



Polyethylene
Visico™ FR4450

1. Identification of the substance/mixture and of the company/undertaking

Trade name: Visico FR4450
Material use: raw material for plastics industry
Manufacturer: Borealis
E-mail address: product.safety@borealisgroup.com

2. Hazards identification

Health: The product is not classified as hazardous. However, during crosslinking reaction in combination with catalyst masterbatch: methanol (Flam. Liq. 2; H225, Acute Tox. 3; H301, Acute Tox. 3; H311, Acute Tox. 3; H331, STOT SE 1; H370 - see chapter 16) may be released. Methanol: Toxic by inhalation, in contact with skin and if swallowed. Very serious irreversible effects through inhalation, in contact with skin and if swallowed. Inhalation of dust may irritate the respiratory tract. Prolonged inhalation of high doses of decomposition products may give headache or irritation of the respiratory tract.

Fire: The product burns, but is not classified as flammable.

Environment: The product is not considered hazardous for the environment.

3. Composition/information on ingredients

The product is a polyethylene polymer.

Contains no substance classified as hazardous in concentrations, which should be taken into account according to EU regulations.

4. First aid measures

No specific instructions needed.

Skin contact: Cool melted product on skin with plenty of water. Do not remove solidified product.

5. Firefighting measures

Suitable extinguishing media: Water in spread jet, dry chemicals, foam or carbon dioxide.

Special exposure hazards: Principal toxicant in the smoke is carbon monoxide.

6. Accidental release measures

Vacuum or sweep up spill. All spill of material must be removed immediately to prevent slipping accidents.



Polyethylene Visico FR4450

7. Handling and storage

Handling: Avoid inhalation of dust and decomposition fumes. Provide adequate ventilation. Local exhaust ventilation may be necessary.

Advice on protection against fire and explosion: Dust from the product gives a potential risk for dust explosion. All equipment shall be grounded.

Storage: Safety aspects do not require any special precautions in terms of storage.

8. Exposure controls/personal protection

Provide adequate ventilation. Local exhaust ventilation may be necessary.

Respiratory protection: In case of insufficient ventilation: Suitable mask with particle filter P3.

Hand protection: butyl-rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

9. Physical and chemical properties

Appearance: solid, opaque, white

Odour: odourless

Melting point/range: 100 - 140 °C

Density: 1,1 - 1,2 g/cm³

Ignition temperature: > 320 °C

Water solubility: insoluble in water

10. Stability and reactivity

The product is a stable thermoplastic, with no chemical reactivity. The intended crosslinking reaction occurs in combination with the catalyst masterbatch and moisture: at ambient conditions, in sauna or hot water bath.

11. Toxicological information

The product is not classified as hazardous according to Regulation (EC) No 1272/2008. However, during crosslinking reaction in combination with catalyst masterbatch: methanol may be released. Methanol: Toxic by inhalation, in contact with skin and if swallowed. Very serious irreversible effects through inhalation, in contact with skin and if swallowed. Inhalation of dust may irritate the respiratory tract. Prolonged inhalation of high doses of decomposition products may give headache or irritation of the respiratory tract.

12. Ecological information

The product is not considered hazardous for the environment.



Polyethylene
Visico FR4450

13. Disposal considerations

Reuse or recycle if not contaminated. The product may be safely used as fuel. Proper combustion does not require any special flue gas control. Check with local regulations.

14. Transport information

The product is not regulated by ADR/RID, IMDG or IATA.

15. Regulatory information

In accordance with Regulation (EC) No 1272/2008, the product does not need to be classified nor labelled.

Label:

Trade name:	Visico FR4450
Manufacturer:	Borealis

16. Other information

Issued in accordance with Article 32 of Regulation (EC) No 1907/2006, and its amendments.

Full text of H-Statements referred to under sections 2 and 3

H225: Highly flammable liquid and vapour.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

H370: Causes damage to organs.

Issuer: Borealis, Group Product Stewardship / Niina Kerttula



Polyethylene
Visico FR4450

Disclaimer

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of Borealis' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.