

Printing date 06.11.2015 Version number 1 Revision: 06.11.2015

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

#### 1.1 Product identifier

Trade name: C6SFA MONOMER

Article number: 361

**EC number:** 241-527-8

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:

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Japan: +81-6-6349-7521

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# SECTION 2: Hazard identification

# 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



STOT RE 2 H373 May cause 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: Warning Precautionary statements:

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

P314 Get medical advice/attention if you feel unwell.

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

Additional information:

EUH208 Contains 1,4-Dihydroxybenzene. May produce an allergic reaction.

### SECTION 3: Composition/information on ingredients

#### Information on ingredients:

17527-29-6 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl acrylate

≥98%

123-31-9 1,4-Dihydroxybenzene

Xn R22-40-68; Xi R41; Xi R43; N R50

Carc. Cat. 3, Muta. Cat. 3 Muta. 2, H341; Carc. 2, H351

Eye Dam. 1, H318

Aquatic Acute 1, H400

Acute Tox. 4, H302; Skin Sens. 1, H317

<1%



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150-76-5 4-Methoxyphenol

Xn R22; Xi R36; Xi R43

Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317

Identification number(s) EC number: 241-527-8

#### SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.

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

**After skin contact:** Immediately wash with water and soap and rinse thoroughly. **After eye contact:** Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult a doctor.

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: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.

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 fully protective suit.

#### SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective clothing.

6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.

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.

**6.4 Reference to other sections:** No dangerous substances are released.

#### SECTION 7: Handling and storage

7.1 Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace.

*Information about fire - and explosion protection:* No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

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.

Additional information: The lists valid during the making were used as basis.

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.

<1%



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**Respiratory protection:** Suitable respiratory protective device recommended.

Protection of hands: Impervious gloves



Material of gloves: Synthetic rubber gloves Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Goggles are recommended during refilling

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: Weak, characteristic

pH-value: Not applicable.

*Melting point/Melting range:* No further information available.

**Boiling point/Boiling range:** 76-80 °C (8mmHg)

Flash point:  $104 \, ^{\circ}C \, (COC)$ 

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:** Not applicable.

Lower explosive limit:Product does not present an explosion hazard.Upper explosive limit:Product does not present an explosion hazard.

Vapour pressure: No further information available.

**Density at 25 °C:** 1,55 g/cm<sup>3</sup>

Solubility in / Miscibility with

*water:* 0,185 mg/l

Partition coefficient (n-octanol/water): No further information available.

Viscosity:

**Dynamic:** Not determined.

9.2 Other information: No further relevant information available.

## SECTION 10: Stability and reactivity

 ${\it 10.1 Reactivity}\ No\ further\ relevant\ information\ available.$ 

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions: Reacts with peroxides and other radical forming substances.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products:

Hydrogen fluoride

Fluorophosgene in contact with naked flame or red hot objects.



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# SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

# 17527-29-6 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl acrylate

 $Oral\ LD50 > 2000\ mg/kg\ (Rat)$ 

Primary irritant effect

Skin corrosion/irritation Slightly irritant.

Serious eye damage/irritation Slightly irritant.

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 - Positive

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

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Based on available data, the classification criteria are not met.

Chronic study

#### 17527-29-6 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl acrylate

Oral 28 days 5 mg/kg/day (Rat)

NOEL

#### SECTION 12: Ecological information

#### 12.1 Toxicity

Aquatic toxicity:

#### 17527-29-6 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl acrylate

EC50/48h 0,141 mg/l (Daphnia)

EC50/72h 0,0215 mg/l (Alga)

 $LC50/96h > 15,0 \, mg/l \, (Fish)$ 

#### 12.2 Persistence and degradability:

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

Other information: The product is slightly biodegradable.

12.3 Bioaccumulative potential: No further relevant information available.

**12.4 Mobility in soil:** Respiration of Activated sludge 3h NOEC≥1000 mg/L

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

#### 12.5 Results of PBT and vPvB assessment

PBT: No further relevant information available.

vPvB: No further relevant information available.

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  $^{\circ}$ C.

Treat exhaust gas such as HF in a suitable way.

Disposal must be made according to official regulations.



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Wear appropriate protective devices.

# Uncleaned packaging

#### Recommendation:

Disposal must be made according to official regulations.

Empty contaminated packagings thoroughly.

# SECTION 14: Transport information

14.1 UN-Number:

ADR, ADN, IMDG, IATA Not applicable

14.2 UN proper shipping name:

ADR, 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

14.5 Environmental hazards:

Marine pollutant:

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: Not dangerous according to the above specifications.

UN "Model Regulation":

# SECTION 15: Regulatory information

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



## Signal word Warning

#### Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

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

P314 Get medical advice/attention if you feel unwell.

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

# 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

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



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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

vPvB: very Persistent and very Bioaccumulative STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

\* Data compared to the previous version altered.