

# MATERIAL SAFETY DATA SHEET

# BASF

1. Trade Name **STYROPOR® KF GRADES** Ref No: **6149**

**Company:** BASF New Zealand Ltd.  
38 Mahunga Drive, Mangere Bridge  
PO Box 407, Auckland  
Tel: 0800 107 050  
Fax: 0800 107 055

**Emergency Information:**

**24 Hour Urgent Information:** National Poisons Centre: 0800 764 766  
BASF New Zealand Ltd 24 Hour Emergency Advice Number: 0800 944 955

2. **Composition/information on ingredients**

Chemical nature: Polystyrene containing pentane as blowing agent and flame-proofing agent

Hazardous ingredients:

The product contains pentane, to which the following data will apply:

Pentane  
CAS No: 109-66-0  
Content: < 5.5%  
Hazard symbol: F+, Xn, N  
R-phrases: 12-51/53-65-66-67

Isopentane  
CAS No : 78-78-4  
Content : < 1.5%  
Hazard symbol: F+, Xn, N  
R-phrases: 12-51-53-65-66-67

3. **Possible hazards**

Critical hazards to man and the environment: Pentane can diffuse out and form explosive mixtures with air.

4. **First aid measures**

No special measures necessary.

**5. Fire fighting measures**

Suitable extinguishing media:	Water, dry extinguishing media, foam.
Unsuitable extinguishing media:	None
The following can be given off in a fire:	Carbon black, carbon dioxide (CO <sub>2</sub> ), carbon monoxide, styrene (traces), other degradation products (traces).
Special protective equipment:	None.
Further information:	May be released on heating pentane. Foaming, with increased liberation of blowing agent, at above 70°C. Pentane can diffuse out and form explosive mixtures with air.

**6. Spillage measures**

Personal precautions:	Ensure adequate ventilation.
Environmental precautions:	Sources of ignition should be kept clear.
Methods for cleaning up:	Sweep/shovel up to prevent slipping.

**7. Handling and storage**

<u>Handling:</u>	Pentane can diffuse out and form explosive mixtures with air.
Protection against fire and explosion:	Take precautionary measures against static discharges.
<u>Storage:</u>	Keep in a cool, well-ventilated place. Sealed containers should be protected against heat as this results in pressure build-up. Containers under pressure should be opened with care and the pressure then released

**8. Exposure controls and personal protection:**

Components with workplace control parameters:

Pentane	CAS No:	109-66-0
Isopentane	CAS No:	78-78-4

Personal protective equipment:  
No special measures necessary.

## 9. Physical and chemical properties

Form:	Beads
Colour:	Colourless
Odour:	Faint specific odour
Softening point/expansion temperature:	> 70°C
Pentane Explosion limits (by diffusion of pentane)	
lower:	1.3% volume
upper:	7.9% volume
Pentane Ignition temperature:	285°C
Density:	1040 – 1050 g/cm <sup>3</sup> at 20°C
Bulk density:	550 - 650 kg/m <sup>3</sup>
Solubility in water:	Insoluble
Solubility in other solvents:	Soluble in organic solvents

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## 10. Stability and reactivity

Conditions to avoid:	Foaming, with increased liberation of blowing agent, at above 70°C. Starts to decompose at 220°C
Substances to avoid:	Organic solvent.
Hazardous decomposition products:	No decomposition if used as directed.

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## 11. Toxicological information

In our experience and according to information available to us the product is not harmful to health provided it is correctly handled and processed according to the given recommendations.

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## 12. Ecological information

Elimination information: Test cannot be carried out.

Ecotoxic effects:  
Toxicity to fish: None

Further ecological information:  
Due to the consistency of the product, and its insolubility in water, it will apparently not be bioavailable.

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## 13. Disposal considerations

Product:	Contact manufacturer regarding recycling.
Contaminated Packaging:	Contact manufacturer regarding recycling.

**14. Transport information**

Land transport

Description of the goods:	Expandable Polymer Bead
ADR/RID	
Class:	9
Packaging Group:	III
Warning panel	
UN Number:	2211
Hazard No:	90

Sea transport

Proper shipping name:	Polymeric beads, expandable
IMDG/GGVSee	
UN Number:	2211
Packaging Group:	III
IMDG Class	9
EMS:	4.1-06
Marine pollutant:	No

Air transport

Proper shipping name:	Polymeric beads, expandable
ICAO/IATA	
Class:	9
UN Number:	2211
Packaging Group:	III

**15. Regulatory information**

Label Requirements:

Not subject to labelling

HSNO Classifications:

**16. Other information**

**DISCLAIMER:** The information provided in this MSDS is based upon sources believed to be accurate. However, BASF New Zealand Limited assumes no responsibility for the accuracy, completeness or suitability of this information. The product recipient/user is responsible for determining the suitability of this information for their particular purposes, and for observing existing laws and regulations.