

BUILDING TRUST

PRODUCT DATA SHEET

SikaFlow®-640

(formerly MFlow 640)

GROUT ACCELERATOR FOR SIKAFLOW® 648/649/678

PRODUCT DESCRIPTION

When SikaFlow®-640 is added to SIKAFLOW®-648, SIKAFLOW®-649 or SIKAFLOW®-678, it accelerates the cure rate at low temperatures. SikaFlow®-640 should be used in temperatures below 60 °F (16 °C).

USES

- Where heating exterior spaces is impractical
- When temperatures fall below 60 °F (16 °C)
- Where high early strengths are required

CHARACTERISTICS / ADVANTAGES

- Accelerated cure rate enables cold-weather applications
- Early strength development facilitates early return to service

PRODUCT INFORMATION

| Packaging | 1 quart can | |
|--------------------|---|--|
| Shelf Life | 1 year when properly stored | |
| Storage Conditions | Store in unopened containers at 60–80°F (16–27°C) in clean, dry conditions. | |

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Compressive Strength

(ASTM C 579, Method B, modified 2 by 2" cubes)

Before mixing, all materials were conditioned for 24 hours at the respective cure temperatures given below.

Tests Conducted with SikaFlow®-648

Material cured at 50°F (10°C)

| Cure Time | Results | |
|-----------|---|--|
| Hours | Non-Accelerated Accelerated Hours psi (MPa) | Accelerated Hours psi (MPa) psi (MPa) |
| 24 | 750 (5) | 6,400 (44) |
| 72 | 10,500 (37) | 12,000 (82) |
| 168 | 12,300 (84) | 13,300 (91) |

Tests Conducted with SikaFlow®-678

Material cured at 50°F (10°C)

| Cure Time | Results | |
|-----------|---|--|
| Hours | Non-Accelerated Accelerated Hours psi (MPa) | Accelerated Hours psi (MPa) psi (MPa) |
| 24 | - | 3,500 (24) |
| 72 | 5,400 (37) | 8,500 (58) |
| 168 | 8,500 (58) | 9,500 (65) |

Tests Conducted with SikaFlow®-649

Material cured at 40°F (4°C)

| Cure Time | Results | |
|-----------|---|--|
| Hours | Non-Accelerated Accelerated Hours psi (MPa) | Accelerated Hours psi (MPa) psi (MPa) |
| 16 | - | - |
| 24 | | 100 (0.7) |
| 48 | 800 (5.5) | 4,000 (27.6) |
| 72 | 3,900 (26.9) | 8,700 (60.0) |
| 96 | 5,000 (34.5) | 9,400 (64.8) |
| 120 | 6,800 (46.9) | 11,400 (78.6) |
| 144 | 7,100 (49.0) | 12,000 (82.7) |
| 168 | 8,000 (55.2) | 13,100 (90.3) |
| | | |

Material cured at 50°F (10°C)

| Cure Time | Results | |
|-----------|---|--|
| Hours | Non-Accelerated Accelerated Hours psi (MPa) | Accelerated Hours psi (MPa) psi (MPa) |
| 16 | - | - |
| 24 | - | 3,900 (26.9) |
| 48 | 4,900 (33.8) | 12,400 (85.5) |
| 72 | 9,200 (63.4) | 14,000 (96.5) |
| 96 | 11,500 (79.3) | 15,500 (106.9) |
| 120 | 12,800 (88.3) | 17,000 (117.2) |
| 144 | 14,500 (100.0) | 17,400 (120.0) |
| 168 | 14,800 (102.0) | 17,400 (120.0) |

Material cured at 60°F (16°C)





| Cure Time | Results | |
|-----------|---|--|
| Hours | Non-Accelerated Accelerated Hours psi (MPa) | Accelerated Hours psi (MPa) psi (MPa) |
| 16 | - | 6,800 (46.9) |
| 24 | 2,600 (17.9) | 10,500 (72.4) |
| 48 | 9,000 (62.1) | 13,000 (89.6) |
| 72 | 13,500 (93.1) | 16,000 (110.3) |
| 96 | 16,500 (113.8) | 17,500 (120.7) |
| 120 | 17,200 (118.6) | 17,700 (122.0) |
| 144 | 17,400 (120.0) | 18,000 (124.1) |
| 168 | 17,400 (120.0) | 18,000 (124.1) |

Temperatures vary so radically (day vs. night, atmospheric vs. metal surface) that field judgment must still be used. When struck with a hammer, cured grout should have a solid, almost metallic feel.

APPLICATION INFORMATION

Coverage

Order 1 quart can of SikaFlow®-640 for each full-size kit of SikaFlow®-648 (1.7 ft³), SikaFlow®-649 (1.7 ft³) or SikaFlow®-678 (1.8 ft³)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

APPLICATION INSTRUCTIONS

NOTES ON INSTALLATION

For Best Performance:

- Adding Accelerator does not improve the workability of grouts in cold-weather applications.
- For professional use only; not for sale to or use by the general public.
- Make certain the most current versions of the product data sheet and SDS are being used; visit usa.sika.com to verify the most current version.
- Proper application is the responsibility of the user.
 Field visits by Sika personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the job site.

APPLICATION

- 1. Add 1 can SikaFlow®-648, SikaFlow®-649 or SikaFlow®-678 Part B and 1 can SikaFlow®-640 to the pail of SikaFlow®-648, SikaFlow®-649 or SikaFlow®-678 Part A, and stir for 3 minutes. Use immediately. Do not let stand for more than 2 minutes before placing.
- Proceed with grouting according to directions in the SikaFlow®-648, SikaFlow®-649 or SikaFlow®-678 product data sheet.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product



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Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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