



Technical Data Sheet

DOWSIL™ 2-1912 Fluid

FEATURES & BENEFITS

- Easy to use
- Does not discolor molded parts
- Solvent dilutable
- Displays low surface tension
- In most cases, a single application provides release through numerous molding cycles
- As an additive in automotive polishes, provides water repellency, durability and gloss
- Provides heat stable, non-carbonizing, non-oily parting film
- Minimum build-up on molds and dies

COMPOSITION

- Polydimethylsiloxane and high molecular weight silicone resin

Release coating for plastics, adhesives, and elastomeric products, and polish additive

APPLICATIONS

- Provides durable parting film in fabricating plastics, adhesives, and elastomeric products
- Additive for automotive polishes

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications.

Test*	Property	Unit	Result
0176 B	Appearance		Clear
	Active material content	% w/w	100
1100 G	Specific gravity	g/ml	1.025
0004 A	Viscosity	cst	700
0006 A	Flash point – open cup	°C	> 250
	Suitable solvents		Hydrocarbons

*CTM: Corporate Test Method, copies of CTMs are available on request.

DESCRIPTION

DOWSIL™ 2-1912 Fluid is a transparent, two-component, viscous blend of polydimethylsiloxane and a high molecular weight silicone resin.

HOW TO USE

Release agent

As a release agent, DOWSIL 2-1912 Fluid provides a durable parting film which is heat stable and keeps mold build-up to a minimum. Since DOWSIL 2-1912 Fluid is supplied as 100% silicone, users may choose their own solvent and application concentration.

For easier application and finer control of the amount applied to mold surfaces, DOWSIL 2-1912 Fluid should be diluted with solvent to 1–10% silicone and applied by either spraying, brushing, or wiping. If wetting is a problem, blend 10 parts DOWSIL 2-1912 Fluid with 80 parts isopropanol (99%) and 10 parts toluene. Whenever using solvents, always provide adequate ventilation and follow the precautions on the manufacturer's label.

To break in molds with porous surfaces, a more concentrated solution - equal parts solvent and DOWSIL 2-1912 Fluid - may be used. Once the mold has been broken in, a more dilute solution may be used.

Frequency of application and proper concentration for optimum release should be established by small-scale trial runs under actual operating conditions before use in operation.

Mold surfaces should be cleaned prior to application. Best parting characteristics are obtained when this product is applied in a very thin film.

Avoid excess.

Thick films do not give good release and may even cause sticking. Difficult release may also result from uneven dispersion or failure to wet surfaces completely. This may be corrected by rubbing out the release material until a thin, dry film is obtained.

After application, allow the mold surface to dry until completely free of diluent. Because the solvents used to dilute DOWSIL 2-1912 Fluid may be flammable, special care must be taken when applying the dilution to hot surfaces.

Although not essential, a heat cure produces better release and increased durability of the parting film. Heating the molds for 5–10 minutes at 93–204°C (200–400°F) is suggested.

Polish Additive

As an automotive polish ingredient, DOWSIL 2-1912 Fluid provides excellent gloss, water repellency, detergent resistance, and durability, while maintaining excellent ease of use and rub-out characteristics. The fluid is compatible with most water-in-oil and oil-in-water systems. The durability may be enhanced by the addition of a small amount of amine functional silicone, such as XIAMETER™ OFX-536 Fluid, or may be combined with various organic waxes.

Use levels of DOWSIL 2-1912 Fluid in automotive polishes are 1–5 weight percent. Optimal levels in specific polish formulations should be determined by the end user.

**HANDLING
PRECAUTIONS
PRODUCT SAFETY
INFORMATION REQUIRED FOR
SAFE USE IS NOT INCLUDED IN
THIS DOCUMENT. BEFORE
HANDLING, READ PRODUCT
AND SAFETY DATA SHEETS
AND CONTAINER LABELS FOR
SAFE USE, PHYSICAL AND
HEALTH HAZARD
INFORMATION. THE SAFETY
DATA SHEET IS AVAILABLE ON
THE DOW WEBSITE AT
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OR FROM YOUR DOW SALES
APPLICATION ENGINEER, OR
DISTRIBUTOR, OR BY CALLING
DOW CUSTOMER SERVICE.**

USABLE LIFE AND STORAGE

When stored in the original unopened containers, this product has a usable life of 30 months from the date of production.

PACKAGING INFORMATION

This product is available in 20 kg pails and 210 kg drums, net weight. Samples are available in 500 ml containers, net weight.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Finishing Molded Parts

The silicone release film formed by DOWSIL 2-1912 Fluid may, in some cases, interfere with the painting and bonding of molded parts. If a finish coat or bonding is involved, the effect of a silicone release agent should be thoroughly tested before use.

Should painting or bonding of molded parts be an issue, Dow offers release agents that are compatible with many organic coatings and adhesive systems. These alternative release products provide good release and offer the advantage that residual film transferred to the molded part can be removed from the molded part without requiring extraordinary cleaning procedures prior to painting or bonding. Information about these Dow release materials is available upon request.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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Form No. 26-062-01 C