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:
CO2, 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.
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 trough 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.
45.2.29

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.

Flash point: Not applicable.

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

Decomposition temperature: Not determined.

Explosive properties: Product does not present an explosion hazard.

Lower explosive limit: Not applicable.

Upper explosive limit: Not applicable.

Vapour pressure: Not applicable.

Density at 20 °C: 1.79 g/cm³ (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
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: Not applicable

14.4 Packing group: 
ADR, IMDG, IATA: Not applicable

14.5 Environmental hazards: 
Marine pollutant: No

14.6 Special precautions for user: 
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.
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.