SikaGrind® 820
Efficient grinding aid for the production of cement

Description
SikaGrind®-820 is a chloride free liquid cement grinding aid with performance enhancing properties.
SikaGrind®-820 has been specifically designed to increase the output of cement grinding plants and obtain improved early strength development for cements with high amount of clinker replacements.

Uses
• Improve the production rate of the cement grinding system
• Increase the early strength of the cement

Advantages
SikaGrind®-820 is a dispersant with the following characteristics:
• Neutralisation of electrical charges on the surface of the cement particles
• Separation of the cement particles

SikaGrind®-820 provides the following advantages in the cement production:
• Enhanced grinding properties of the cement mill due to less accumulation of material on grinding balls and mill-liners
• Higher separator efficiency due to improved cement particle dispersion
• Reduced relative power consumption per ton of cement due to increased output of the grinding system (tons per hour)
• Easier achievement of the desired cement fineness (Blaine, particle fraction > 32 µm, granulometry) due to reduced re-agglomeration of the sufficiently ground cement particles
• Minimized problems with “plugging” due to improved powder flow characteristics

SikaGrind®-820 gives the following advantages to the finished cement:
• Reduced quantity of “over-milled” particles in the cement granulometry
• Easier discharge of the silos
• Increased early strengths after 1 and 2 days
• Economic cement design with clinker replacements

Storage and Shelf life
Stored at temperatures between 5°C and 35°C in unopened original containers, protected from direct sunlight and frost, shelf life is at least one (1) year. Please check with your Sika representative for shelf a life exceeded product.

Instructions for Use

Dosage
Typical dosage rates of SikaGrind®-820 are between 0.2 - 1.0 kg per tonne of cement (0.02% - 0.10% of total weight = cement clinker + additions). The optimum dosage to achieve the desired characteristics shall be determined in Plant trials. Influencing factors are e.g. the properties of clinker source, type of cement and other plant variables.

For consistent results, SikaGrind®-820 must be accurately dispensed.

Mixing
SikaGrind®-820 is added onto the clinker feed shortly before the mill entrance or directly into the grinding mill (first or second compartment). Suitable dosage pumps with adjustable flow rates shall be used for accurate dosing.

Note: Periodically, the end of the additive tube/hose shall be checked to ensure that it is not blocked!

Application Method
Place concrete according to good concrete practices with proper curing procedures.
### Technical and Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Form</td>
<td>Aqueous polymer solution.</td>
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<tr>
<td>Colour</td>
<td>Clear yellowish liquid</td>
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<tr>
<td>Density (20°C)</td>
<td>1.1 approx.</td>
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<tr>
<td>Packaging</td>
<td>1000 kg IBC</td>
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<td></td>
<td>Bulk deliveries.</td>
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### Handling Precautions
- Avoid contact with eyes and skin.
- Wear protective gloves and eye protection during work.
- If skin contact occurs, wash skin thoroughly.
- If in eyes, hold eyes open, flood with warm water and seek medical attention immediately.
- A full Material Safety Data Sheet is available from Sika on request.

### Important Notification
The information, and, in particular, the recommendations relating to the application and end-use of Sika’s products, are given in good faith based on Sika’s current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Australian version of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.