

PRODUCT DATA

7^{07 18 00} Traffic Coatings

IC-5400

UV-resistant aliphatic polyurea coating

Description

IC-5400 is a two-component extended-set aliphatic polyurea coating. It has excellent color stability and resistance to abrasion, weathering and a wide range of chemicals. It can be roller or spray applied on horizontal and vertical surfaces. It can be used as a skid-resistant coating with the addition of a broadcast aggregate.

Yield

MIL THICKNESS	FT ² /GAL	M ² /L
4	350	8.6
6	225	5.5
10	135	3.3
12	132	3.2

Coverage rates are approximate and will vary with the texture and porosity of the substrate.

Packaging

10 gallon (37.9 L) kits containing 5 gallon (18.95 L) pails of both Part A and Part B

Color

White and gray

Custom colors available by special order (subject to minimum quantities)

Shelf Life

One year when properly stored.

Features

- Two-component polyurea
- Aliphatic
- Tack free time of 2 hours
- Roller or spray applied
- Hygienic
- Excellent impact and abrasion resistance
- Good chemical resistance

Storage

Store between 60 and 90° F (15 and 32° C) in a clean, dry, low-moisture environment.

Where to Use

APPLICATION

- As a topcoat for any Sonneborn® polyurea or epoxy product
- Stadiums
- Balconies

LOCATION

- Vertical and horizontal surfaces
- Interior or exterior

SUBSTRATE

- Over concrete and steel

Benefits

- Can be applied at low temperatures
- Provides color and UV stability
- Reduces facility downtime
- Ease of application
- Seamless surface easily cleaned
- Durable membrane
- Resistant to a wide range of chemicals

How to Apply

CONCRETE

1. The surface being coated must be fully cured 28 days, structurally sound (200 psi or greater according to ASTM D 4541), clean (ASTM D 4258), and dry (less than 5%, ASTM D 4263).
2. It must have low moisture-vapor transmission (less than 3 lbs/24 hr/1,000 ft², RMA Test Method).
3. Profile surface according to ICRI Guide 03732 to a minimum of CSP 3 by abrasive blasting or hydroblasting. Remove contaminants before blasting.
4. Fill all voids and cracks greater than 0.060" to achieve a uniform coating surface. Voids and cracks can be pre-filled with the appropriate repair materials. Contact your BASF representative for additional information on concrete-repair products.

Technical Data

Composition

IC-5400 is a two-component extended-set aliphatic polyurea.

Compliances

- USDA compliant for use in meat and poultry industry

Typical Properties

PROPERTY	VALUE
Minimum application temperature	-20° F (-29° C)
Service temperature	-60 to 350° F (-51 to 177° C)
Ratio by volume	1 to 1
Tack-free time, hrs	2
Pot life, at 70° F (21° C)	30 – 45 minutes

Test Data

PROPERTY	RESULTS	TEST METHODS
Viscosity, cps		Brookfield
Part A	120	
Part B	600	
Tensile, psi (MPa)	3,000 (20.7)	ASTM D 412
Elongation, %	40	ASTM D 412
Hardness, Shore D	50	ASTM D 2240
Tear, T, pli	450	ASTM D 1938
Abrasion resistance, mg lost; CS-17 Wheel, 1000 g, 1,000 cycles	71	ASTM C 957
Concrete adhesion, psi (MPa)	350 (2.4)	ASTM D 4541
Puncture resistance, lbs (kg)	350 (159)	ASTM D 4833
Negative hydrostatic pressure, psi (MPa)	529 (3.6)	ASTM D 761
Horizontal burn test	Pass	UL 94 HB
180° 1" mandrel, at -40° F	Pass	ASTM G 11

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

Chemical Resistance¹

CHEMICAL	RESULT
Gasoline	Slight surface change; no hardness loss
Diesel fuel	No visible damage
H2SO4, 20%	Slight surface change; no hardness loss
Hcl, 10%	No visible damage
NaOH, 50%	Slight surface discoloring; no hardness loss
Acetic acid, 10%	No visible damage

¹Test method ASTM D 3912 12 month exposure; call your Sonneborn® representative for specific chemical results.

STEEL

1. Steel surfaces must be cleaned before blasting (SSPC-SP1). Remove any sharp edges and other surface imperfections.
2. Dry abrasive blast surface according to SSPC-SP-10/NACE No. 2 (0.003" profile).
3. Remove any nonvisible soluble salt contamination (less than 3 µg/cm², NACE 6G186, CHLOR*RID).
4. Apply coating only if steel surface temperature is 5° F above the dew point to avoid application over damp surfaces.
5. Apply primer and coating within the same day and before the prepared steel surface is chemically contaminated or rusting reoccurs.

OTHER SURFACES

Contact your Sonneborn® representative for application over other surfaces.

Mixing

1. Thoroughly mix each separate component (Part A and Part B) with a low-speed drill and a clean mixing blade for a minimum of 3 – 4 minutes. Mix slowly to minimize the vortex and to prevent trapping air in Part B.
2. Combine Part B and Part A in a mixing container. Thoroughly mix both parts with a slow-speed drill and mixing blade for a minimum of 3 – 5 minutes.
3. Keep the lid on the mixing container to extend the pot life of the product.

Priming

Priming is required. Allow IC-2000 PSW primer to set up according to instructions. See the product data sheet on IC-2000 PSW Primer (Form No. 1019016) for more information.

Application

1. Apply IC-5400 as a topcoat over Sonneborn® polyurea coatings within 12 hours of application.
2. IC-5400 has been specifically developed for thin-mil applications. Apply by brush, 1/4" short-nap mohair roller or airless sprayer. Two 6 mil coats are normally required. Allow first coat to dry for a minimum of 45 minutes before applying the finish coat.

RECOATING OF IC-5400

Recoat within first 12 hours at 70° F (21° C). After 12 hours, mechanically abrade the entire surface of the coating and clean with acetone or MEK. Allow substrate to dry and reapply coating within 1 hour.

OVER POLYUREA COATINGS

Topcoat with IC-5400 within the first 12 hours of the polyurea base-coat application. After 12 hours, mechanically abrade the entire base-coat surface and clean with acetone. Allow to dry and apply IC-5400 within 1 hour.

OVER POLYURETHANE OR EPOXY COATINGS

Mechanically abrade the entire surface of the coating and clean with acetone. Allow substrate to dry and apply IC 5400 within 1 hour.

Clean Up

Use IC-Gun Cleaner to clean guns and parts. Cured material must be mechanically removed. Consult a Sonneborn® representative for more information on cleanup procedures.

For Best Performance

- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

SONNEBORN® IC-5400 PART A

Warning

Sonneborn® IC-5400 Part A contains aliphatic polyisocyanate and chlorobenzotrifluoride.

Risks

COMBUSTIBLE LIQUID AND VAPOR. May cause skin, eye or respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

Precautions

KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. KEEP OUT OF THE REACH OF CHILDREN. Keep container closed. Empty containers may contain explosive vapors or hazardous residues. Use only with adequate ventilation. Prevent contact with skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations. All label warnings must be observed until container is commercially cleaned or reconditioned.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product does not knowingly contain material listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content

0 lbs/gal or 0 g/L, less water and exempt solvents

SONNEBORN® IC-5400 PART B

Warning

Sonneborn® IC-5400 Part B contains amine resin.

Risks

May cause skin, eye and respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Wash thoroughly after handling. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product contains materials listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content

0.05 lbs/gal or 6 g/L, less water and exempt solvents, when components are mixed and applied according to BASF instructions

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

**BASF Construction Chemicals, LLC –
Building Systems**

889 Valley Park Drive
Shakopee, MN, 55379

www.BuildingSystems.BASF.com

Customer Service 800-433-9517
Technical Service 800-243-6739



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