

XIAMETER[®] OFX-0203 Fluid

Alkylarylpolysiloxane fluid

Release agent for molding, extruding and fabricating rubber and plastic parts, and in die casting metals

FEATURES

- Compatible with most organic coatings and adhesive systems, and permits subsequent coating of fabricated parts without requiring unusual or extraordinary surface preparation
- Imparts good gloss and color enhancement
- Easy application/buffability
- Gives very good durability
- Provides a heat-stable film
- Clean and easy release of plastics and rubbers
- Effective release (parting) agent for die cast metals
- Molded parts can be coated/painted/plated without excessive cleaning
- Appearance of treated part is unaltered
- Good thermal stability allows repeated use at high temperatures without natural breakdown and consequences (build-up on mold etc.)
- Mold and die replacement is minimized (reduced maintenance cost)

APPLICATIONS

- May be formulated into automotive polish products for use in garages and body shops where polydimethylsiloxanes could give rise to re-coatability problems.
- Release agent in the production of floor mats and tiles, seals, grommets, gaskets, toys, paneling, decorative trim, household appliance assemblies and similar plastic and rubber products that are coated, painted, plated or bonded.
- Parting agent in die casting of aluminum, zinc, magnesium and other metals that are subsequently painted, bonded or plated.
- Additive or plasticizer in rubber and plastics formulations, including plastisols.
- When added as a built-in lubricant the fluid can facilitate the assembly of mechanical components and can act as a lubricant in service.

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local XIAMETER[®] sales representative prior to writing specifications on this product.

CTM ¹	Test	Unit	Value
0176	Color Physical Form		Clear light straw-colored pourable liquid
	Color, APHA, maximum		150
0001	Specific gravity at 25°C/15.6°C		0.90 - 0.92
0862	Active content	%	100
0004	Viscosity at 25°C (77°F)	mm ² /s	1200
0002	Refractive index at 25°C (77°F)		1.4635 - 1.4665
0021	Flash point	°C (°F)	> 93 (200)

¹CTM: Corporate Test Method, copies of CTMs are available on request.

DESCRIPTION

Release Applications:

XIAMETER® OFX-0203 Fluid is a release agent that in most cases provides a heat-stable film that does not carbonize at temperatures that quickly destroy many organic mold release agents.

HOW TO USE

Auto/Home Care:

Incorporate into products by adding 0.5-5.0% to the aliphatic hydrocarbon solvent phase by low shear mixing.

In applications where a water emulsion of XIAMETER OFX-0203 Fluid is preferable to an organic solvent solution, then use of *Dow Corning*® 22857 Emulsion is recommended. This emulsion is described in a separate information sheet.

Application Methods Silicone Fluids and Release Applications:

XIAMETER OFX-0203 Fluid should can be diluted with solvent prior to use. A common dilution ratio is 100 parts solvent to one part fluid. However, tests should be conducted under actual production conditions to determine the most suitable concentration and frequency of application for specific uses. Suitable diluents include most aliphatic and aromatic hydrocarbons and chlorinated solvents. The diluted solution is easily applied by wiping, brushing or spraying.¹

¹Flamability and toxicity should be important considerations in the choice of the solvent. Always provide adequate ventilation. Follow precautions on solvent container label.

This product should be evaluated as a dilute solution under production conditions if possible. A good starting point is a 1% solution. Tests can then be run at higher and lower concentrations to ascertain which is best.

Breaking in the surface of new or freshly cleaned molds is best done by applying a light coat of undiluted fluid and running through one or two heat cycles with no rubber or plastic present. After excess fluid is wiped from the surface, the mold is ready for use.

For applications where a water emulsion of XIAMETER OFX-0203 Fluid is preferable to an organic solvent solution, *Dow Corning*® 290 Paintable Release Agent or *Dow Corning*® 2418 Release Emulsion is available.

Surface Preparation

In all cases, surfaces that are to be finished should be free of dirt, oil and grease. To obtain optimum coverage, adhesion and appearance, follow the recommended chemical or physical surface preparation before applying various finishes.

Release coatings made with XIAMETER OFX-0203 Fluid show good compatibility with many enamels and lacquers.

In tests, paints have been successfully applied directly over a light smear of XIAMETER OFX-0203 Fluid. These tests deliberately skipped cleaning the smeared surface before painting. The success of these tests, however, should not encourage users to discontinue standard procedures prior to painting. (Ref. report no. 1966-I0030-2924 and 1967-I0245-2).

The success of these tests should not encourage users to discontinue standard cleaning procedures prior to painting.

For applications where a water emulsion is preferred, then use of *Dow Corning* 290 Paintable Release Agent or *Dow Corning* 2418 Release Emulsion are recommended. These emulsions are described in separate information sheets.

The chemical or physical surface preparation recommended before applying various finishes should be followed to obtain optimum coverage, adhesion and appearance.

PRODUCT SAFETY INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL, ENVIRONMENTAL, AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE XIAMETER WEB SITE AT WWW.XIAMETER.COM.

XIAMETER OFX-0203 Fluid will freeze, so adequate precautions should be taken.

STORAGE

Product should be stored at or below 25°C/77°F in original, unopened containers. The most up-to-date shelf life information can be found on the XIAMETER Web site in the Product Detail page under Sales Specification.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. Not intended for human injection. Not intended for food use.

SHIPPING LIMITATIONS

None.

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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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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