

# XIAMETER<sup>®</sup> MHX-1107 Fluid 20CST and 30CST

## Polymethylhydrogensiloxane

### FEATURES

- Colorless
- Essentially non-toxic
- Cures to give a durable film
- Cure times and temperatures can be controlled
- Effective at addition rates down to 0.2%
- Can be diluted in solvents in order to improve dispersion

### APPLICATIONS

- Hydrophobing treatment of plasterboard and plaster blocks
- Treatment for powders and granular materials to make them water repellent and free flowing, and to reduce caking

### TYPICAL PROPERTIES

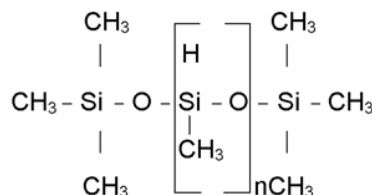
Specification Writers: These values are not intended for use in preparing specifications. Please contact your local XIAMETER<sup>®</sup> sales representative prior to writing specifications on this product.

Test	Unit	Value of XIAMETER <sup>®</sup> MHX-1107 20CST	Value of XIAMETER <sup>®</sup> MHX-1107 30CST
Color		Water white	Water white
Active ingredient	%	100	100
Specific gravity at 25°C/15.6°C		1.002	1.002
Viscosity at 25°C	mm <sup>2</sup> /s	18-24	20-40
Flash point – open cup	°C	>= 150	93
Acid number		<=0.01	<=0.01
SIH AS H	%	1.55-1.66	1.40-1.75

### DESCRIPTION

Chemically, XIAMETER<sup>®</sup> MHX-1107 Fluid has the formula:

#### Polymethylhydrogensiloxane



Upon heat curing, the polymers crosslink at the sites of hydrogen atoms to form a resinous release coating.

### HOW TO USE

XIAMETER MHX-1107 Fluid is usually applied from dilute solution. Solutions are prepared by diluting XIAMETER MHX-1107 Fluid with hydrocarbon solvents, acetone or methyl ethyl ketone (see Product Safety Information), and stirring the mixture gently until uniform. The extent of dilution will depend on the surface to be treated and surface properties desired.

#### Curing

Coatings of XIAMETER MHX-1107 Fluid are usually heat cured to develop release properties or water repellency.

Curing temperatures range from 120°C to 175°C. Curing times are much shorter at higher curing temperatures.

Catalysts are often used to accelerate cure. Four suitable catalysts in order of increasing activity include zinc octoate (22% zinc), iron octoate (6% iron), dibutyl tin dilaurate, and tin octoates (28% tin). A typical catalyst concentration is one part catalyst, as supplied, to 10 parts of XIAMETER MHX-1107 Fluid. Concentrations of the more active catalyst must not be increased to the point that bath life becomes too short.

The actual curing time will vary with the surface being treated as well as with the catalyst. In a typical application, uncatalyzed films of XIAMETER MHX-1107 Fluid can be cured in 3 to 4 hours at 120°C or in 10 to 15 minutes at 150°C.

Films applied from dilute solutions catalyzed with one part iron octoate (6% iron) to 10 parts of XIAMETER MHX-1107 Fluid will cure in 3 minutes at 120°C, 1.5 minutes at 150°C, or 50 seconds at 175°C.

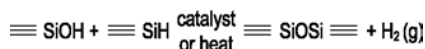
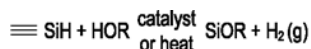
## PRODUCT SAFETY INFORMATION

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 MHX-1107 Fluid and systems containing XIAMETER MHX-1107 Fluid may evolve hydrogen gas under certain conditions.

**Reactions leading to the formation of hydrogen gas include:**



Where R= alkyl, aryl, H, metal. Catalysts: Bases, acids, heavy metal salts, polar ionic salts, certain transition metal salts. When using solvents avoid heat, sparks and open flame. Always provide adequate ventilation. Obtain and follow handling precautions from the solvent supplier.

## STORAGE

Product should be stored at or below 60°C (140°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.

## LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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