

Safety Data Sheet acc. to EC-directive **91/155/EEC**

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Issue Date 94/01

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Company: Isola AG, D-52348 Düren

Product: DURAVER^â-E-Cu quality 104

1. Chemical Characterisation:

Laminates made from glass fabric and cured brominated epoxy resin; both sides or one side cladded with copper foil.

2. Composition:

Glass fabrics: E- glass
Resin system: brominated epoxy resin based on tetrabromobisphenole "A" (TBBA)

3. Hazards Identification:

Not classified as hazardous

4. First-Aid Measures:

In case of cut and scratch caused by the material wash the wound with water and soap.
Desinfection is useful.

5. Fire-Fighting Methods:

All kinds of fire fighting methods are useful, if possible don't use water. In case of fire the following hazardous components can be produced:
carbonmonoxide, carbondioxide, hydrogenbromide and organic brominated substances

6. Accidental Release Measures:

Be inapplicable

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7. Storage and Handling:

Store in a dry place.
For cutting and drilling we recommend a suction system; take care of dust explosions.

8. Exposure Control and Personal Protection:

Limits:

CAS-Number	Substance	List	Exposure Limit	Unit
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Be inapplicable

Personal Protection:

- **Respiratory Protection:** suction system
- **Hand Protection:** skin cream
- **Eye Protection:** useful
- **Body Protection:**
- **Industrial Hygiene:** no eating, drinking or smoking; cleanness necessary.

9. Physical and Chemical Properties:

Appearance: sheets
Colour: yellow transparent
Odour: odourless

Change of Condition:

- Boiling Point:	(°C)	---		
- Melting Point:	(°C)	---		
- Glas Transition Temperature 20°C/min Heating Rate)	: (°C)		appr. 13 0	(DSC-Method)
- Flash Point:	(°C)	---		
- Autoignition Temperature:	(°C)	---		
- Explosion Limits:	(Vol.-%)		lower:---	

- Thermal Decomposition:	(°C)	upper:---
Heating Rate)		at approx. 300 (Thermogravimetry 10°C/min)
- Vapour Pressure:	(mbar)at 20°C	---
- Density:	(g/cm ³)at 20°C	approx. 1.8
- Viscosity:	(mPa*s)	---
- Solubility in Water:		insoluble

10. Stability and Reactivity:

Conditions to avoid: formation of dust in the working area
 Materials to avoid: strong oxidizing acids may destroy the material.

11. Toxicological Information:

The dust occuring from cutting and drilling processes is principally not toxic. Beginners may have skin irritations, however, there is a quick accustoming. Exceptionally skin allergies; this person should be employed elsewhere.

12. Ecological Information:

No data available

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13. Disposal Considerations:

Normal industrial waste in accordance with local regulations.

14. Transport Information:

Road: no hazardous product
 Ship: no hazardous product
 Plane: no hazardous product

15. Regulatory Information:

EC Risk Phrases:

Not classified as hazardous

EC Safety Phrases:

Not classified as hazardous

16. Other Information:

The above mentioned data correspond to our present state acknowledge and experience.
The safety data served as description of the product in regard to necessary safety measures.

They do not guarantee the described chemical properties.

If you need further informations please contact:

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