

Printing date 29.09.2015

Version number 1

Revision: 29.09.2015

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** NEOFLON ETFE EC-6510,EC-6520**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:**

94228-79-2 ETFE

≥95%

Others

&lt;5%

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:** Seek medical treatment.**After skin contact:** Immediately wash with water and soap and rinse thoroughly.**4.2 Most important symptoms and effects, both acute and chronic:** No further relevant information available.**Information for doctor:**

Vapors and fumes liberated during hot processing with this material may cause flu-like symptoms (chills, fever and, sometimes, cough) that may not occur until several hours after exposure and typically pass within about 36 to 48 hours.

**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.**5.2 Special hazards arising from the substance or mixture:**

During heating or in case of fire poisonous gases may be produced.

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.

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Wear fully protective suit.

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation before entering the area.

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: Do not allow product to reach sewage system or any water course.**

### **6.3 Methods and material for containment and cleaning up:**

Dispose of the material collected according to regulations.

### **6.4 Reference to other sections:**

No dangerous substances are released.

See Section 7 for information on safe handling.

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.

### **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.

**Information about storage in one common storage facility:**

Not required.

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.

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.

**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.

##### **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 150 °C and toxic gas is formed.

Use mask which filters at least 99.95% of airborne particles(below 0.3µm)

##### **Protection of hands:**



Protective gloves

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**Trade name:** NEOFLON ETFE EC-6510,EC-6520**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:** Safety glasses with side shields or 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:** Powder**Colour:** Whitish**Odour:** Odourless**Odour threshold:** Not determined.**pH-value:**

No further information available.

**Melting point/Melting range:**

210-230 °C (ETFE)

**Boiling point/Boiling range:**

Not applicable.

**Flash point:**

Not applicable.

**Flammability (solid, gaseous):**

Product is not flammable.

**Decomposition temperature:**

No further information available.

**Self-igniting:**

Not determined.

**Danger of explosion:**

Product does not present an explosion hazard.

**Explosion limits:****Lower explosive limit:** No further information available.**Upper explosive limit:** No further information available.**Vapour pressure:**

Not applicable.

**Density:**

No further information available.

**Relative density at 20 °C**

0,55-0,95 g/ml

**Vapour density**

Not applicable.

**Evaporation rate**

Not applicable.

**Solubility in / Miscibility with****water:** No further information available.**Partition coefficient (n-octanol/water):** No further information available.**Viscosity:****Dynamic:** Not applicable.**Kinematic:** Not applicable.**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:**

*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 under normal conditions of use.**10.4 Conditions to avoid:** Keep away from heat, sparks, flame, high temperature.**10.5 Incompatible materials:** No further relevant information available.

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

**Acute toxicity** no data**LD/LC50 values relevant for classification:** No further information available.

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**Trade name: NEOFLON ETFE EC-6510,EC-6520****Primary irritant effect****Skin corrosion/irritation** No further information available.**Serious eye damage/irritation** No further information available.**Respiratory or skin sensitisation**

No sensitising effects known.

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

**CMR effects****Germ cell mutagenicity** Based on available data, the classification criteria are not met.**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** Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**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 slightly biodegradable.**12.3 Bioaccumulative potential:** No further relevant information available.**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.**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:**

After prior treatment product has to be landfilled or incinerated adhering to the regulations pertaining to the disposal of especially hazardous waste.

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:****Transport/Additional information:**

Not applicable.

Avoid direct sunlight. Make sure of no damage, corrosion, leaks on the receptacles.

Take necessary measures for preventing cargo shift.

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**Trade name: NEOFLON ETFE EC-6510,EC-6520****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** Not applicable**Hazard pictograms** Not applicable**Signal word** Not applicable**Hazard statements** Not applicable**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