



Beton SHimi  
بتن شبمی زرین کوه



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## Concrete antifreeze (Beton Shimi)

### Chemical concrete antifreeze BS780 without chloride:

During the exposure of fresh concrete in cold weather conditions, the mixing water within the concrete tends to turn into ice and affects its setting properties. This is because the conversion of the hydration product from ettringite to monosulfate is mainly affected. During exposure of hardened concrete to cold weather conditions, the water within the concrete pores usually turns to ice, causing a volume increase of about 9%. These effects push outwards and create high hydraulic pressure around.

Technical specifications of concrete antifreeze	
physical state :	liquid
Color :	light red
Special Weight :	1.5 kg/liter
packing :	20 kg gallon
Expiration date :	One year after production in closed gallons
Mixing ability:	has it
Chlorine ion:	does not have
pH:	7

### Uses of concrete antifreeze:

- .1In the production of ready concrete, concrete antifreeze is used.
- .2Concrete antifreeze is used in the production of prefabricated concrete parts.
- .3Concrete antifreeze can be used to open molds quickly.

### Benefits of using concrete antifreeze:

- .1Concrete antifreeze improves concrete strength
- .2Concrete antifreeze reduces concrete cracking
- .3Concrete antifreeze increases concrete performance
- .4Concrete antifreeze reduces the cost of concreting projects

### Consumption of concrete antifreeze:

2to 3 liters of antifreeze for each bag of cement (depending on the air temperature and grade used)