

EZ-PART® #76C

CONCENTRATED, WATER BASED SILICONE MOLD RELEASE

EZ-Part #76C is the concentrated form of our standard EZ-Part #76 mold release solution. When diluted with water it forms a solvent-free water based emulsion of silicone polymers that dry to form an effective mold release film. The diluted solution is an effective release agent for epoxy, urethane, and polyester resins as well as for many types of rubbers and thermoplastic polymers. EZ-Part #76 can be used on most mold materials including wood, epoxy, steel and aluminum. It is formulated with corrosion protection additives to help prevent the rusting of steel molds and application equipment. It will not stain ABS and PVC.

EZ-Part #76C, is effective for both room temperature and elevated temperature applications. It produces little or no buildup on released molds even after multiple applications at elevated temperatures such as 150°C. It will withstand temperatures in excess of 180°C without degrading and is suitable for use with Automatic Pressure Gelation (APG) systems.

HANDLING PROPERTIES	VALUE	TEST METHOD
<u>EZ-PART #76C</u>		
Appearance	Milky white Liquid	Visual
Viscosity	< 50 cps	ASTM D-2393
Density	1.04 g/cm ³	ASTM E-201
Flash Point	No flash point	ASTM D-92
Solids Content	15% – 20%	

Values are based on laboratory or average production results – not for specification purposes.

PROCESSING AND APPLICATION INSTRUCTIONS

To use, dilute the EZ-Part 76C with 4 parts distilled or di-ionized water per 1 part of the 76C. This will form a solution equivalent to our standard EZ-Part 76 formulation. For some applications a slightly more concentrated solution may be helpful. For example 3.5 parts water to 1 part of the 76C by weight or volume. Alternately, where cost of build up is a concern it may be desirable to evaluate solutions using distilled or di-ionized water at levels such as 4.5 or 5 parts water to 1 part of the 76C. Simple place the water and the 76C in the same container and stir or shake to blend. The solution formed will be stable at room temperature for an extended period, but shake or stir prior to use, if any separation is visible.

For use on plaster, a plaster sealer is required to seal the pores of the plaster and eliminate absorption of water from the EZ-Part #76 solution into the plaster mold. The plaster seal must be applied and fully dried prior to application of the EZ-Part #76 solution. For urethane and epoxy foam molds and for most wood molds, it is desirable to seal the mold surface prior to application of the EZ-Part #76 release agent. Our Pro-Prep HPS high performance sealer is ideal for this sort of mold sealing application. Conventional lacquer sealers may also work for some applications.

Product Datasheet



Thoroughly clean and dry the surface to be released prior to applying the EZ-Part #76 solution. The EZ-Part #76 solution can be applied by spraying, brushing on, or wiping on with a clean cloth. For most Spray applications, a single thin coating is sufficient, but applying 2 coatings from different directions may be helpful if the mold surface is intricate. For brush or wipe-on application use a clean brush or a clean, lint free cloth. For best results, apply 2 thin layers rather than 1 thick layer of the release agent. For warm molds (ex. 40°C – 80°C), allow at least 1-2 minutes between coats for each layer to dry. In warm molds, steam will be visible during drying. On room temperature molds, after application of the release, the molds should be dried for at least 15 minutes at 40°C or 5 minutes at 65°C to ensure complete evaporation of water from the release film. Alternately, the release film can be allowed to dry at room temperature in a dust free area or for at least 4-8 hours prior to use. Please note that at room temperature, the drying time will vary with the ambient relative humidity, in high humidity conditions heating the mold may be required to eliminate moisture from the release film in a reasonable time period.

If the parts or mold will be used multiple times, it is typically only necessary to apply a single thin new coat between uses. EZ-Part #76 is resistant to mold build up, but if any build up is observed, it can typically be removed with a Ketone solvent and consider increasing the amount of water used in the dilution by 10% - 20% to reduce future buildup..

De-molded parts will require thorough cleaning prior to staining, painting, or bonding as the residual mold release will prevent other materials from adhering to the surface properly. Ketone solvents and some aqueous detergents are effective for removing release residues. Contact SP&S for cleaning suggestions suitable for your specific parts and application.

PACKAGING AVIALABLE

This product is available in a wide range of package sizes including quart, gallon, and 5-gallons pails.

STORAGE GUIDELINES

Store the EZ-Part® #76C or solution of EZ-Part® #76C in a clean, dry environment in its tightly closed original containers. Store at 50°F – 104°F (10°C - 40°C). Tightly re-seal containers after use to prevent evaporation. If the recommended storage conditions are observed the products will have a minimum shelf-life of 24 months from the date of shipment.

Please note: that the EZ-Part #76C will freeze around 32°F (0°C). If this occurs, allow the container to warm to room temperature until completely re-liquefied or heat the tightly sealed container to 40°C for 30 – 60 minutes, then place the container on a paint shaker or use a drill mixer to thoroughly re-mix.

HANDLING PRECAUTIONS

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

EZ-Part® #76C - CAUTION! In keeping with good industrial. Keep away from eyes, skin, and clothing. Wash skin and clothing thoroughly after handling. Avoid breathing vapor or mist and use with adequate ventilation. Keep containers closed when not in use. Do NOT take internally.

Product Datasheet



FIRST AID

In case of contact: **Skin** – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather. **Eyes** – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention. **Inhalation** - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician. **Ingestion** - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

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