Safety data sheet according to 1907/2006/EC, Article 31

Printing date 02.07.2013 Revision: 30.06.2009

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

1.1 Product identifier

1H,1H-Perfluorooctyl acrylate

Trade name Stock number: CAS Number: 307-98-2 206-212-1

EC number: 206-212-1

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

S1124 Scientific research and developr Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG A Johnson Matthey Company Zeppelinstr. 7b Zeppelinsti. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com

Informing department:

www.alfa.com
www.alfa.com
product safety Tel + +049 (0) 7275 988687-0
Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240 1.4 Emergency telephone number:

#### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

GHS07

Skin Irrit. 2 H315 Causes skin irritation. Eve Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36/37/38: R36/37/38: Irritating to eyes, respiratory system and skin. Information concerning particular hazards for human and environment: Other hazards that do not result in Not applicable

classification No information known.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms Signal word

Hazard statements

GHS07
Warning
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
Avoid breathing di

Precautionary statements

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Specific treatment (see on this label).

Step lecked up.

P405 Store locked up

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

regulations.

.3 Other hazards

Results of PBT and vPvB assessment PBT:

Not applicable. Not applicable. vPvB:

#### SECTION 3: Composition/information on ingredients

3.1 Substances

After eye contact

CAS# Designation: Identification number(s): 307-98-2 1H,1H-Perfluorooctyl acrylate

EC number

206-212-1 Stabilized with: Additional information:

4-Methoxyphenol (CAS# 150-76-5)

## SECTION 4: First aid measures

4.1 Description of first aid measures After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.

After skin contact

Seek immediate medical advice Rinse opened eye for several minutes under running water. Then consult doctor.

Seek medical treatment.

After eye contact
After swallowing
4.2 Most important symptoms and effects,
both acute and delayed
4.3 Indication of any immediate medical
attention and special treatment needed

No further relevant information available No further relevant information available

# SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing agents 5.2 Special hazards arising from the

substance or mixture

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

If this product is involved in a fire, the following can be released:

Carbon monoxide and carbon dioxide Hydrogen fluoride (HF)

5.3 Advice for firefighters Protective equipment: Wear self-contained breathing apparatus. Wear full protective suit.

#### SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil. 6.2 Environmental precautions:

6.3 Methods and material for containment

and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
Keep away from ignition sources.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Prevention of secondary hazards: 6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers:

Information about storage in one common

No special requirements.

storage facility:

Further information about storage

Store away from oxidizing agents.

conditions:

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. No further relevant information available. 7.3 Specific end use(s)

### SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems:

8.1 Control parameters

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace:
Additional information:

Not required. No data

8.2 Exposure controls

Personal protective equipment General protective and hygienic measures

Breathing equipment: Protection of hands:

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Impervious gloves

Impervious gloves Not determined

Material of gloves Penetration time of glove material Eye protection:

Safety glasses Face protection

**Body protection:** Protective work clothing.

#### SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Form: Colour: Smell: Odour threshold:

Liquid Colourless Not determined Not determined.

pH-value:

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:

Not determined 112-115 °C (60 mmHg) Not determined

Flash point Inflammability (solid, gaseous) Ignition temperature: Decomposition temperature:

Not determined Not determined

Not determined

Not determined

Not determined

Not determined Not determined

Self-inflammability: Danger of explosion: Critical values for explosion: Product is not explosive.

Lower: Upper: Opper:
Steam pressure:
Density at 20 °C
Relative density
Vapour density
Evaporation rate
Solubility in / Miscibility with
Water: Not determined

1,403 g/cm<sup>3</sup> Not determined. Not determined. Not determined.

Water: Partition coefficient (n-octanol/water):

Not miscible or difficult to mix Not determined.

Viscosity: dynamic:

Not determined.

kinematic: 9.2 Other information Not determined. No further relevant information available

SECTION 10: Stability and reactivity

10.1 Reactivity No information known.

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10.2 Chemical stability

Thermal decomposition / conditions to be

avoided:
10.3 Possibility of hazardous reactions
10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Stable under recommended storage conditions.

No decomposition if used and stored according to specifications.

No dangerous reactions known Oxidizing agents

Carbon monoxide and carbon dioxide

Hydrogen fluoride

No effects known.

No effects known.

Not applicable.

Causes skin irritation. Causes serious eye irritation.

No sensitizing effect known. No effects known.

No data

#### **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Acute toxicity: LD/LC50 values that are relevant for classification:

Skin irritation or corrosion: Eye irritation or corrosion:

Sensitization: Germ cell mutagenicity:

Carcinogenicity:

Reproductive toxicity: Specific target organ system toxicity - repeated exposure:

Specific target organ system toxicity - single

exposure:

Aspiration hazard:

Additional toxicological information:

May cause respiratory irritation. No effects known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Do not allow material to be released to the environment without proper governmental permits.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

No effects known.

**SECTION 12: Ecological information** 

12.1 Toxicity
Aquatic toxicity:
12.2 Persistence and degradability
12.3 Bioaccumulative potential
12.4 Mobility in soil
Additional ecological information:
General notes:

12.5 Results of PBT and vPvB assessment

PBT: vPvB:

12.6 Other adverse effects

Not applicable.
No further relevant information available.

Generally not hazardous for water. Avoid transfer into the environment.

No further relevant information available No further relevant information available. No further relevant information available. No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.

Consult state, local or national regulations for proper disposal

None

None

Uncleaned packagings: Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information **UN-Number** 

ADR, IMDG, IATA

None

14.2 UN proper shipping name ADR, IMDG, IATA

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class

Packing group ADR, IMDG, IATA

14.5 Environmental hazards:

14.6 Special precautions for user Code

None

Not applicable. Not applicable

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC

Transport/Additional information:

Not applicable.

Not dangerous according to the above specifications

# SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Australian Inventory of Chemical

Substances

Standard for the Uniform Scheduling of **Drugs and Poisons** 

Substance is not listed. Substance is not listed.

National regulations Information about limitation of use: Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals.

Water hazard class:
Other regulations, limitations and prohibitive regulations
ELINCS (European List of Notified Chemical

Substances)

Substances of very high concern (SVHC) according to REACH, Article 57 REACH - Pre-registered substances 15.2 Chemical safety assessment:

Substance is not listed.

Substance is not listed. Substance is listed.

A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Régulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Martime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent Abbreviations and acronyms:

DE/E