

## SAFETY DATA SHEET



Keltan® 4703(Z)

## 1. Identification of the substance/preparation and of the company/undertaking

**Product Name** : Keltan® 4703(Z)  
**Chemical product name** : Ethylene-propylene-(diene) elastomer, EP(D)M  
**Supplier** : DSM Elastomers Europe B.V.  
 Poststraat 1, 6135 KR Sittard  
 P.O. Box 43, 6130 AA Sittard  
 The Netherlands  
**Emergency telephone number** : Netherlands: +31 (0)46 476 55 55  
**Recommended use** : Elastomeric component in rubber compounds, plastics modification and oil modification, for applications in automotive, construction, wire and cable and general rubber goods.

## 2. Composition/information on ingredients

**Substance/preparation** : Preparation

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU regulations or National regulations.

## 3. Hazards identification

**Human health hazards** : Heated material can cause thermal burns.  
**Environmental hazards** : Based on the available data of this product no hazardous properties are known.  
**Physical/chemical hazards** : Combustible.  
**Remarks** : The material burns slowly with high smoke density and flaming drips.

## 4. First aid measures

**Remarks** : During heating and processing of the material small amounts of free monomer may evaporate resulting in airborne concentration that may cause irritating effects of the respiratory tract and nausea.  
**Effects and symptoms**  
**Inhalation** : Not applicable.  
**Ingestion** : There is no known effect from acute over-exposure to this product.  
**Skin contact** : Heated material can cause thermal burns resulting in pain, redness, blistering.  
**Eye Contact** : May cause eye irritation. (redness).  
**First-Aid measures**  
**Inhalation** : Not applicable.  
**Ingestion** : Swallowed, rinse mouth with water (only if the person is conscious). Obtain medical attention if symptoms occur.  
**Skin contact** : Rinse with plenty of running water. Obtain medical attention.  
**Eye Contact** : Rinse with plenty of running water. Obtain medical attention if symptoms occur.  
**First aid facilities** : No special recommendations.

## 5. Fire-fighting measures

**Extinguishing Media**  
**Small fire**  
**Suitable** : Use dry chemical powder or CO<sub>2</sub>.  
**Large fire**  
**Suitable** : Use dry chemical powder. alcohol resistant foam  
**Unusual fire/explosion Hazards** : No specific hazard.  
**Hazardous thermal decomposition products** : In case of fire, may produce toxic and/or corrosive decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, organic acids.  
**Special fire-fighting procedures** : Avoid contact with heated material.  
**Protection of fire-fighters** : Wear suitable protective clothing. Self-contained breathing apparatus.

## 6. Accidental release measures

- Personal Precautions** : Use suitable protective equipment (Section 8).
- Environmental precautions** : No special measures required.
- Clean-up Methods**
- Small spill and leak** : Vacuum or sweep up material and place in a designated labelled waste container. Clean up affected area with a large amount of water.
- Large spill and leak** : Vacuum or sweep up material and place in a designated labelled waste container. Recycle, if possible. Prevent formation of dust clouds. Clean up affected area with a large amount of water.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. Handling and storage

- Handling** : Use with adequate ventilation.
- Storage** : Store in a fireproof location. Keep away from incompatible materials and avoid specific conditions (See section 10).
- Storage temperature** : Store between 15 and 25 °C.
- Remarks** : Relative humidity should be kept below 65%. Do not stack more than 2 pallets high in connection with risk of falling over. Do not stack more than 2 pallets high in connection with risk of falling over. For further information about handling and storage see 'Keltan® EPDM packaging storage conditions'.

**Note:** See section 10 for stability and reactivity

## 8. Exposure controls/personal protection

- Engineering measures** : Use only with adequate ventilation.
- Hygiene measures** : When using do not eat, drink or smoke. Wash hands after handling compounds and before eating, smoking, using lavatory and at the end of day.
- Personal protective equipment - Production scale**
- Respiratory system** : Not required.
- Skin and body** : Working clothes.
- Eyes** : Safety glasses with side shields.
- Hands** : When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product.
- Remarks** : If general ventilation is inadequate, local exhaust ventilation should be used to dispose of vapours from hot processing equipment, particularly during purging. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Advice on personal protection is applicable for high exposure levels.**

## 9. Physical and chemical properties

- Physical state** : Solid. (Bales)
- Colour** : Beige.
- Odour** : Odourless.
- Flash Point** : >300 °C
- Lower explosion limit** : Not available.
- Upper explosion limit** : Not available.
- Auto-ignition temperature** : 370 °C
- Density ( g/cm<sup>3</sup> )** : 0.86 g/cm<sup>3</sup>
- Solubility** : Insoluble in cold water.

## 10. Stability and reactivity

- Stability** : Stable under recommended storage and handling conditions (see section 7).
- Conditions to Avoid** : Keep away from heat, sparks and flame. Exposure to (sun)light. Relative humidity should be kept below 65%.
- Materials to avoid** : Oxidising agent.
- Hazardous decomposition products** : At processing temperatures some degree of thermal degradation may occur. Highly dependent on temperature and environmental conditions, a variety of decomposition products may be formed, such as low molecular weight hydrocarbons and hydrocarbon oxidation products (acids, ketons, aldehydes).

## 11. Toxicological information

### Acute toxicity

Ingredient name	Test	Species	Route	Result
ethylene-propylene-(diene) elastomer, EP(D)M	LD <sub>50</sub>	Rat	Oral	>5000 mg/kg

Chronic toxicity : Not available.

Remarks : Acute oral toxicity (LD50) Estimated.

Note: See section 4 for effects and symptoms

## 12. Ecological information

Ecotoxicity data : Not available.

### Persistence/degradability

Ingredient name	BOD <sub>5</sub>	COD	ThOD
ethylene-propylene-(diene) elastomer, EP(D)M			

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
ethylene-propylene-(diene) elastomer, EP(D)M			Not readily

Ingredient name	LogP <sub>ow</sub>	Bio-concentration factor	Bioaccumulative potential
ethylene-propylene-(diene) elastomer, EP(D)M			

Mobility : For data on physical state and solubility see section 9.

Hazard class for water (Germany) :  (Low hazard to waters) (Self-classification.)

## 13. Disposal considerations

Methods of disposal (waste of residues; contaminated packaging) : Waste must be disposed of in accordance with national and local environmental regulations.

## 14. Transport information

### General information

Not established

## 15. Regulatory information

### EU Regulations

Risk Phrases :  This product does not have to be classified according to the EC regulations.

## 16. Other information

Information : [www.dsm.com/en\\_US/html/keltan/home\\_keltan.htm](http://www.dsm.com/en_US/html/keltan/home_keltan.htm)

Internal code :  W13774

### History

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Notice to reader

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

None of the materials referenced herein should be used and/or applied in any product, device or material used or for use as human body implant or otherwise within the human body.

**Training advice** : Before handling this substance/preparation, the personnel involved should be instructed by means of this safety data sheet.

**Sources of key data** : Literature data and/or investigation reports are available at the manufacturer.

**Alterations compared to the previous version** : Alterations compared to the previous version are marked with a little (blue) triangle.