

Safety data sheet

Printing date 22.11.2018

Version number 1

Revision: 22.11.2018

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

1.1 Product identifier

Trade name: C6 OLEFIN**Article number:** ST-N2OLF**EC number:**

246-791-8

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

DAIKIN INDUSTRIES, LTD. CHEMICALS DIVISION:

Umeda Center Bldg., 4-12, Nakazaki-Nishi 2-chome, Kita-Ku, Osaka, JAPAN

Phone: (+81) 6-6373-4345 Fax: (+81) 6-6373-4281

Further information obtainable from: <http://www.daikin.com/>

1.4 Emergency telephone number:

Japan: +81-6-6349-7521

China: +86-512-5-232-0949, +86-21-34151689

South Korea: +82-2-568-1722

Americas: +1-256-306-5000

Europe: +49-211-179 225-0

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

The substance is classified and labelled according to the CLP regulation.

Signal word: Danger**Precautionary statements:**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3: Composition/information on ingredients

Substance or mixture: Substance**Information on ingredients:**

CAS: 25291-17-2 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooct-1-ene ≥99.9%
T R48/23/24/25; Xn R22
STOT RE 1, H372
Acute Tox. 4, H302

Others

<0.1%

Identification number(s)**EC number:** 246-791-8

Safety data sheet

Printing date 22.11.2018

Version number 1

Revision: 22.11.2018

Trade name: C6 OLEFIN

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Seek medical treatment.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Remove contaminated clothes immediately.

Immediately wash with water and soap and rinse thoroughly.

Consult a doctor in case of complaints.

After eye contact:

Immediately rinse with a lot of water for several minutes. Remove contact lenses if possible. Continue rinsing.

Consult an ophthalmologist in case of complaints.

After swallowing:

Rinse mouth with water. Do not induce vomiting.

Consult a doctor in case of complaints.

4.2 Most important symptoms and effects, both acute and chronic: No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable for surrounding conditions.

5.2 Special hazards arising from the substance or mixture:

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Protective equipment:

Wear self-contained breathing apparatus and protective suit.

Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation before entering the area.

Stay on the windward side.

Keep out unauthorized persons.

Wear appropriate protective devices (See Section 8 Exposure Controls/Personal Protection).

Avoid contact with eyes and skin.

Do not swallow the product.

6.2 Environmental precautions: Prevent seepage into sewage system, workpits and cellars.

6.3 Methods and material for containment and cleaning up:

For a small amount of leakage: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders) or collect in an empty container that can be sealed tightly.

For a large amount of leakage: Enclose with banks to avoid outflow. Lead the leakage to a safe place and collect.

6.4 Reference to other sections:

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Do not handle until all safety precautions have been read and understood.

Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

Safety data sheet

Printing date 22.11.2018

Version number 1

Revision: 22.11.2018

Trade name: C6 OLEFIN

7.2 Conditions for safe storage, including any incompatibilities:

Storage

Requirements to be met by storerooms and receptacles:

Store in a cool and dry location.

Keep containers tightly sealed.

Information about storage in one common storage facility:

See section 10 for information on incompatible materials.

Further information about storage conditions:

Protect from heat and direct sunlight.

Store containers in a well ventilated area.

Store locked up.

7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters No further information available.

Ingredients with limit values that require monitoring at the workplace: Not required.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Do not eat or drink while working.

Keep away from tobacco products.

Respiratory protection:

Use respiratory protective device with filters for organic and acid gas (or airline respirators in some cases) if formation of toxic gases is possible while the product is heated.

Use respiratory protective device with organic gas cartridge.

Protection of hands:



Protective gloves

Material of gloves: Rubber

Eye protection:



Safety glasses

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance

Form:	Liquid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	4.5-8
Melting point/freezing point:	<-60 °C

Safety data sheet

Printing date 22.11.2018

Version number 1

Revision: 22.11.2018

Trade name: C6 OLEFIN

Initial boiling point and boiling range:	106 °C No further information available.
Flash point:	Not applicable.
Explosion limits:	
Lower explosive limit:	No further information available.
Upper explosive limit:	No further information available.
Vapour pressure:	No further information available.
Density at 25 °C:	1.56-1.58
Relative density	Not determined.
Solubility in / Miscibility with water:	1.21 mg/l
Partition coefficient: n-octanol/water:	No further information available.
9.2 Other information:	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** No further relevant information available.
- 10.2 Chemical stability**
- Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- 10.3 Possibility of hazardous reactions:** No dangerous reactions known under normal conditions of use.
- 10.4 Conditions to avoid:** Keep away from heat, sparks, flame, high temperature.
- 10.5 Incompatible materials:** Nucleophilic reagent (alkali, alcohol)
- 10.6 Hazardous decomposition products:** Danger of toxic fluorine based pyrolysis products.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects**
- Acute toxicity** Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:** No further information available.
- Primary irritant effect**
- Skin corrosion/irritation** No further information available.
- Serious eye damage/irritation** No further information available.
- after inhalation:** No further information available.
- Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- CMR effects**
- Germ cell mutagenicity**
- Ames Assay - Negative
- Chromosomal Aberration Study in vivo - Negative
- Carcinogenicity** Based on available data, the classification criteria are not met.
- Reproductive toxicity** Based on available data, the classification criteria are not met.
- STOT-single exposure** Based on available data, the classification criteria are not met.
- STOT-repeated exposure**
- Causes damage to organs through prolonged or repeated exposure.
- Aspiration hazard** Based on available data, the classification criteria are not met.
- Chronic study**

CAS: 25291-17-2 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooct-1-eneOral 28 days 5 mg/kg/day (Rat)
NOAEL

Safety data sheet

Printing date 22.11.2018

Version number 1

Revision: 22.11.2018

Trade name: C6 OLEFIN

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 25291-17-2 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooct-1-ene

EC50/48 h >0.0719 mg/l (Daphnia)

EC50/72hr >0.0139 mg/l (Alga)

LC50/96 h >10 mg/l (Fish)

12.2 Persistence and degradability:

This product will persist in the environment. Handle with care in case of accidental release or disposal.

12.3 Bioaccumulative potential:

Does not accumulate in organisms

CAS: 25291-17-2 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooct-1-ene

BCF 300-380 (Fish)

12.4 Mobility in soil: No further relevant information available.

Ecotoxicological effects: no data

12.5 Results of PBT and vPvB assessment

PBT:

No further relevant information available.

Not applicable.

vPvB:

No further relevant information available.

Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation:

Landfill disposal is recommended.

In case of incineration, the temperature must be higher than 800 °C.

Treat exhaust gas such as HF in a suitable way.

Disposal must be made according to official regulations.

Wear appropriate protective devices.

Uncleaned packaging

Recommendation:

Disposal must be made according to official regulations.

Empty contaminated packaging thoroughly.

SECTION 14: Transport information

14.1 UN-Number:

ADR, ADN, IMDG, IATA

Not applicable

14.2 UN proper shipping name:

ADR:

Not applicable

ADN, IMDG, IATA

Not applicable

14.3 Transport hazard class(es):

ADR, ADN, IMDG, IATA

Class:

Not applicable

14.4 Packing group:

ADR, IMDG, IATA

Not applicable

Safety data sheet

Printing date 22.11.2018

Version number 1

Revision: 22.11.2018

Trade name: C6 OLEFIN**14.5 Environmental hazards:****Marine pollutant:** No**14.6 Special precautions for user:** Not applicable.**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.**Transport/Additional information:** Avoid direct sunlight. Make sure of no damage, corrosion, leaks on the receptacles.

Take necessary measures for preventing cargo shift.

UN "Model Regulation": Not applicable*** SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS08

Signal word Danger**Hazard-determining components of labelling:**

3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooct-1-ene

Hazard statements

H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations No further information available.**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

The product is for the industrial use only. We do not guarantee the safety in case the product is used for the other purposes. When using the product for health-care application or food/feed application, consult us in advance. This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: EHS Department**Contact:** <http://www.daikin.com/>**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

Safety data sheet

Printing date 22.11.2018

Version number 1

Revision: 22.11.2018

Trade name: C6 OLEFIN

vPvB: very Persistent and very Bioaccumulative

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

**** Data compared to the previous version altered.***