



The Chemical Company

PRODUCT DATA

9 09 67 23 **Resinous
Flooring**

SELBY™ OP FLOOR COATING

Epoxy floor coating with orange-peel texture

Description

Selby™ OP Floor Coating is a high-solids epoxy polymer system. It is used where a tough, abrasion-resistant, orange-peel-textured coating is required.

Yield

Primer: 150 – 200 ft²/gallon
(3.75 – 5 m²/L)

Base coat: 200 ft²/gallon (5 m²/L)

Topcoat: 200 ft²/gallon (5 m²/L)

All coverage rates are approximate. Coverage rates will vary with the desired texture and the porosity of the concrete.

Packaging

1 gallon (3.79 L) cans

5 gallon (18.95 L) pails

55 gallon (208 L) drums available by special order

Color

12 standard colors (see Selby™ Color Selector)

Custom colors are subject to minimum quantities, increased manufacturing lead times, and premium pricing.

Shelf Life

Epoxy base and topcoats: 2 years

Storage

Store and transport in unopened containers in a clean, dry area. Protect from freezing.

Features

- Moisture resistant
- High bond strength
- Nonporous resin matrix
- Fast cure rate
- 100% solids
- Good abrasion resistance
- Special blend of aggregates
- Epoxy chemistry

Benefits

- Ideal for wet spaces
- Excellent bond to concrete
- Provides long-term protection
- Reduces down time
- Low odor
- Longer wear
- Good handling characteristics
- Good chemical resistance

Where to Use

APPLICATION

- Where an abrasion-resistant orange-peel coating is required
- As a grout coat and topcoat for Selbaclad systems
- Recoating floors

LOCATION

- Interior floors

SUBSTRATE

- Over new and existing concrete surfaces and toppings

How to Apply

Selby™ systems are installed by approved contracting firms. Selby™ is a globally branded product line with industry synergies around the world.

The following is only a summary of the installation techniques used by Selby™ approved contractors. Refer to the Selby™ Installation Guideline for more information.

Surface Preparation

This coating must be installed over a Selby™ coating or system within the prescribed recoat window to promote maximum intercoat adhesion. If the recoat window is exceeded, the surface must be mechanically abraded and properly cleaned to create a mechanical bond between the surface and first Selby™ OP application.

Mixing

1. Mix the components for this product in the following ratios.

APPLICATION	COMPONENTS	MIX RATIO BY VOLUME
Base coat	A455 / B452 OP	2.5 to 1
Topcoat	A455 / B452 OP	2.5 to 1

2. Premix each component separately before mixing together to ensure uniform consistency.

3. Combine Parts A and B in a suitably sized container. Use the proper ratios of A and B; scrape the sides of the containers to ensure a complete reaction.

SELBY

Technical Data

Composition

Selby™ OP Floor Coating is a 100% reactive epoxy polymer system.

Typical Properties

PROPERTY	VALUE
Maximum in-service temperature, ° F (° C)	170 (77)

Test Data

PROPERTY	RESULTS	TEST METHODS
Adhesion to concrete, psi (MPa)	350 (2.4) 100% concrete failure	ASTM D 4541
Abrasion, mg loss; CS-17 wheel, 1,000 g load, 1,000 cycles	0.087	ASTM D 4060
Moisture-vapor transmission, perms	0.4	ASTM E 96
Impact resistance	Passes	MIL-D-3134F
Hardness, Shore D	85	ASTM D 2240
Rate of burning	Self-extinguishing	ASTM D 635

Unless otherwise noted, test samples were cured 7 days at 73° F (23° C) and 50% relative humidity.

Chemical Resistance

Full chemical resistance is achieved after curing for 7 days. For resistance to a specific chemical compound, consult the Selby™ Chemical Resistance Guideline.

4. Mix properly for 3 minutes with a slow-speed drill and Jiffy-style mixing paddle at 350 rpms. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.

5. Apply a 5 by 5 ft (1.52 by 1.52 m) test in an inconspicuous area that meets the owner's expectations for appearance and performance.

Priming

If priming is required, apply the mixed material to the properly prepared concrete or properly prepared aged coating at approximately 150 – 200 ft²/gallon (3.75 – 5 m²/L). For more information, contact your BASF representative or flooring specialist.

Application

1. Selby™ OP floor coating is recommended as a two-step application. Experienced installers can achieve orange-peel textures of varying degrees by using various coverage rates and nap rollers.

2. Install base coat at 200 ft²/gallon (6 – 8 mils). Roll out the material in crosshatch patterns to lessen roller marks. Use a roller nap that will achieve the desired texture. Use a 1/4" (6.4 mm) nap roller cover to achieve the widely accepted orange-peel texture. Allow to cure 12 – 24 hours before applying the second coat.

3. Install the OP topcoat at 200 ft²/gallon (6 – 8 mils). Roll out the material in crosshatch patterns to lessen roller marks. Use a roller nap that will achieve the desired texture. Use a 1/4" (6.4 mm) nap roller cover to achieve the widely accepted orange-peel texture.

4. Apply a finish coat of N300CR polyurethane, if required.

5. Allow the final floor to cure 24 hours before opening to traffic.

Drying Time

Base coat: 12 – 24 hours

Topcoat: 24 hours

Maintenance

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance, and reduce any tendency to retain dirt. Follow the Selby™ Flooring Protection and Maintenance guide to maximize the life of the floor.

For Best Performance

- Use an effective moisture barrier for substrates on or below grade; if not present, contact your BASF representative for options.
- Install this product at a substrate temperature between 50 and 85° F (10 and 30° C).
- The architect and owner should address joint details with the contractor before the job starts.
- Before application, prepare an on-site mock-up to verify the owner's expectations and to serve as reference for texture.
- Apply a finish coat of pigmented N300CR polyurethane for increased abrasion resistance, color retention and UV stability.
- Do not exceed the recommended recoat window of 24 hours. If in doubt, contact your BASF representative or flooring specialist.
- Precondition this product to 70° F (21° C) for 24 hours before using.

- BASF representatives and flooring specialists can help you select the proper flooring system. Call 1-800-243-6739 for in-house and field technical assistance.
- 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 versions.
- 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

A750

Warning

A750 contains epoxy resin, alkyl glycidyl ether, and triacrylate ester.

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 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, when components are mixed and applied according to BASF instructions.

A455

Warning

A455 contains epoxy resin, 1-methoxy-2-propanol, and aromatic hydrocarbon.

Risks

Combustible liquid and vapor. May cause skin, eye and respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. 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 OUT OF THE REACH OF CHILDREN. KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. Vapors are heavier than air. Keep container closed. Use only with adequate ventilation. Avoid contact with eyes, skin 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.

First Aid

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B725

Danger—Corrosive

B725 contains polyoxypropylenediamine, 4-nonylphenol, aminoethylpiperazine, and benzyl alcohol.

Risks

Contact with skin or eyes may cause burns. Ingestion may cause irritation and burns of mouth, throat and stomach. Inhalation of vapors may cause irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Repeated or prolonged contact with skin may cause sensitization. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. 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 OUT OF THE REACH OF CHILDREN. DO NOT get in eyes, on skin or clothing. Wash thoroughly after handling. Keep container closed. DO NOT take internally. Use only with adequate ventilation. DO NOT breathe vapors. 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.

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B452

Danger—Corrosive

B452 contains n-aminoethylpiperazine, nonylphenol, benzyl alcohol, and poly (oxypropylene) diamine.

Risks

Contact with skin or eyes may cause burns. Ingestion may cause irritation and burns of mouth, throat and stomach. Inhalation of vapors may cause irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Repeated or prolonged contact with skin may cause sensitization. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. 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.

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VOC Content

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

BASF Building Systems

889 Valley Park Drive
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www.BASFBuildingSystems.com

Customer Service 800-433-9517

Technical Service 800-243-6739

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