MATERIAL SAFETY DATA SHEET

Version: 1.12 10/23/2013

SS4004P Silicone primer solution

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: Momentive Performance Materials LLC

260 Hudson River Road Waterford NY 12188

Revised: 10/23/2013

Prepared by Product Safety Team 1-800-424-9300 MSDS Contact 1-888-443-9466

Information 4information@momentive.com

Chemical Family/Use: Silicone Primer

Formula: Silicone resin in solvent(s)

HMIS

Health: 2 Flammability: 3 Reactivity: 1

NFPA

Health: 2 Flammability: 3 Reactivity: 1

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER! Flammable liquid and vapor. Irritating to eyes, respiratory system and skin. May cause adverse liver, kidney, and CNS effects.

Form: Liquid Color: Red Odor: Pungent

POTENTIAL HEALTH EFFECTS

INGESTION

Harmful if swallowed. Irritation of the mouth, throat, and stomach. Aspiration hazard if swallowed - can enter lungs and cause damage. Causes vomiting, nausea, and diarrhea.

SKIN

May be absorbed through the skin and contribute to the symptoms listed under "Ingestion". May cause skin irritation.

INHALATION

Harmful if inhaled. Causes irritation of the mouth, nose, and throat. High concentrations of vapors may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Can cause unconsciousness if inhaled. Massive inhalation immediately dangerous to life and health.

EYES

Visual disturbances including blurred vision Causes redness and tearing. Risk of corneal damage.



Version: 1.12 10/23/2013

SS4004P Silicone primer solution

MEDICAL CONDITIONS AGGRAVATED

Central nervous system disorders. Eye disorders. Skin disorders and allergies.

SUBCHRONIC (TARGET ORGAN)

Dermatitis; Central nervous system damage.; - anemia; Effect on adrenal glands; Over exposure may result in cardiac abnormality.; This product contains a component that is tumorigenic.; Laboratory rats exposed to prolonged high xylene concentrations suffered hearing loss. Rats exposed to xylene vapor during pregnancy have shown embryo/fetotoxic effects. Mice exposed orally to doses of xylene which produced maternal toxicity have also shown embryo/fetotoxic effects.

; This product contains a component which is considered a teratogen or embryotoxin under the Canadian WHMIS act.

CHRONIC EFFECTS / CARCINOGENICITY

This product or one of its ingredients present at 0.1% or more is listed as a carcinogen or potential carcinogen by NTP, IARC or OSHA X Yes ____ No

In a National Toxicology Program (NTP) 2-year study of "Ethylbenzene in rats and mice, there was clear evidence of "carcinogenic activity in male rats, based on increased incidence of renal tubule neoplasms and testicular adenoma. There was some evidence of carcinogenic activity in female rats, based on "increases of renal tubule adenoma. In mice, there was also some evidence of carcinogenic activity based on increased incidence of alveolar/bronchiolar neoplasms and hepatocellular neoplasms and females, respectively."

ROUTES OF EXPOSURE

Dermal; Eye; Oral

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS-No.	WGT. %	
A. HAZARDOUS			
n-BUTANOL	71-36-3	1 - 5 %	
Acetone	67-64-1	10 - 30 %	
Xylene Isomers Mixture	1330-20-7	10 - 30 %	
Ethylbenzene	100-41-4	5 - 10 %	
2-Propanol	67-63-0	10 - 30 %	
Tetraethyl Silicate	78-10-4	1 - 5 %	
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MATERIAL SAFETY DATA SHEET

Version: 1.12 10/23/2013

SS4004P Silicone primer solution

B. NON-HAZARDOUS

Polyalkylsiloxane 68037-74-1 10 - 30 %

4. FIRST AID MEASURES

INGESTION

Do NOT induce vomiting. Do not give victim anything to drink if he is unconscious. Seek immediate medical attention. Do not induce vomiting.

SKIN

Wash with soap and water.

INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

EYES

Get medical attention.

5. FIRE-FIGHTING MEASURES

FLASH POINT:ca. -12 °C; 10 °FIGNITION TEMPERATURE:> 343 °C; 649 °FFLAMMABLE LIMITS LEL:2.10 %(V).FLAMMABLE LIMITS UEL:12.00 %(V).

SENSITIVITY TO MECHANICAL IMPACT: No

SENSITIVITY TO STATIC DISCHARGE

Sensitivity to static discharge is expected; material has a flash point below 200 F.

EXTINGUISHING MEDIA

Carbon dioxide, Alcohol foam.

SPECIAL FIRE FIGHTING PROCEDURES

Extremely flammable., Pressure inside container is increased when heated, and may cause explosion., Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.



Version: 1.12 10/23/2013

SS4004P Silicone primer solution

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Wear proper protective equipment as specified in the protective equipment section. Warn other workers of spill. Keep unauthorized personnel away. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Use personal protective equipment. Keep up-wind to avoid fumes.

STORAGE

Keep away from heat, sparks and open flame. Keep container tightly closed. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Eye wash facilities and emergency shower must be available when handling this product.

RESPIRATORY PROTECTION

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

EYE AND FACE PROTECTION

Monogoggles; Face shield

OTHER PROTECTIVE EQUIPMENT

Wear suitable protective clothing and eye/face protection.

Exposure Guidelines

Component	CAS-No.	<u>Source</u>	<u>Value</u>
n-BUTANOL	71-36-3	ACGIH, Ceiling	50 ppm; 152 mg/m3
n-BUTANOL	71-36-3	ACGIH, SKIN_DES	Can be absorbed through the skin.



Version: 1.12 10/23/2013

SS4004P Silicone primer solution

n-BUTANOL	71-36-3	OSHA Z1, PEL	100 ppm; 300 mg/m3
n-BUTANOL	71-36-3	ACGIH, TWA	20 ppm
Ethylbenzene	100-41-4	ACGIH, TWA	20 ppm
Ethylbenzene	100-41-4	OSHA Z1, PEL	100 ppm; 435 mg/m3
2-Propanol	67-63-0	OSHA Z1, PEL	400 ppm; 980 mg/m3
2-Propanol	67-63-0	ACGIH, TWA	200 ppm
2-Propanol	67-63-0	ACGIH, STEL	400 ppm
2-Propanol	67-63-0	ACGIH,	Listed.
2-Propanol	67-63-0	OSHA Z1,	Listed.
Xylene Isomers Mixture	1330-20-7	OSHA Z1, PEL	100 ppm; 435 mg/m3
Xylene Isomers Mixture	1330-20-7	ACGIH, TWA	100 ppm
Xylene Isomers Mixture	1330-20-7	ACGIH, STEL	150 ppm
Tetraethyl Silicate	78-10-4	ACGIH, TWA	10 ppm
Tetraethyl Silicate	78-10-4	OSHA Z1, PEL	100 ppm; 850 mg/m3

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°C):

VAPOR PRESSURE (20 C) (MM HG):

VAPOR DENSITY (AIR=1):

FREEZING POINT:

Not applicable

No data available.

< -34 °C; -29 °F

PHYSICAL STATE: Liquid
ODOR: Pungent
Color: Red
EVAPORATION RATE (BUTYL ACETATE=1): > 1
SPECIFIC GRAVITY: ca. 0.80

DENSITY: ca. 0.855 g/cm3

ACID / ALKALINITY (MEQ/G): ca. 0.12 pH: Not applicable solubility in WATER (20 C): hydrolyses

SOLUBILITY IN ORGANIC SOLVENT (STATE Soluble, Aromatic Solvent

SOLVENT):

VOLATILE ORGANIC CONTENT: 56.0 %(m)



Version: 1.12 10/23/2013

SS4004P Silicone primer solution

VOC EXCL. H2O & EXEMPTS (G/L): 636 g/l

10. STABILITY AND REACTIVITY

STABILITY

Stable

HAZARDOUS POLYMERIZATION.

Hazardous polymerisation does not occur.

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS

Carbon dioxide: Silicon dioxide.

INCOMPATIBLE MATERIALS

Oxidizing agents.

CONDITIONS TO AVOID

Keep away from sources of ignition - No smoking. Keep away from sources of ignition - No smoking.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL

Remarks: No data available.

ACUTE DERMAL

Remarks: No data available.

ACUTE INHALATION

Remarks: No data available.

OTHER

Xylene has been shown to cause embryofetal toxicity and birth defects in laboratory animals, but only at doses which also cause maternal toxicity

,In higher concentrations, xylene is irritating to eyes and the respiratory tract, causes drowsiness and may cause central-nervous effects (headache etc.).

,Animals exposed repeatedly to high vapor concentrations (800 ppm or greater) of mixed xylenes suffered hearing loss.,Long-term exposure to xylene can cause chronic headache, chest pain, nausea, mental confusion, breathing difficulties, heartbeat abnormalities, numbness in limbs, fever, malaise, and fatigue. Skin irritation can occur. Repeated exposures at high concentrations may cause injury to the liver and kidneys.

, Isopropyl alcohol has produced fetotoxic effects and developmental effects in animals following oral administration., Isopropyl alcohol has produced developmental effects and reduced fetal weight in animals following inhalation exposure., Ethylbenzene has been shown to cause cancer in laboratory



Version: 1.12 10/23/2013

SS4004P Silicone primer solution

animals. The relevance of this finding to human is uncertain. IARC (International Agency for Research on Cancer) has classified ethylbenzene as a possible human carcinogen.

SENSITIZATION

No data available.

SKIN IRRITATION.

No data available.

EYE IRRITATION

No data available.

MUTAGENICITY

No data available.

OTHER EFFECTS OF OVEREXPOSURE

More severe effects if alcohol is consumed., Stimulants such as epinephrine may induce ventricular fibrillation., This product contains a component that showed unexpected acute toxicity to pregnant rabbits in a gavage study conducted by the Chemical Manufacturers Association. There were no unexpected toxic effects in pregnant rats exposed in the same study. No developmental effects were noted in either study. Effect levels in rabbits were several times the maximum exposure which would occur at the TLV for this component.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

No data available.

DISTRIBUTION

No data available.

CHEMICAL FATE

No data available.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Disposal should be made in accordance with federal, state and local regulations.

MATERIAL SAFETY DATA SHEET

Version: 1.12 10/23/2013

SS4004P Silicone primer solution

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: FLAMMABLE LIQUID, N.O.S.(Acetone, Isopropanol)

DOT HAZARD CLASS: 3
DOT LABEL (S): 3

UN/NA NUMBER: UN1993

PACKING GROUP: ||

IMDG SHIPPING NAME: FLAMMABLE LIQUID, N.O.S. (Acetone, Isopropanol)

CLASS: 3
IMDG-Labels: 3

UN NUMBER: UN1993 PACKING GROUP: II

EmS No.: F-E; S-E

IATA: FLAMMABLE LIQUID, N.O.S.(Acetone, Isopropanol)

CLASS: 3 ICAO-Labels: 3

UN NUMBER: UN1993

PACKING GROUP:

15. REGULATORY INFORMATION

Inventories

Australia Inventory of Chemical y (positive listing)

Substances (AICS)

Canada DSL Inventory y (positive listing) EU list of existing chemical y (positive listing)

substances

Japan Inventory of Existing & New y (positive listing)

Chemical Substances (ENCS)

China Inventory of Existing y (positive listing)

Chemical Substances

Korea Existing Chemicals y (positive listing)

Inventory (KECI)

Canada NDSL Inventory n (Negative listing)
Philippines Inventory of Chemicals y (positive listing)

and Chemical Substances

(PICCS)

TSCA list y (positive listing) On TSCA Inventory

New Zealand Inventory of n (Negative listing)

Chemicals

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

MATERIAL SAFETY DATA SHEET

CERCLA Reportable Quantity

Reportable quantity: 100 LBS

Version: 1.12 10/23/2013

SS4004P Silicone primer solution

US Regulatory Information

CERCLAReportable quantity 391 lbs

PRODUCT COMPOSITION Chemical Isopropyl Alcohol 67-63-0

SARA (311,312) HAZARD CLASS

Acute Health Hazard; Fire Hazard

SARA (313) CHEMICALS

67-64-1, Acetone. 67-63-0, Isopropyl Alcohol. 1330-20-7, Xylenes. 100-41-4, Ethylbenzene. 71-36-3, n-Butanol.

CALIFORNIA PROPOSITION 65

Warning! This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Canadian Regulatory Information

WHMIS CLASSIFICATION

B2 - Flammable liquid

D2A - Very Toxic Material Causing Other Toxic Effects

D2B - Toxic Material Causing Other Toxic Effects

16. OTHER INFORMATION

OTHER

C = ceiling limit NEGL = negligible
EST = estimated NF = none found
NA = not applicable UNKN = unknown
NE = none established REC = recommended

ND = none determined V = recommended by vendor

SKN = skin TS = trade secret R = recommended MST = mist

NT = not tested STEL = short term exposure limit

ppm = parts per million ppb = parts per billion

By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2). These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.



Version: 1.12 10/23/2013

SS4004P Silicone primer solution