

# **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

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**Product:** DURAVER<sup>â</sup>-E-Cu quality 104 ML

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**1. Chemical Characterisation:**

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

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**2. Composition:**

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

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**3. Hazards Identification:**

Not classified as hazardous

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**4. First-Aid Measures:**

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

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**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

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**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** : (°C) appr. 13 0 (DSC-Method 20°C/min Heating Rate)
- **Flash Point:** (°C) ---
- **Autoignition Temperature:** (°C) ---
- **Explosion Limits:** (Vol.-%) lower:---  
upper:---
- **Thermal Decomposition:** (°C) at approx. 300 (Thermogravimetry 10°C/min Heating Rate)
- **Vapour Pressure:** (mbar)at 20°C ---
- **Density:** (g/cm<sup>3</sup>)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 occurring 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:

Dipl.-Ing. H. Schumacher ( Phone: Germany 2421 808673; Fax: Germany 2421 808386 )

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