

Product Information

1,7-Octadiene 98%

CAS NUMBER

3710-30-3

SPECIFICATIONS

Property	Value	Unit	Method
Purity	min. 98	%	P1-AV-19) [GC]

PRODUCT DESCRIPTION

1,7-Octadiene can act as crosslinker in a multitude of polymers, preferentially in polyolefins, like PE or PP. It can be applied by itself or in a chemically modified way, e.g. after epoxidation, hydrosilation.

Typical Properties

Property	Unit	Value
Boiling Point, min. ASTM-D-1078, at 1013 hPa	°C	119
Chemical Name		alpha, omega-octadiene, octa-1,7-diene
Density ASTM-D-941, at 20°C	g/ml	0.730-0.732
Flash Point, min. DIN ES ISO 13736	°C	9
Ignition Point ASTM-E-659	°C	230
Melting Point ASTM-D-1015	°C	-70
Refractive Index ASTM-D-1747, nD 20		1.422
Solubility in water at 20°C		0.08 g/l
Solubility in methanol, cyclohexane, and petroleum ether		miscible
Specific Heat at 100°C	J/g·K	2.55
Viscosity ASTM-D-2270, at 20°C	- 0.55 mPa·s	0.45

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Polymers crosslinked with 1,7-octadiene are applicable in a huge range of applications, e.g. in crosslinked LDPE for wire and cable, in ion-exchange resins, pharmaceutical polymers, rubbers for tires and silicone coatings.

BENEFITS & ADVANTAGES

- Due to its reactivity profile, it is beneficial to add 1,7-octadiene directly in the polymerization process as comonomer
- The storage and handling of 1,7-octadiene is very safe
- No stabilizers are required but can be added on request
- Even in low concentrations the use of 1,7-octadiene shows significant improvements of the polymers' (especially polyolefines') performance and processability

HANDLING & PROCESSING

For transport, handling and first aid instructions, please refer to our material safety data sheet.

PACKAGING

1,7-Octadiene is available in bulk, in standard drums of 140 kg and for development purposes in drums of 19 kg.

STORAGE

It is recommended to store the product in unopened original packaging under ambient and dry conditions.

SHELF LIFE

According to available information, we herewith pass on to you, we can guarantee a shelf life of 12 months, if the product is stored properly according to the storage recommendation. We suggest a revision of the product properties when using it after that period.

HAZARDOUS SUBSTANCE

Information concerning

- Classification and labelling according to regulations for transport and for dangerous substances
- Measures in case of accidents and fire
- Toxicity and ecological effects

are given in our material safety data sheets.

FOOD CONTACT COMPLIANCE

When used as a crosslinking comonomer in the manufacture of polyolefins for contact with any type of foods for long term storage at room temperature including hot-fill conditions and the migration of the substance does not exceed mg/kg food, then the use of this substance does not endanger human health. It is therefore appropriate to include the additive in the Union list and authorize its use in accordance with those specifications.

Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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