

Printing date 17.10.2017

Version number 1

Revision: 17.10.2017

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** DAI-EL LT-252,302,303L,304**Article number:** 252**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**

The substance is not classified according to the CLP regulation.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008:** Not applicable**Signal word:** Not applicable**\* SECTION 3: Composition/information on ingredients****Information on ingredients:**

CAS: 56357-87-0 Fluoroelastomer

100%

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:** Seek immediate medical advice.**After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:**

After contact with the molten product, cool rapidly with cold water.

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:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** None**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.

Printing date 17.10.2017

Version number 1

Revision: 17.10.2017

Trade name: DAI-EL LT-252,302,303L,304

**SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures:** Not required.  
**6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water.  
**6.3 Methods and material for containment and cleaning up:** Pick up mechanically.  
**6.4 Reference to other sections:** No dangerous substances are released.

**SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling:**  
Extractors are required on all machines used for thermal processing or powder handling processes.  
**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:** Protect from contamination.  
**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**

**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.

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 the product is heated above 200 °C and toxic gases is formed.

**Protection of hands:**

Protective gloves

**Material of gloves:** Synthetic rubber gloves

**Penetration time of glove material**

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

**Eye protection:**

Tightly sealed goggles

**Body protection:** Protective work clothing

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance**

**Form:** Sheet  
**Colour:** Whitish  
**Odour:** Odourless

**pH-value:** Not applicable.

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

Printing date 17.10.2017

Version number 1

Revision: 17.10.2017

Trade name: DAI-EL LT-252,302,303L,304

**Initial boiling point and boiling range:** No further information available.

**Flash point:** Not applicable.

**Flammability (solid, gas):** Product is not flammable.

**Decomposition temperature:** Not determined.

**Explosive properties:** 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:** Not applicable.

**Density at 20 °C:** 1.79 g/cm<sup>3</sup> (RT)

**Solubility in / Miscibility with water:** Insoluble.

**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.

Even at the temperatures reached during the normal hot processing of fluoropolymers, fume that presents a potential health hazard may be generated.

**10.3 Possibility of hazardous reactions:** No dangerous reactions known.

**10.4 Conditions to avoid:** Keep away from heat, sparks, flame, high temperature.

### 10.5 Incompatible materials:

Metal powder (e.g. Al, Mg) and fluorine oxidizer. There is a danger of chemical reactions that could cause fire or explosion when the product is heated with them.

### 10.6 Hazardous decomposition products:

As for decomposition products, particulate matters and extremely toxic/corrosive fumes may be generated (HF, carbonyl fluoride, monomers, perfluoroisobutylene).

Decomposition products differ depending on the temperature and conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity** no data

**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.

**Respiratory or skin sensitisation** No further information available.

#### Additional toxicological information:

**General effects:**

Fumes generated during burning may cause "polymer fume fever" (flu-like symptoms such as fever, chill, cough).

This may last for a whole day and night.

Fumes are not absorbed in skin. No sensitizing effect known.

**Effects of hydrogen fluoride:**

Low concentration of hydrogen fluoride may cause feeling of dyspnea, cough, irritation in eyes, nose, throat, fever, chill for 1-2 days.

After that, dyspnea, cyanosis and pulmonary edema may be seen.

High concentration of hydrogen fluoride damages liver and kidney.

**Effects of carbonyl fluoride:**

**Skin:** Irritation or eruption

Printing date 17.10.2017

Version number 1

Revision: 17.10.2017

Trade name: DAI-EL LT-252,302,303L,304

Eye: Ulcer in cornea, conjunctiva

Respiratory system: Irritation

Lung: Temporary symptoms such as cough, pain, dyspnea

Persons who have experienced lung diseases are vulnerable to toxicity caused by excessive exposure to pyrolysis products

CMR effects

**Germ cell mutagenicity** No further information available.

**Carcinogenicity** No further information available.

**Reproductive toxicity** No further information available.

**STOT-single exposure** No further information available.

**STOT-repeated exposure** No further information available.

**Aspiration hazard** No further information available.

**Chronic study** No further information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Aquatic toxicity:** No further relevant information available.

**12.2 Persistence and degradability:** No further relevant information available.

**Other information:** The product is insoluble in water and the biodegradation and ecotoxicity is expected to be low.

**12.3 Bioaccumulative potential:** No further relevant information available.

**12.4 Mobility in soil:** No further relevant information available.

### 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 °C.

Treat exhaust gas such as HF in a suitable way.

Disposal must be made according to official regulations.

### Uncleaned packaging

**Recommendation:** Disposal must be made according to official regulations.

## 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:** 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:** Not dangerous according to the above specifications.

**UN "Model Regulation":** Not applicable

Printing date 17.10.2017

Version number 1

Revision: 17.10.2017

Trade name: DAI-EL LT-252,302,303L,304

**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** Not applicable**Hazard pictograms** Not applicable**Signal word** Not applicable**Hazard statements** Not applicable**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:**

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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