

Aktiplast® 8

Processing Promoters

Function

Aktiplast 8 is a highly effective peptizing agent for the depolymerization of natural rubber

Product description

Composition:	metal complex in organic carrier material
Appearance:	brown pastilles
Density:	approx. 1,10 g/cm ³
Solidification point:	approx. 91°
Physiological properties:	see material safety data sheet

Use

Mode of action: In mastication the molecule chains of the rubber are split by a process in which atmospheric oxygen participates. This reduces their weight and decreases viscosity. Aktiplast 8 accelerates the mastication process, leading to important energy and time savings. In general, the effect increases with the temperature of the rubber. Aktiplast 8 is particularly suitable for NR and IR, on which it has a marked peptizing effect even at rubber temperatures of about 80 °C. It also peptizes synthetic rubber, such as SBR, IR and BR.

Processing: Aktiplast 8 can be used on a mill or in an internal mixer and at low or high temperatures. If a compound is to be produced in an internal mixer at temperatures above 100 °C, preliminary mastication is not necessary because Aktiplast 8 acts during the mixing process itself. Mixing can be started shortly after Aktiplast 8 has been added. It should be noted, though, that the effectiveness of Aktiplast 8 is reduced by active carbon blacks and silicas. Where such fillers are used, separate mastication before mixing is recommended.

As Aktiplast 8 counteracts cyclization, it is particularly suitable for rubbers which cycle readily. Aktiplast 8 is incorporated very quickly and disperses excellently. Aktiplast 8 can be added to the rubber as soon as it has been put into the internal mixer or onto the mill. There is no need to produce a batch containing the peptizing agent.

Dosage: Natural rubber (NR): 0.05-0.3 pbw at 80 to 170 °C
Synthetic isoprene rubber (IR): 0.05-0.3 pbw at 80 to 150 °C
Other synthetic rubbers, e.g. SBR, BR: 1.0-2.0 pbw at 130 to 150 °C
Where NR and IR are concerned, the required dosage decreases as the mastication temperature rises.

Application: Tires and technical goods, masticator for peptizing natural rubber at low and high temperatures

Packing

20 kg paper bag

Storage stability

In original closed containers under cool and dry conditions 730 days from date of production

Handling

For additional handling information on Aktiplast 8 please consult current safety data sheet.

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