BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET
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HEAVY-DUTY CONCRETE FLOOR FINISHING

Sika® Diamag-7®

ECONOMICAL MINERAL SURFACE HARDENER

Description

Sika® Diamag-7® is an economical, mineral broadcast-applied surface hardener. It contains carefully graded, hard wearing particles, which provide an exceptionally durable surface. Special dispersing and plasticizing agents promote ease of incorporation into the concrete surface. Sika® Diamag-7® is premixed and ready-to-use.

Where to Use

Designed for use in industrial and commercial flooring exposed to moderate levels of abrasion, impact and loading. Suitable for both interior and exterior exposure:

- Storage rooms and dressing rooms.
- Food processing areas.
- Manufacturing plants, electrical equipment rooms.
- Roller rinks/Ice rinks.
- Service areas, warehouses, supermarkets, etc.
- Warehouse floors.
- Loading docks.
- Hangars.

Advantages

- Easy application.
- High resistance to abrasion.
- Improves impact resistance.
- Higher surface density than plain concrete.
- Improves resistance to oils, greases, and some industrial chemicals.
- Saves time and labour costs.
- Lowers maintenance requirements.
- Reduces surface dust.
- Provides a slip-resistant surface when properly finished.
- Canadian Food Inspection Agency acceptance.

Technical Data

Packaging	25 kg (55 lb) bag
Colour	Natural Concrete Grey
Yield	
Dressing rooms, storage rooms, light duty manufacturing	5 kg/m² (1 lb/ft²)
Average manufacturing, services bays, garages, warehouses	5 - 6 kg/m² (1 - 1.2 lb/ft²)
Heavy-duty manufacturing, machine areas, roller rinks	7 - 8 kg/m² (1.4-1.6 lb/ft²)
Shelf Life	1 year in original, unopened packaging. Store dry, ensuring that product is not exposed to rain, condensation or high humidity.
Application Temperature	16 to 30°C (61 to 86°F)

Properties at 23 °C (73 °F) and 50 % R.H.

Hardness (Moh's scale)	6.5 - 7
Compressive Strength (28 days)	50 MPa (7250 psi)

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

How to Use

Cold Weather: Where required, space heaters must be properly vented to avoid floor surface damage caused by carbonation or contamination.
Hot Weather: Adjustments to application procedures may be required to offset rapid setting of concrete surface before applying Sika® Diamag-7®. Contact your Sika Canada Representative for further information regarding hot weather installations.

Application	Sika® Diamag-7® is applied to the surface in 2 or 3 broadcasts, each being floated using power equipment. The surface is then power-trowelled and hand-trowelled as required to a satisfactory finish. Apply the first broadcast of Sika® Diamag-7®, as soon as concrete is firm enough to support the weight of workmen and their equipment and no standing water is present on the surface. Use up to 2/3 of the total material in the first application. Treat areas adjacent to walls and columns first. Spread the product evenly by broadcasting at right angles in two passes close to surface level. Do not broadcast from a stationary position to avoid uneven distribution of the hardener. Allow Sika® Diamag-7® to absorb surface moisture. Float the broadcasted material promptly. Work wall, column and door areas first. Avoid excessive floating, but ensure that the broadcast application is completely wetted and incorporated into the base slab. Follow immediately behind first floating, apply the remaining material, and install as above. A third power floating may follow for added compaction, if required. **Note 1:** If a coarse, non-slip finish is required, do not proceed with further floating or trowelling operations after second floating, but allow the surface to cure. **Note 2:** For applications greater than 5 kg/m^2 (1 lb/ft^2), apply hardener in 3 shakes. First application should be 50 % of the total required material and 25 % in each of the subsequent applications. Proceed with power trowelling as soon as the floor surface begins to lose moisture sheen, setting the trowel blades at a flat angle. As floor stiffens further, proceed with second trowelling with trowel angle raised. When a minimum amount of cement paste clings to the trowel edges, proceed with final trowelling. Eliminate trowel marks, pinholes or any other flaws.
Curing	As soon as final trowelling is completed and applicator and equipment cannot damage the surface, apply as per printed directions by low-pressure spray, one or more coats of Sika® Florseal WB-18 & -25. Protect finished surface from damage by traffic or trades until sufficiently hardened.
Clean Up	Clean all tools and equipment promptly with water. Remove hardened product mechanically.
Limitations	▪ Important: protect stored material from exposure to rain, condensation and high humidity as moisture may penetrate packaging, causing lumps. ▪ For best results, condition product to 18 to 29 °C (65 to 84 °F) prior to mixing and installation. Lower temperatures may result in slower strength development and longer cure times. ▪ Not recommended for areas where exposure to oxidizing, mineral and organic acids is likely. ▪ Certain admixtures such as Calcium Chloride and/or admixtures containing Calcium Chloride and high range water reducing admixtures should not be used in concrete on which hardeners are to be applied. ▪ Do not apply over concrete containing more than 3% entrained air. ▪ For application on slabs containing fly ash or slag, contact your Sika Canada Representative for unique application procedures or precautions.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data. KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY

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