

SECTION 1. COMPANY IDENTIFICATION

COMPANY IDENTIFICATION

MANUFACTURER'S NAME: Shin-Etsu Chemical Co., Ltd.
ADDRESS: 6-1, 2-Chome, Ohtemachi, Chiyodaku, Tokyo, JAPAN
EMERGENCY TELEPHONE NUMBER:

330-630-9860 (Shin-Etsu Silicones of America, Inc.)
800-424-9300 (CHEMTREC) (24hrs) (Washington, D.C. USA)
TELEPHONE NUMBER FOR INFORMATION:

03-3246-5121 (Tokyo, JAPAN)

330-630-9860 (Shin-Etsu Silicones of America, Inc.)

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BASE NO 2

PRODUCT NAME :

PRIMER SF-1

PRODUCT CLASSIFICATION:

Silicone Primer

SECTION 2. COMPOSITION

SINGLE OR MIXTURE:

Mixture

CHEMICAL IDENTIFICATION:

Solution of alkoxysilane mixture

HAZARDOUS COMPONENT(S)/(CAS No.):

Aliphatic hydrocarbons/

(8032-32-4) [Flammable Liquid] : ca.85 %

Tetraethoxysilane/(78-10-4) [Flammable Liquid] : ca.10 %

(See Section 8 of this MSDS for Exposure guideline)

SECTION 3. HAZARDS IDENTIFICATION

HAZARDS CLASSIFICATION:

Flammable Liquids (based on IMO)

Flammable Liquid (based on DOT)

FIRE AND EXPLOSION:

Highly flammable and explosive hazard

POTENTIAL HEALTH EFFECT:

INHALATION : May cause dizziness, headache, nausea and
mental confusion.

SKIN contact : May cause skin irritation. Prolonged skin contact may cause dermatitis.
EYES contact : Causes eyes irritation.
INGESTION : Harmful

SECTION 4. FIRST AID MEASURES

INHALATION : Remove to fresh air. If not breathing or difficult, give artificial respiration or oxygen. Call a physician.
SKIN contact : Remove product from skin with dry cloth or towel, and wash exposed area with detergent.
EYES contact : Immediately flush with plenty of water for at least 15 minutes and promptly call a physician.
INGESTION : Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Call a physician immediately.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT(method used) :
-5 degrees C (closed cup)
FLAMMABLE LIMITS :
[Aliphatic hydrocarbons] LOWER: 1.1% UPPER: 6.7%
EXTINGUISHING MEDIA :
Foam, dry chemical or carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURE :
Use supplied breathing air and protective clothing.
Flammable, owing to the solvent.
UNUSUAL FIRE AND EXPLOSION HAZARD :
Solvent vapors form explosive mixtures with air.
Vapors may travel considerable distance to source of ignition and flash back.

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED :

Shut off all ignition sources.
Wear appropriate protective equipment.
Contain the spill or leak.
Collect on absorbent material.

SECTION 7. HANDLING AND STORAGE

PRECAUTION TO BE TAKEN IN HANDLING AND STORING :

Keep container closed when not in use.
Store in a cool place.
Keep away from heat, sparks and flame.
Use only with adequate ventilation.
Do not inhale vapors.
Avoid contact with eyes, skin and clothing.
Static electricity may accumulate and cause a fire hazard.
Keep out of reach of children.
* * * * * Information about the emptied container * * * * *
Do not re-use this container.
This container will be very hazardous when emptied.
Residues will be explosive or flammable.
Keep away from heat, sparks and flame.
Do not puncture or cut this container, and do not weld on or near this container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ACGIH TLV-TWA : ca.300ppm ; STEL ca.400ppm
[Aliphatic hydrocarbons]
ACGIH TLV-TWA : 10ppm,
OSHA PEL : 8H TWA 100ppm [Tetraethoxysilane]
ACGIH TLV-TWA : 1000ppm,
OSHA PEL : 8H TWA 1000ppm
[Ethanol ; decomposed product]
ACGIH TLV-CL : 50ppm(SKIN),
OSHA PEL : 8H TWA 100ppm [1-Butanol ; decomposed product]
RESPIRATORY PROTECTION(specific type) :
Approved respirator

VENTILATION:

LOCAL EXHAUST: Required

MECHANICAL(general) : Adequate ventilation system

SPECIAL: Unknown

OTHER: Unknown

PROTECTIVE GLOVES:

Plastic film or rubber gloves

EYE PROTECTION:

Protective goggles or glasses

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Safety shower and eyewash equipment

WORK/HYGIENIC PRACTICES:

Keep away from heat, sparks and flame.

Avoid breathing vapor.

Avoid contact with eyes and skin.

Wash hands and eyes, and gargle after handling.

BOILING POINT:

98.4 degrees C (Aliphatic hydrocarbons)

VAPOR PRESSURE:

40mmHg (20 degrees C) (Aliphatic hydrocarbons)

VAPOR DENSITY(a1r=1):

3.5 (Aliphatic hydrocarbons)

SPECIFIC GRAVITY:

0.67 (25 degrees C)

MELTING POINT:

Not applicable

EVAPORATION RATE:

>1 (Butyl Acetate=1) [Aliphatic hydrocarbons]

SOLUBILITY IN WATER:

Not soluble

APPEARANCE (color) :

Yellow, transparent

APPEARANCE (Form) :

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Solvent odor

STABILITY:

Stamps

CONDITION TO AVOID:

Active ingredients are hydrolyzed with water, but no hazard. INCOMPATIBILITY (material to avoid):

For the above-mentioned reason, avoid contact with water, acids and alkalis.

HAZARDOUS DECOMPOSITION OR BY-PRODUCT:

Ethanol (Flammable Liquid)

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITION TO AVOID:

None

SECTION 11. TOXICOLOGICAL INFORMATION

SKIN IRRITATION:

SKIN-RABBIT : 500mg/24hr MODERATE (Tetraethoxysilane)

EYE IRRITATION;

EYE-RABBIT : 500mg/24hr MILD (Tetraethoxysilane)

ACUTE TOXICITY (LD50):

LD50 (Oral/Rat) : 6.27g/kg [Tetraethoxysilane]

ACUTE TOXICITY(LC50):

LC50(Inhalation/Mouse): 1900ppm/15min

[Aliphatic hydrocarbons]

CHRONIC TOXICITY:

No information is available.

CARCINOGENICITY:

NTP:Not listed, IARC:Not listed, OSHA REGULATED:Not listed

OTHER INFORMATION:

None

SECTION 12. ECOLOGICAL INFORMATION

BIODEGRADATION:

No information is available.

BIOACCUMULATION:

No information is available.

AQUATIC TOXICITY:

LC50: 2940/(220-270)mg/l(goldfish) [Aliphatic hydrocarbons]

OTHER INFORMATION:

None

SECTION 13. DISPOSAL CONSIDERATIONS

Can be burned in chemical incinerator equipped with

afterburner and scrubber but exert extra care in igniting

as this product is very flammable.

Do not dispose of the emptied container unless the contents

have been completely removed and container has been flushed

with a clean neutral solvent and then dried up.

Do not dispose the emptied container unlawfully.

Observe all federal, state, and local laws.

SECTION 14. TRANSPORT INFORMATION

<IMO INFORMATION>

ID No.:

UN 1133

CLASSIFICATION AND CLASS:

Flammable Liquids / Class 3.2

PACKAGING GROUP:

II

PROPER SHIPPING NAME:

Adhesive

TECHNICAL SHIPPING NAME:

Contains Aliphatic Hydrocarbon Solvent

MARINE POLLUTANT:

None

PRODUCT NAME: PRIMER SF-1

MSDS NO: EU-06-70001434



<DOT INFORMATION>
ID NO.(49CFR 172.101):
UN 1133
HAZARD CLASS(49CFR 172.101):
3, Flammable liquid
PACKING GROUP(49CFR 172.101):
II
PROPER SHIPPING NAME(49CFR 172.101):
Adhesives, containing a flammable liquid
DOT REPORTABLE QUANTITY(49CFR 172.101, APP.):
HAZARD SUBSTANCE(S) NAME / (CAS No.), CONTENTS AND RQ
Not applicable

SECTION 15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT(TSCA) STATUS:

Listed on the TSCA Inventory.
This product contains alkoxysilane that has
restriction on TSCA. Therefore this product can be imported
in the USA under only the following condition.
**The concentration of this substance at surface water
must be below 10ppb.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986(SARA)
TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic
chemical(s) that appear in section 313 of the emergency planning
and community Right-To-know Act of 1986 and 40 CFR 372.
This information must be included in all MSDS's that are copied
and distributed for the material.

The toxic chemical(s) contained in this product are:
CHEMICAL NAME/(CAS No.) AND CONTENTS
** None **

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California
Proposition 65 Chemical(s) under the statute.
The California Proposition 65 Chemical(s) contained in this
product are:

CHEMICAL NAME/(CAS No.) AND CONTENTS
** None **

SECTION 16. OTHER INFORMATION

For Industrial Use Only

Shin-Etsu

MSDS NO: EU-06-70001434

PRODUCT NAME: PRIMER SF-1

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This materials safety data sheet is offered solely for your information, consideration and investigation.
The data described in this MSDS consist of data on literature, our acquisitional data and analogical inference by data of similar chemical substance or product.
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