

# Material Safety Data Sheet



Issued May-23-2002

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## Section 1: Identification of the substance and manufacturer

Chemical name **NEOFLON™ ETFE EC-6510, EC-6520, 532-6005**  
Generic name Fluoropolymer Powder

### Company identification

Manufacturer DAIKIN INDUSTRIES, LTD. CHEMICAL DIVISION:  
Umeda Center Bldg., 4-12, Nakazaki-Nishi2-chome, Kita-Ku, Osaka, JAPAN  
Phone: (+81)6-6373-4349 FAX: (+81)6-6373-4389

Supplier in EU DAIKIN CHEMICAL EUROPE GmbH  
ImmermannStr.65 d, 40210 Düsseldorf, GERMANY  
Phone: (+49) 211-1640-834. Fax: (+49) 211-1640-734,

Supplier in US DAIKIN AMERICA, INC.  
20 Olympic Drive, Orangeburg, New York 10962  
Phone: +1-800-365-9570

### Emergency Telephone Contacts

North America: +1-256-306-5000  
Japan: +81-6-373-4349 Europe: +49-211-179225-0

## Section 2: Composition / information on ingredients

Component	mass %	CAS RN	Symbols	R-Phrase
ETFE	>99	94228-79-2	n.ap	n.ap
Others	<1	Confidential	n.ap	n.ap

## Section 3: Hazard identification

### EMERGENCY OVERVIEW:

Harmful if thermal decomposition products are inhaled. Normally inhalation problems should not be expected.

### Potential Health Effects:

Inhalation 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.

Eye Normally low irritation to the eyes is expected.

Skin Low-irritating to skin.

Ingestion Small amounts (tablespoon full) swallowed during normal handling operation are not likely to cause injury. Swallowing larger than that may cause injury.

Chronic -

## Section 4: First aid measures

Inhalation If exposed to fumes from overheating or combustion, remove to fresh air. Keep warm and at rest. If breathing has stopped, give artificial respiration. Call a physician.

Skin Contact The compound is not likely to be hazardous, but cleansing the skin after use. If skin contact with hot material occurs: DO NOT ATTEMPT TO REMOVE POLYMER. Immediately cool with plenty of cold water. Have burn treated by a physician.

Eyes Contact Immediately flush eyes with plenty of water for at least 15 minutes. (Remove contact lenses if easily possible.) Consult a physician.

Ingestion Wash out mouth with water. Consult a physician.

**SECTION 5: Fire-fighting measures**

## General Information:

Low fire hazard.

## Extinguishing Media:

Water Spray. Dry Chemical. Foam. Carbon Dioxide.

## Fire fighting procedures:

Keep personnel removed and upwind of fire.

Wear self-contained breathing apparatus (SCBA) and full protective equipment.

## WARNING:

Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, throat, and lung irritation or toxic effects.

**SECTION 6: Accidental release measures**

## General Information:

Use proper personal protective equipment as indicated in Section 8.

## Spills/Leaks:

Shovel or sweep up.

**SECTION 7: Handling and storage**

## Handling:

Use proper personal protective equipment as indicated in Section 8.

Use in well ventilated areas.

Avoid contact with eyes and skin and breathing of particles.

Wash hands thoroughly after handling.

Wash clothing after use.

Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material.

## Storage:

Keep container tightly closed.

Keep away from direct heat or sunlight.

**SECTION 8: Exposure controls / personal protection**

## Engineering Controls:

Use local exhaust ventilation facilities, when curing.

## Personal Protective Equipment:

Eyes Wear safety glasses with side shields.

Skin Wear appropriate gloves, when handling this material to prevent thermal burns.

Clothing Wear protective clothing and boots as required

Respirators If thermal decomposition occurs, mask for acidic gases must be used to avoid inhalation of the product.

## Exposure Guidelines:

HF TLV (as F): 0.5 ppm as TWA, 2 ppm as STEL; Ceiling (skin) (ACGIH 2005)  
MAK: 3ppm; 2.5mg/m<sup>3</sup>, BAT 7mg/g creatinine (1999)

MAK as STEL: 6ppm, 5mg/m<sup>3</sup> (1999)

COF<sub>2</sub> TLV: 2ppm; 5.4mg/m<sup>3</sup> (as TWA);  
5ppm; 13mg/m<sup>3</sup> (as STEL) (ACGIH 1997)

PFIB TLV: 0.01ppm; 0.082 mg/m<sup>3</sup> (ceiling values) (ACGIH 1993-1994).

**SECTION 9: Physical and chemical properties**

Appearance	White powder
Odor	None
Melting Point	210-230 C
pH	Not available
Apparent density	0.55-0.95
Flash point	None
Explosive limits	None
Solubility in water	Insoluble

**SECTION 10: Stability and reactivity**

## Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

## Conditions to Avoid:

Ignition sources, excess heat.

## Decomposition products:

Carbon monoxide, carbon dioxide, HF, toxic gases or particles may be formed during combustion.

## Polymerization:

Will not occur.

**SECTION 11: Toxicological information**

When heated for a long time, a very small quantity of hydrogen fluoride (HF), carbonyl fluoride (COF<sub>2</sub>) Perfluoroisobutylene (PFIB) is generated. Further the higher temperature, the larger it will increase.

(as HF or COF<sub>2</sub>)

Burning sensation. Cough. Dizziness. Headache. Laboured breathing. Nausea. Shortness of breath. Sore throat. Vomiting. Symptoms may be delayed.

Inhalation of this gas or vapour may cause lung oedema.

(as PFIB)

The substance irritates the respiratory tract. Inhalation of this gas may cause lung oedema. Exposure may result in death. The effects may be delayed. Medical observation is indicated.

**SECTION 12: Ecological information**

This substance may not degrade significantly in most natural environments..

Exotoxicity is expected to be low.

**SECTION 13: Disposal considerations**

Dispose of in compliance with Federal, state and local government regulations.

Usually considered an inert packaging material that can be recycled or landfilled.

**SECTION 14: Transport information**

SHIPPING NAME:	NONE
HAZARD CLASS:	NOT DOT REGULATED
LABEL (S):	NONE
UN/NA NUMBER:	NONE
IATA:	NOT REGULATED BY IATA
IMO IMDG-code:	NOT REGULATED FOR OCEAN TRANSPORTATION

**SECTION 15: Regulatory information**

NFPA-HMIS RATINGS (SCALE 0-4): HEALTH=1, FIRE=1, REACTIVITY=0

European Labeling in Accordance with EC Directives

Hazard Symbols	-
Risk Phrases	-
Safety Phrases	15: Keep away from heat. 20/21: When using, do not eat, drink or smoke.

**SECTION 16: Other information**

TSCA Chemical Inventory	ETFE Listed: P89-852
Canadian DSL Inventory	No
Australian Inventory	No
Korea Inventory	ETFE Listed
Philippine Inventory	PICCS: No
Japan	ETFE Listed; 6-1939
ELINCS Number	ETFE Listed; confidential

This product is not designed, manufactured, or intended for medical uses, including implantation to the body or other applications in direct contact with body fluids or tissues.  
Do not use for non-industrial applications.

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. The information does not relate to use in combination with any other material or in any process.

DAIKIN INDUSTRIES, LTD.CHEMICAL DIVISION:  
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