmful effects to aquatic life.

Legal disclaimer: The material is intended for research purposes only and should be handled exclusively by those who have been fully trained in safety, laboratory and chemical handling procedures. The above information is believed to be correct to the best of our knowledge. The above information is believed to be correct to the best of our knowledge at the date of its publication, but should not be considered to be all inclusive. It should be used only as a guide for safe handling, storage, transportation and disposal. We cannot guarantee that the hazards detailed in this document are the only hazards that exist for this product. This is not a warranty and Apollo Scientific Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.