



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Aquapel® Glass Treatment
Product ID: 0964
ISSUE DATE: 03/09/2009
EDITION NO.: 6

PPG Industries, Inc.
One PPG Place, Pittsburgh, PA 15272, USA
24-hour Emergency Telephone Number: 1-412-434-4515
For Product Information (8am-5pm Eastern time):
1-800-861-4999 (ARG Glass)

PREPARER: Product Safety, Glass

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Material/CAS Number</u>	<u>Percent</u>
NAPHTHA 64742-48-9	90 - 100

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION! Combustible. Causes eye irritation. May cause slight skin irritation. Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose and throat. May be harmful if swallowed. Keep away from heat, sparks, flames and other sources of ignition.

Precautions: Do not get in eyes, on skin, or on clothing. Do not breathe vapors. Use only with adequate ventilation. Ventilation must be sufficient to minimize employee exposure in the work area. Do not swallow. Wash thoroughly after handling. Remove and wash contaminated clothing before reuse. Do not eat, drink or smoke in work area.

4. FIRST AID MEASURES

INHALATION: Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

EYE/SKIN CONTACT: EYE: Remove contact lens and pour a gentle stream of warm water

through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary. SKIN: Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INGESTION: Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do Not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

5. FIRE-FIGHTING MEASURES

FLASH POINT: 147 °F (63 °C)

FLAMMABLE LIMITS IN AIR - LOWER (%): 1.2 (Naphtha)

FLAMMABLE LIMITS IN AIR - UPPER (%): 9.6 (Naphtha)

EXTINGUISHING MEDIA: Carbon Dioxide. Dry Chemicals. Foam.

SPECIAL FIREFIGHTING PROCEDURES: Firefighters should wear self-contained breathing apparatus and full protective clothing. Emits toxic fumes under fire conditions. Vapors may travel a considerable distance to source of ignition and flash back.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Provide maximum ventilation. Remove sources of ignition. Dike area to contain spill. Wear proper protective equipment. Maintain ventilation until all vapors have been eliminated. Recover spilled material on adsorbents, such as sand or vermiculite, and place in covered containers for reclamation or disposal. After all visible liquid has been removed, wash area of spill with plenty of soap and water and maintain ventilation until all vapors are eliminated. If area of spill is porous, remove as much earth and gravel, etc. as necessary and place in closed containers for disposal.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:

Store in a cool, dry, well-ventilated place. Store only in closed, properly labeled containers. Keep container closed when not in use. Keep away from heat, sparks, flames, direct sunlight, and other sources of heat. Do not store above 120° F (48° C). Store large quantities in buildings designed and protected for storage of NFPA Class IIIA combustible liquids. Do not use in poorly ventilated or confined spaces without proper respiratory protection. Electrically ground all containers, pumps and piping to avoid static electrical discharge. Vapors are heavier than air and will collect in low areas. Wear appropriate personal protective equipment when handling this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

8-hour Time Weighted Average (TWA); 15-minute Short-Term Exposure Limit (STEL)

OSHA: No occupational exposure limits have been established by OSHA for this product.

ACGIH: No occupational exposure limits have been established by ACGIH for this product.

ONTARIO: No occupational exposure limits have been established by Ontario for this product.

RESPIRATORY PROTECTION: Overexposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH-approved air purifying respirator with the appropriate chemical cartridges or a positive-pressure air-supplied respirator may also reduce exposure. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

VENTILATION: Use local exhaust or general room/dilution ventilation as appropriate to control employee exposures in the work place.

EYE AND FACE PROTECTION: Chemical safety goggles.

PROTECTIVE GLOVES: Neoprene or nitrile gloves. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on glove testing for materials with similar chemical structure.

OTHER PROTECTIVE EQUIPMENT: Boots, aprons, or chemical suits should be used when necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	135 °F (57 °C) Initial
Vapor Density (Air=1):	5.9 (Heavier) (Naphtha)
Specific Gravity (Water=1):	0.78
pH:	Not Applicable
FREEZING/MELTING POINT:	NA
SOLUBILITY (wt.% in water):	Insoluble
Bulk Density (kg/M3):	NA
VOLUME % VOLATILE:	100
VAPOR PRESSURE:	~0.8 mm Hg @ 20 °C
Evaporation Rate:	0.4 (Butyl acetate = 1)
HEAT OF SOLUTION:	NA
Physical State:	Liquid.
Odor:	PETROLEUM SOLVENT
COLOR:	Clear

10. STABILITY AND REACTIVITY

Stability: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (CONDITIONS/MATERIALS TO AVOID):

Moisture. Finely divided metals.

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:

Carbon monoxide. Carbon dioxide. Halogenated products.

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY STATUS: This product is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, ACGIH, or OSHA.

MEDICAL CONDITIONS AGGRAVATED: None known.

EFFECTS OF OVEREXPOSURE:

ACUTE:

Eye: Causes eye irritation. Skin: Skin contact may cause mild irritation. Inhalation: Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose and throat. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Ingestion: May be harmful if swallowed.

CHRONIC: The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

No data at this time.

ENVIRONMENTAL FATE:

No data at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

Proper Shipping Name: Combustible liquid, n.o.s.

NOS Technical Name: Naphtha

Hazard Class: COMBUSTIBLE LIQUID
UN Number: NA1993
Packing Group: III
USA-RQ, Hazardous Substance and Quantity: None
Marine Pollutant: None
Additional Information: USA Shipments Only - Combustible Liquid Bulk Restriction:
This material is regulated only in bulk (> 119 Gallons/450 L) sizes. Non-bulk (<=119 Gallons/450 L) shipments can be reclassified to "not regulated" for transportation.

15. REGULATORY INFORMATION

USA TSCA: All components of this product are listed on the TSCA Inventory.

EU EINECS: All components in this product are listed on EINECS or are covered under a low volume exemption.

CANADA DOMESTIC SUBSTANCES LIST (DSL): A component in this product is listed on the Canadian NDSL, but not the DSL.

AUSTRALIA AICS: A component of this product is the subject of a NICNAS Low Volume Chemical Permit. All other components are listed on AICS.

KOREA ECL: One or more components in this product are not listed on the Korean Existing Chemicals Inventory (KECI). This product can only be used in R&D applications.

JAPAN MITI (ENCS): One or more components in this product are not listed on the Japanese Existing and New Chemical Substances (ENCS) chemical inventory. This product can only be used in R&D applications.

PHILIPPINES PICCS: One or more components in this product are not listed on the Phillipines Inventory of Chemical and Chemical Substances (PICCS). This product can only be used in R&D applications.

CHINA IECSC: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or otherwise exempt.

SARA TITLE III:

SARA (311, 312) Hazard Class:
Acute Health Hazard. Fire Hazard.

SARA (313) Chemicals:
Not listed.

SARA Extremely Hazardous Substance:
Not listed.

CERCLA Hazardous Substance:
Not listed.

CANADA REGULATIONS (WHMIS): Class B3 - Combustible Liquids.

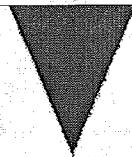
16. OTHER INFORMATION

The following has been revised since the last issue of this MSDS:

Date. Edition. Section 15 has been updated.

Previous revision date: 02/15/2006
Previous edition number: 005

NA = Not Available



CNS Material Request Form

1 Requester Information

2012-08-15
Date of Request

Ralph Sperling
Requester Name

White lab
Requester Group or Affiliation

617-3315144
Sperling@seas.harvard.edu
Requester phone, email

2 Material Information

<input checked="" type="checkbox"/> New Chemical	<input type="checkbox"/> Biological Material	<input type="checkbox"/> Nanomaterial
2.1 Material Name: Aquapel glass treatment		
2.2 Material Description: Fluorinated silane for treating glass, PDMS, silicone surfaces		

3 Describe Intended Use (attach sheets if required)

3.1 CNS Labs/Facilities where Material proposed to be used: SMCR

3.2 Container type and size: 10 ml syringe

3.3 Proposed date to bring into Laboratory: 2012-08-20

3.4 Description of proposed use including anticipated quantities: Treatment of glass, PDMS, silicone surfaces

3.5 Proposed date to remove from Laboratory: 2012-12-31

Requester Signature: <i>R. Sperling</i>	Date: 2012-08-15
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4 Assessment

To be completed by CNS / EHS staff

MSDS Received

<input type="checkbox"/> Approved	<input type="checkbox"/> Approved with special instruction	<input type="checkbox"/> Rejected
Reviewed By	Date	
Requester contacted by: Email Phone Fax	Contacted by:	Date:

Instructions on reverse