



SAFETY DATA SHEET

Safety Data Sheet according to (EC) No. 1907/2006 (REACH).

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

1.1. Product identifier:

See above

UFI: Not relevant.

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

Industrial laminate.

1.3. Details of the supplier of the safety data sheet:

Elektro-Isola A/S Tel: + 45 76 42 82 00

Grønlandsvej 197 Fax + 45 75 82 73 36

DK-7100 Vejle www.elektro-isola.com

Denmark E-mail: ei@elektro-isola.dk

Responsible person for the safety data sheet (e-mail): ei@elektro-isola.dk

1.4. Emergency telephone number:

+45 82 12 12 12 (24-hour service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

According to Regulation 1272/2008 (CLP) the industrial laminate is not a chemical product and therefore does not require a classification.

This Safety Data Sheet is intended as a service to customers/users of the laminate.

2.2. Label elements:

None.

2.3. Other hazards: The material does not constitute any health risk, but careless handling may cause skin abrasion.

Dust from machining (e.g. milling, drilling, sawing, planing, grinding/polishing) may constitute minor health risks - see SECTION 8.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

Endocrine disrupting properties: The substances above the trigger limit are not identified as having endocrine disrupting properties in accordance with the criteria set out in Regulation 2017/2100 or Regulation 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures:

Product description: Cured polyimide resin on glass-fabric substrate.

Components contributing to the hazard:

May contain minute amounts of: N-ethyl-2-pyrrolidone (CAS No.: 2687-91-4, EINECS: 220-250-6)

SECTION 4: First aid measures (if user is exposed to dust from machining)

4.1. Description of first aid measures:

Symptomatic treatment.

Inhalation: Move user to fresh air. Keep under surveillance. If needed: Seek medical advice.

Skin contact: Fibrous glass can irritate the skin, making it more sensitive to chemicals. Remove clothes contaminated with dust. First rinse the skin with plenty of water and then wash the skin with soap and water.

Eye contact: Flush eyes well with copious quantities of water or normal saline. If irritation persists: Seek medical advice.

Ingestion: Not relevant.

4.2. Most important symptoms and effects, both acute and delayed:

Inhalation of large amounts of machining dust may cause acute respiratory problems such as asthma. Dust may irritate the eyes. Prolonged or frequent exposure may cause chronic respiratory problems.

SECTION 4: First aid measures (continued) (if user is exposed to dust from machining)

4.3. Indication of any immediate medical attention and special treatment needed:

Show this Safety Data Sheet to a physician or emergency ward.

SECTION 5: Firefighting measures

5.1. Extinguishing media:

Water preferred, foam may be used.

5.2. Special hazards arising from the substance or mixture:

Do not breathe smoke gasses: Oxides of carbon, ammonia, small amounts of hydrogen and aromatics such as aniline, phenol, benzene.

5.3. Advice for firefighters:

When entering burning area: Wear self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Not relevant.

6.2. Environmental precautions:

Not relevant.

6.3. Methods and material for containment and cleaning up:

Dampen dust with water. Then transfer material to a suitable container.

6.4. Reference to other sections:

Not relevant.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

See SECTION 8.

7.2. Conditions for safe storage, including any incompatibilities:

Clean and dry.

7.3. Specific end use(s):

See SECTION 1

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

Occupational exposure limits: None.

DNEL/PNEC: No CSR.

8.2. Exposure controls:

Maintain sufficient local exhaust and ventilation when machining. Ventilated air should not be recycled.

Personal protective equipment:

Inhalation: If the local exhaust ventilation is insufficient when machining: Use an approved mask with a particle filter: Type P2. The filter has a limited lifetime and must be changed. Read the instruction.

Skin: Gloves: Normally not required but may prevent skin abrasion during machining.
Exposed skin may require protection owing to irritation caused by glass fibre particles.

Eyes: When machining, protect eyes from dust and flying chips with safety goggles.

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Physical state: Solid sheets and tubes

Colour: Brown

Odour: Odourless

Melting point/freezing point (°C): Not determined

Boiling point or initial boiling point and boiling range (°C): Not determined

Flammability (solid, gas): Not relevant

Lower and upper explosion limit (vol-%): Do not apply to solids

Flash point (°C): > 200

Auto-ignition temperature (°C): > 200

Decomposition temperature (°C): See section 10

pH: Not determined

SECTION 9: Physical and chemical properties (continued)

Kinematic viscosity:	Not relevant
Solubility:	Insoluble in water
Partition coefficient n-octanol/water (log value):	Not soluble in n-octanol or water
Vapour pressure:	Not determined
Density and/or relative density:	1.8 – 2.0
Relative vapour density:	Not determined
Particle characteristics:	Not determined

9.2. Other information:

None relevant

SECTION 10: Stability and reactivity

10.1. Reactivity:

Chemically inert. Does not attack other materials.

10.2. Chemical stability:

See SECTION 10.1.

10.3. Possibility of hazardous reactions:

See SECTION 10.1.

10.4. Conditions to avoid:

Sensitivity to mechanical impact: Not sensitive.

Sensitivity to static discharge: Not sensitive. May build up static electricity during handling, depending upon the atmospheric conditions.

Dust explosion hazard: None.

Thermal decomposition: Will decompose as a function of temperature and time at temperatures above 210°C.

10.5. Incompatible materials:

None.

10.6. Hazardous decomposition products:

See SECTION 5.

SECTION 11: Toxicological information (when machining)

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Acute toxicity:	Based on available data, the classification criteria are not met.
Skin corrosion/irritation:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Based on available data, the classification criteria are not met.
Respiratory or skin sensitization:	Based on available data, the classification criteria are not met.
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.

Not relevant for industrial laminate.

Information on likely routes of exposure: May be absorbed by inhalation (lungs).

Synergistic products: Tobacco smoke may enhance the effects of inhalation of machining dust.

Symptoms:

Inhalation: Inhalation of large amounts of machining dust may cause acute respiratory problems such as asthma.

Skin: Glass fibre dust is a contact irritant.

Eyes: Glass fibre dust is a contact irritant.

Ingestion: Not relevant.

Chronic effects: Prolonged or frequent exposure may cause chronic respiratory problems if not prevented by personal protective measures and/or engineering controls such as local exhaust. When machining the laminate, small amounts of *N*-ethyl-2-pyrrolidone can be released.

Sensitization to product: None.

Carcinogenicity of product: Glass filaments are not classifiable as to their carcinogenicity to humans by IARC (Group 3).

The size of the continuous filament glass fibres used in this laminate is outside the respirable range, 3 microns or less, thus minimising the potential for any chronic pulmonary effects. The diameter of the used continuous filament glass fibres is 5-14 µm (typically 12 µm). Machining of these fibres does not reduce their diameter, and thus does not increase their potential respirability.

SECTION 11: Toxicological information (continued) (when machining)

11.2. Information on other hazards:

None known.

SECTION 12: Ecological information

12.1. Toxicity:

Not applicable for industrial laminate

12.2. Persistence and degradability:

Not relevant.

12.3. Bioaccumulative potential:

Not relevant.

12.4. Mobility in soil:

Not relevant.

12.5. Results of PBT and vPvB assessment:

Not relevant.

12.6. Endocrine disrupting properties:

None known.

12.7. Other adverse effects:

Not relevant.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

Comply with national and local regulations for inert waste. Recommended means of disposal are incineration or landfill.

EWC-Code: 17 02 03 (Laminate)

SECTION 14: Transport information

Not dangerous goods according to ADR/RID.

14.1. UN number or ID number: None.

14.2. UN proper shipping name: None.

14.3. Transport hazard class(es): None.

14.4. Packing group: None.

14.5. Environmental hazards: No.

14.6. Special precautions for user: None.

14.7. Maritime transport in bulk according to IMO instruments: Not relevant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

The materials fulfil the directives:

2000/53/EC End-of life vehicles.

850/2004/EC On persistent organic pollutants (including PFOS (perfluorooctane sulfonates) and pentabromodiphenyl ether)

1907/2006/EC, annex XVII Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), (including octabromodiphenyl ether)

2011/65/EC On the restriction of the use of certain hazardous substances in electrical and electronic equipment (ROHS), including decaBDE.

Restriction on application:

Not intended for contact with foodstuffs or animal feed.

Not intended for prolonged skin contact.

Not intended for use in toys for children under 3 years of age.

Not intended for prolonged use at temperatures above 120°C.

15.2. Chemical safety assessment:

No CSR

SECTION 16: Other information

Abbreviations:

CMR = Carcinogenicity, mutagenicity og reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

ECB = European Chemicals Bureau.

ECHA = European Chemicals Agency

FW = Fresh Water

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Special references used:

Troitzsch, J.: International Plastics Flammability Handbook, Hanser Verlag 1990.

IARC = International Agency for Research on Cancer

Training advice:

No special training is required. However, the user should be well instructed in the execution of the task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Other information:

None.

Changes since the previous edition:

New logo.

Note:

Information contained herein, while accurate to the best of our knowledge, is intended as a health and safety guide and should not be construed as a warranty for any specific properties. However, as conditions of handling and use of this material are beyond our control, we can accept no liability for damages incurred by the use of this material.

It is the responsibility of the user to comply with all applicable local and national laws and regulations, and nothing contained herein is to be construed as a recommendation for use in violation of any patents or of applicable laws or regulations.

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