

COMPOSITE SHIELD

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DESCRIPTION

COMPOSITE SHIELD is a high performance, semi-permanent release coating specifically formulated for use with advanced molding materials in industries requiring assured contamination free fail-safe processing. It also offers effective multiple release efficiency with a wide range of molding compounds. For **NON-VOC** release agents, request technical data on **ENVIROSHIELD**.

COMPOSITE SHIELD benefits are:

- * True semi-permanent multiple release capability
- * Ease of Application
- * Fast Cure
- * Controlled Release (reduces possibility of Pre-Release)
- * No build-up on mold
- * Thermal Stability (> 900°F/480°C)
- * No Transfer
- * Easy Recoat/Touch-Up

TYPICAL PROPERTIES

Appearance & Odor	:	Clear, thin, liquid with characteristic solvent odor
Carrier	:	Aromatic Naphthas
Flash Point [C.C]	:	>100°F/38°C
Coverage	:	1200 Sq. Ft./Gallon
Wt./Gallon	:	7.29 lbs./Gallon
Cure Mechanism	:	Chemical cross-linking and bonding following solvent evaporation and reaction with atmospheric moisture

NOTE: Product is moisture-sensitive. Container must be kept tightly closed when not in use.

USES

COMPOSITE SHIELD is specified for releasing polyester, fiberglass, epoxy, graphite composites, polyimides, polybismaleimides, polyethylenes, polycarbonates, and other materials.

SURFACE PREPARATION

Before applying **COMPOSITE SHIELD**, all previous waxes or oils should be removed using **SURFACE CLEANER**, and a suitable mold sealer should be applied. If surfaces have been coated previously with a semi-permanent release agent, it may be possible to simply solvent wipe, dry, and apply **COMPOSITE SHIELD** directly on top of existing surface. A test patch should be done to confirm this possibility.

MOLD CLEANING

SURFACE CLEANER is a combination of solvents specially blended to aid in the preparation of new and used molds/tools prior to treatment with **ZYVAX MOLD SEALERS AND RELEASE AGENTS**. It readily removes waxes and other surface contaminants without harming or dulling the working surfaces of the mold.

SURFACE CLEANER will also clean brushes and spray equipment used to apply various release products and elastomeric materials. For a **NON-VOC** cleaner, use our **WATERCLEAN**.

MOLD SEALING

SEALER GP is recommended whenever a mold/tool is completely cleaned or the mold surface has been scratched locally after demolding a component. **SEALER GP** forms a thin protective shield that extends the life of the mold surface and reduces the amount of release agent required. Apply **SEALER GP** in accordance with Zyvox Technical Data Sheet.

HOW TO USE

1. Apply **COMPOSITE SHIELD** to a small area of the mold 1-2 sq. (.2 sq. m.) using a Bounty paper towel, clean lint free cloth, or hand sprayer.
2. While still wet, gently wipe dry using a separate clean Bounty paper towel or lint free cloth.
3. Make sure entire mold surface is coated in this manner, slightly over-lapping the last coated area if you are applying in sections. Be certain that all contours are adequately coated.
4. Wait for a minimum of 15 minutes.
5. Apply a second coat of **COMPOSITE SHIELD** in the same way, and wait for a minimum 30 minutes before using mold. If application has been made to a warm surface, a shorter waiting period is needed. The use of heat (hot air, heat gun, oven) can enhance performance. Cure times can be halved at ~250°F/120°C.
6. For touch up apply a single coat of **COMPOSITE SHIELD** as above and continue processing.

STORAGE & SHELF LIFE Store product between 5°C and 30°C (41°F and 86°F). Shelf life is 18 months from the date of manufacture, in the original unopened container.

USE LIFE Use life of product is 60 days from opening of container. Product must be kept in the original container and the lid replaced immediately after dispensing. After opening, product should continue to be stored properly. Maximum product life is not to exceed 18 months from Date of Manufacture.

WARNING Never puncture any Zyvox product container.

SAFETY DATA

Material safety data sheets are available for all ZYVAX products and should be consulted prior to use of product.

SHIPPING DATA

DOT Shipping Name	:	Resin Solution
DOT Hazard Classification	:	Flammable Liquid
DOT I.D. Number	:	UN 1866

PACKAGING

COMPOSITE SHIELD is available in the following sizes:

1-U.S. gallon can
5-U.S. gallon pail
55-U.S. gallon pail

LIMITATIONS OF LIABILITY

To the best of our knowledge, the technical data contained herein are true and accurate at the date of issuance, and are subject to change without prior notice. User must contact **ZYVAX** to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to **ZYVAX** quality control. We assume no responsibility for coverage, performance, or injuries resulting from its use. Liability, if any, is limited to replacement of products. **NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY ZYVAX, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING FITNESS FOR A PARTICULAR PURPOSE.**