



**SM2154
Silicone Emulsion**

PRODUCT DESCRIPTION

SM2154 is an emulsion of an alkyl functional silicone polymer in water. This emulsion may be used where parts are to be painted, metallized or bonded.

KEY PERFORMANCE PROPERTIES

- Good lubricity
- Easy release
- High-temperature stability of silicone polymer
- Low volatility of silicone polymer
- Chemically inert
- Water dispersible

TYPICAL PRODUCT DATA

Property	Value
Emulsifier Type	Nonionic
Base Oil	SF8843
Silicone Content %	50
Viscosity of Contained Oil @25C(77F) (cstks)	1,500
Density lbs/gal	8.2
Total Solids %*	53-56
Color	white to lt. yellow
Diluent	water
Storage Stability(months)	12

*%Total solids:% of nonvolatile material in the emulsion

SPECIFICATIONS

Typical property data values should not be used as specifications. Assistance and specifications are available by contacting GE Silicones at 800-255-8886.

APPLICATIONS

MOLD RELEASE

- tires
- rubber & plastic (Refer to GE bulletin CDS#5269)
- paintable releases
- foundry release

TEXTILES (Refer to GE bulletin CDS#5234)

- fiber & thread lubricants

PLASTIC ADDITIVES

- extruded film

INSTRUCTIONS FOR USE

% TO USE

Normally used at a concentration of 0.2 to 2.5% silicone. A 2.0% silicone concentration is an excellent starting point for evaluating these products in new applications.

FINAL PROPERTIES

-Upon evaporation the product will form a thin film

PAINTABLE RELEASE AGENTS

SM2154 emulsion may be used where parts are to be painted, metallized or bonded.

SM2154 emulsion is dilutable with water and is an effective release agent at 0.5 to 2.5% silicone. It, like the other emulsions products, is an excellent choice for lamination or lay-up work where secondary contamination is an important criterion.

Rubber, plastic and metal parts release with GE paintable silicone release agent can be painted with many types of paint after routine cleaning. As is normal with any oil or grease, an extremely heavy application of silicone will tend to reduce paint adhesion and produce some surface defects. Very light, casual contamination in most instances need not be cleaned off for good paintable results.

**MARKETED BY
HARWICK STANDARD
DISTRIBUTION CORPORATION
60 S. Selberling Street • Akron, Ohio 44305**

HARD WATER DILUTION

Silicone emulsions are generally stable in hard water. However, should the water supply be of 200 ppm hardness or higher, softened water or boiler condensate is recommended as a diluent.

Dilution of the emulsion with water may result in the need for additional bacteriostat/fungistat to counteract possible microbial activity. It is recommended that each user evaluate the diluted emulsion before putting it into use. Depending on the specific applications and dilution level, it may be necessary to use additional bacteriostat/fungistat in the diluted product.

Silicone emulsions are shipped with sufficient biocide for preservation. Shipments of emulsions with sufficient biocide for all dilution levels in all applications is not feasible. Therefore, it is recommended that each user evaluate whether it is necessary to add additional biocide to diluted products.

FREEZE/THAW STABILITY OF GE SILICONE EMULSIONS

GE Silicones' emulsions are divided into two groups based on freeze/thaw stability.

Group I consists of silicone emulsions capable of going through repeated freeze/thaw cycles, i.e., if a container of emulsion is frozen and then properly thawed, there should be no detrimental effect relative to the subsequent performance of the product. "Properly thawed" means that the emulsion has completely melted (at less than 66C/150F) to a liquid state before any agitation of the product is attempted.

These comments apply only to the emulsion itself. As with any water-containing material, damage to the container may result from expansion of the liquid during freezing. Containers should therefore be inspected prior to thawing to insure that no leakage of liquid has or will occur.

If the sample is of uniform appearance, the emulsion may be suitable for use. If the emulsion is not uniform, it probably will not be suitable for use.

It is recommended that all silicone emulsions are shipped in heated vans. All precautions to prevent freezing must be made in the handling, transferring and shipping of emulsions.

Group I: Potentially Stable

SM2059	SM2154	SM2169
SM2068A	SM2112	SM2159
SM2162	SM2138	SM2658
SM2163	SM2101	SM2765/SM2725
SM2140	SM2167	

HANDLING AND SAFETY

Material Safety Data Sheets are available upon request from GE Silicones. Similar information for solvents and other chemicals used with GE products should be obtained from your suppliers. When solvents are used, proper safety precautions must be observed.

STORAGE WARRANTY PERIOD

The warranty period is 12 months from date of shipment from GE Silicones if stored in the original unopened container at above freezing temperatures. Recommended extended storage container conditions: 4 to 27C(40 to 80F).

AVAILABILITY

SM2154 emulsion may be ordered from GE Silicones, Waterford, New York 12188, the GE Silicones Sales office nearest you or an authorized GE silicone product distributor.

GOVERNMENT REQUIREMENT

Prior to considering use of a GE Silicones' product in fulfilling any government requirement, please contact the Government and Trade Compliance office at 413-448-4624.

MARKETED BY
**HARWICK STANDARD
DISTRIBUTION CORPORATION**
60 S. Seiberling Street • Akron, Ohio 44305

Americas

GE Silicones World Headquarters

GE Silicones
260 Hudson River Road
Waterford, New York 12188

Technical Assistance:

800-255-8886

Customer Service:

800-332-3390

GE Canada, Inc.
2300 Meadowvale Blvd.
Mississauga, Ontario
Canada L5N 5P9

Telephone:

800-668-4644

Customer Service:

800-332-3390

GE Silicones Latin America

Av. Prolongacion Reforma
#490 - 4 To. Piso
Col. Santa Fe

Mexico, D.F.C.P. 01207

Telephone: 525-257-6095

Fax: 525-257-6094

Europe

GE Bayer Silicones Headquarters

GE Bayer Silicones GmbH & Co KG
1 Falkenberg
D-40699 Erkrath

Germany

Telephone: 49-2104-9430

Fax: 49-2104-943111

GE Bayer Silicones GmbH & Co KG
1 Plasticlaan
P.O. Box 117

4600 AC Bergen op Zoom
The Netherlands

Telephone: 31-16429-2291

Fax: 31-16429-2708

GE Bayer Silicones GmbH & Co KG

15, Olaf Palme-Strasse

D-51368 Leverkusen

Germany

Telephone: 49-21430-31922

Fax: 49-21430-28435

Pacific

GE Silicones Hong Kong

GE Plastics
Room 1008, Tower 1
The Gateway

25 Canton Road

Tsimshatsui, Kowloon

Hong Kong

Telephone: 852-2629-0888

Fax: 852-2629-0803

Toshiba Silicone Company
Roppongi 6-2-31, Minato-Ku
Tokyo 106-8550, Japan
Telephone: 81-3-3479-3918
Fax: 81-3-3479-2944

GE Silicones Korea
c/o Dongyang Silicones Co., Ltd.

GEPK Bldg. 4th Floor

231-8 Nonhyun-dong

Kangnem-Ku

Seoul, Korea 135-010

Telephone: 82-2-518-2626

Fax: 82-2-517-2646

LIMITED WARRANTY

GE Silicones warrants that its products will conform to GE Silicones' internal specifications at the time of application or use, provided that the product is stored in accordance with GE Silicones' recommendations and used or applied before the earliest of (1) any "Use Before Date" indicated on the product package, (2) one year from date of shipment by GE Silicones, or (3) expiration of such other period or recommended storage time stated in GE Silicones' product literature for such product. If notified in writing of a claim within six months of a product's use or application, GE Silicones will, at its option, replace, or refund the purchase price of, any GE Silicones product which does not satisfy the foregoing warranty.

THE FOREGOING SHALL CONSTITUTE THE SOLE AND EXCLUSIVE REMEDY FOR DEFECTS IN, OR FAILURE OF, ANY PRODUCT, AND THE SOLE AND EXCLUSIVE LIABILITY OF GENERAL ELECTRIC COMPANY THEREFOR. THE WARRANTY STATED ABOVE IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

LIMITATION OF LIABILITY: GE Silicones shall in no event, whether the claim is based on warranty, contract, tort, strict liability, negligence or otherwise, be liable for incidental or consequential damages, or for any other damages in excess of the amount of the purchase price.

NOTE: For many products, GE Silicones may be able to offer a more extensive, application specific warranty. For further information, contact your GE Silicones field representative.



MARKETED BY
**HARWICK STANDARD
DISTRIBUTION CORPORATION**

60 S. Seiberling Street • Akron, Ohio 44305

GE Silicones

5431 (10/98)

General Electric Company, U.S.A. is not connected with the English company of a similar name.

© Copyright 1998 General Electric Company

Printed on recycled paper.