# Chemical Safety Data Sheet MSDS / SDS

# **PERFLUOROPENTADECANE**

Revision Date: 2025-02-01 Revision Number: 1

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

#### **Product identifier**

: PERFLUOROPENTADECANE Product name

CBnumber : CB1696808 CAS : 2264-03-1

: Perfluoro-n-pentadecane, Perfluoropentadecane Synonyms

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

## **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

: 400-158-6606 Telephone

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

### Pictogram(s)

Signal word

Warning

# Hazard statement(s)

H335 May cause respiratory irritation

H319 Causes serious eye irritation

H315 Causes skin irritation

### Prevention

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P264 Wash ... thoroughly after handling.

### Response

P319 Get medical help if you feel unwell.

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.

P362+P364 Take off contaminated clothing and wash it before reuse.

P332+P317 If skin irritation occurs: Get medical help.

P321 Specific treatment (see ... on this label).

P302+P352 IF ON SKIN: Wash with plenty of water/...

#### Storage

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

#### **Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : PERFLUOROPENTADECANE

Synonyms : Perfluoro-n-pentadecane, Perfluoropentadecane

CAS : 2264-03-1 MF : C15F32 MW : 788.11

# SECTION 4: First aid measures

## Description of first aid measures

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

### In case of skin contact

Wash off with soap and plenty of water.

### 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.

# Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

# **SECTION 5: Firefighting measures**

### Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen fluoride

## Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

# SECTION 6: Accidental release measures

## Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

#### **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

## Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

## Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# SECTION 8: Exposure controls/personal protection

## control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### **Exposure controls**

#### Appropriate engineering controls

General industrial hygiene practice.

## Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(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** 

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

Appearance	solid
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: 110 - 113 °C
Initial boiling point and boiling range	228 °C
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	No data available
Vapour density	No data available

Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

No data available

# **Conditions to avoid**

No data available

# Incompatible materials

Strong oxidizing agents

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride

Other decomposition products - No data available In the event of fire: see section  ${\bf 5}$ 

# **SECTION 11: Toxicological information**

# Information on toxicological effects

#### **Acute toxicity**

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

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## Reproductive toxicity

No data available

## Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: Not available

# SECTION 12: Ecological information

### **Toxicity**

No data available

# Persistence and degradability

No data available

# **Bioaccumulative potential**

No data available

# Mobility in soil

No data available

#### Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### Other adverse effects

No data available

# SECTION 13: Disposal considerations

### Waste treatment methods

## **Product**

## Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

## **SECTION 14: Transport information**

IATA:

IATA:IMDG:IATA:

IATA:IATA:

**UN** number

ADR/RID:IMDG:IATA:ADR/RID:IMDG:IATA:

**UN** number

ADR/RID:IMDG:IATA:ADR/RID:IMDG:IATA:

# Transport hazard class(es)

ADR/RID: 3 (8) IMDG: 3 (8) IATA: 3 (8) ADR/RID: 1818 IMDG: 1818 IATA: 1818 ADR/RID: 3272 IMDG: 3272 IATA: 3272

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

ADR/RID: II IMDG: II IATA: II ADR/RID: - IMDG: - IATA: -ADR/RID: - IMDG: - IATA: -

ADR/RID: 1470 IMDG: 1470 IATA: 1470 ADR/RID: 1993 IMDG: 1993 IATA: 1993 ADR/RID: 2226 IMDG: 2226 IATA: 2226 ADR/RID: 1993 IMDG: 1993 IATA: 1993

#### **Packaging group**

ADR/RID: III IMDG: III IATA: III

ADR/RID: SILICON TETRACHLORIDE IMDG: SILICON TETRACHLORIDE IATA: Silicon tetrachloride Passenger Aircraft: Not permitted for

transport

ADR/RID: ESTERS, N.O.S. (Methyl 4-pentenoate) IMDG: ESTERS, N.O.S. (Methyl 4-pentenoate) IATA: Esters, n.o.s. (Methyl 4-pentenoate)

ADR/RID: III IMDG: III IATA: III

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

ADR/RID: - IMDG: - IATA: -ADR/RID: - IMDG: - IATA: -

ADR/RID: LEAD PERCHLORATE, SOLID IMDG: LEAD PERCHLORATE, SOLID IATA: Lead perchlorate, solid

ADR/RID: FLAMMABLE LIQUID, N.O.S. (Di-tert-butylsilane) IMDG: FLAMMABLE LIQUID, N.O.S. (Di-tert-butylsilane) IATA: Flammable liquid,

n.o.s. (Di-tert-butylsilane)

ADR/RID: BENZOTRICHLORIDE IMDG: BENZOTRICHLORIDE IATA: Benzotrichloride

ADR/RID: - IMDG: - IATA: -

ADR/RID: FLAMMABLE LIQUID, N.O.S. (5-Chloro-1-pentyne) IMDG: FLAMMABLE LIQUID, N.O.S. (5-Chloro-1-pentyne) IATA: Flammable

## Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: no IMDG Marine pollutant: no IATA: no Special precautions for user Further information Not classified as dangerous in the meaning

of transport regulations.

ADR/RID: 8 IMDG: 8 IATA: 8

ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: 5.1 (6.1) IMDG: 5.1 (6.1) IATA: 5.1 (6.1) ADR/RID: no IMDG Marine pollutant: no IATA: no

ADR/RID: no IMDG Marine pollutant: no IATA: no Special precautions for user Further information Not classified as dangerous in the meaning

of transport regulations.

No data available

ADR/RID: no IMDG Marine pollutant: no IATA: no

ADR/RID: 3 IMDG: 3 IATA: 3 ADR/RID: 8 IMDG: 8 IATA: 8

## **Packaging group**

ADR/RID: II IMDG: II IATA: II

ADR/RID: III IMDG: III IATA: III

No data available

No data available

ADR/RID: II IMDG: II IATA: II ADR/RID: II IMDG: II IATA: II ADR/RID: II IMDG: II IATA: II ADR/RID: II IMDG: II IATA: II

### **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: yes IMDG Marine pollutant: yes IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no

**SECTION 15: Regulatory information** 

# Special precautions for user

No data available

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

#### Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

### Measures for Environmental Management of New Chemical Substances

Vietnam National Chemical Inventory: Not Listed. website: https://chemicaldata.gov.vn/

United States Toxic Substances Control Act (TSCA) Inventory: Not Listed. website: https://www.epa.gov/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

New Zealand Inventory of Chemicals (NZIoC): Not Listed. website: https://www.epa.govt.nz/

Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

European Inventory of Existing Commercial Chemical Substances (EINECS): Not Listed. website: https://echa.europa.eu/

EC Inventory:Not Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

# SECTION 16: Other information

## Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

EC50: Effective Concentration 50%

IATA: International Air Transportation Association

IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit TWA: Time Weighted Average

#### References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- 【10】 Sigma-Aldrich, website: https://www.sigmaaldrich.com/

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