

## Product Data

# Silicone Dryer FRD-10

FRD-10 is a silicone precision dryer for optical lens, metals, ceramics, plastics and so on. Volatile siloxane, the main component of FRD-10, is certified as a desirable detergent for SNAP (Significant New Alternative Policy) of ODS (Ozone Depleting Substance) replacement and exempt from VOC regulations by US EPA.

### KEY FEATURES

- ◆ No concern for ozone destruction and global warming
- ◆ Drying completely at room temperature
- ◆ Low Heat of vaporization: excellent drying performance
- ◆ Low Viscosity & surface tension: good penetration to fine pitch

### APPLICATIONS

- ◆ Drying of metal parts, electrical parts, automotive parts, optical parts, etc.
- ◆ Removal of silicone fluids and greases

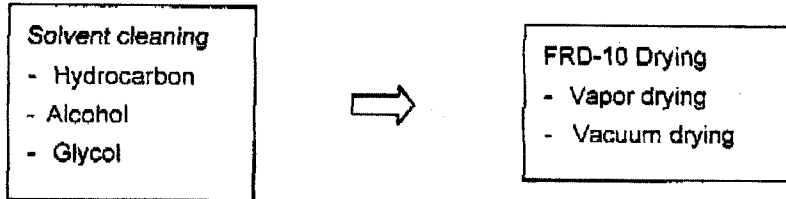
### TYPICAL PROPERTY DATA

PROPERTIES		
Appearance		Transparent
Specific gravity (25°C)		0.762
Viscosity (25°C)	mPa·s	0.5
Boiling point	°C	100
Freezing point	°C	-59
Flash point	°C	-1
Surface tension (25°C)	mN/m	14.8
Heat of vaporization	J/g	213
Evaporation density	g/dm <sup>3</sup>	5.3
Explosion limit	Lower vol%	1.25
	Upper vol%	18.6
ODP		0
GWP		No apprehension

Typical property data values should not be used as specifications. Assistance and specifications are available by contacting GE Toshiba Silicones Commercial Office.

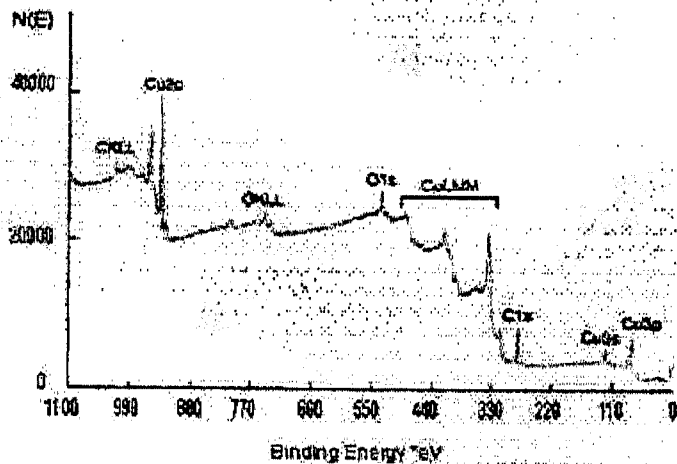
**DRYING PROCEDURE**

Drying after solvent cleaning



**Si RESIDUE**

Following shows the result of ESCA analysis of the copper surface after drying with FRD-10. No Si element found on the surface means no Si left after FRD-10 drying.



**COMPATIBILITY**

PLASTICS	WEIGHT CHANGE*	APPERANCE CHANGE
Phenol resin	○	No change
Polycarbonate	○	No change
6-Nylon	○	No change
PPS	○	No change
Acryl resin	○	No change
Polyacetal	○	No change
Polyethylene	○	No change
Polystyrene	○	No change
Polypropylene	○	No change

ABS	○	No change
PBT	○	No change
PET	○	No change
Polyvinyl chloride	○	No change

\*O: -1~+1%

Test specimen: 2x25x80mm

Testing method: Weight change and appearance are investigated, after a test piece is dipped in the test liquid held at 50°C for 2hours.

A preliminary test should always be conducted before use.

### HANDLING AND SAFETY

- ◆ Wear eye protection and protective gloves as required while handling the product
- ◆ Maintain adequate ventilation in the work place at the times.
- ◆ Avoid any source of ignition.

### STORAGE

- ◆ Store in a dark, cool place out of direct sunlight.
- ◆ Keep out of the reach of children.

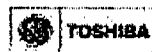
### PACKAGING

15kg drum available

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### FOR INDUSTRIAL USE ONLY

*It is the responsibility of the user to determine the suitability of any GE Toshiba Silicones product for any intended application. NEVER USE ANY GE TOSHIBA SILICONES PRODUCT FOR IMPLANTATION OR INJECTION INTO THE HUMAN BODY. Specifications are available by contacting GE Toshiba Silicones. Typical property data values should not be used as specifications. Inasmuch as GE Toshiba Silicones Company, Ltd. has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the suitability of the material for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any GE Toshiba Silicones patent covering use or as recommendations for use of such materials in the infringement of any patent. Material Safety Data Sheets are available upon request from GE Toshiba Silicones. The contents of this catalog are subject to change without notice. No part of this data may be reproduced without the prior approval of GE Toshiba Silicones.*



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