SECTION 1 - PRODUCT AND COMPANY INFORMATION

PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

EMERGENCY PHONE NUMBERS (412) 434-4515 (U.S.)
(24 hours/day):
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
0532-83889090 (China)

TECHNICAL INFORMATION: 1-800-441-9695 (8:00 am to 5:00 pm EST)

PRODUCT SAFETY/MSDS INFORMATION: (412) 492-5555 7:00 a.m. - 4:30 p.m. EST

Product ID: 77-9200 (0876)

PRODUCT NAME: WATER WHITE LACQUER SANDI

SYNONYMS: None

ISSUE DATE: 03/02/2007

EDITION NO.: 5

CHEMICAL FAMILY: Alkyd Cellulose

SECTION 2 - COMPOSITION INFORMATION

The following ingredient(s) marked with an "x" are considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations. If no ingredients are listed, then there are no U.S. OSHA and/or Canadian WHMIS hazardous ingredients in this product.

<table>
<thead>
<tr>
<th>Material/ CAS Number</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ISOBUTYL KETONE 108-10-1</td>
<td>15 - 40</td>
<td>X</td>
</tr>
<tr>
<td>TOLUENE 108-88-3</td>
<td>10 - 30</td>
<td>X</td>
</tr>
<tr>
<td>METHYL ETHYL KETONE 78-93-3</td>
<td>5 - 10</td>
<td>X</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL 67-63-0</td>
<td>1 - 5</td>
<td>X</td>
</tr>
<tr>
<td>ZINC STEARATE 557-05-1</td>
<td>0.1-1.0</td>
<td>X</td>
</tr>
<tr>
<td>XYLENES 1330-20-7</td>
<td>0.1-1.0</td>
<td>X</td>
</tr>
<tr>
<td>ETHYL BENZENE (As Stearates) 557-05-1</td>
<td>*</td>
<td>X</td>
</tr>
<tr>
<td>(As Zinc Cmpnds) 557-05-1</td>
<td>*</td>
<td>X</td>
</tr>
</tbody>
</table>

SECTION 3 - HAZARDS IDENTIFICATION

ACUTE OVEREXPOSURE EFFECTS

EYE CONTACT:
Causes severe eye irritation. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

SKIN CONTACT:
May cause moderate skin irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

SKIN ABSORPTION:
May be absorbed through the skin.

INHALATION:
Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat.

INGESTION:
Harmful if swallowed.

SIGNS & SYMPTOMS OF OVEREXPOSURE:
Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of hearing are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

CHRONIC OVEREXPOSURE EFFECTS

Avoid long-term and repeated contact.
Repeated exposure to vapors above recommended exposure limits (see Section 8) may cause irritation of the respiratory system and permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Prolonged exposure to an ingredient(s) in this product may cause kidney and/or liver damage. This product contains toluene. Toluene inhalation in animals (greater than 1500 ppm) and intentional inhalation of toluene-containing products by humans (e.g. glue) has caused adverse fetal development effects. High exposures to xylenes in some animal studies have been reported to cause health effects on the developing embryo and fetus. These effects were often at levels toxic to the mother. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

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. See Section 11, of this MSDS for a detailed list of chronic health effects information available on individual ingredients in this product.

SECTION 4 - FIRST AID MEASURES

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available.

EYE CONTACT:
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 CONTACT:
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.

INHALATION:
Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.
SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASHPOINT: 21 Degrees F ( -6 Degrees C)
FLASHPOINT TEST METHOD:
Pensky-Martens Closed Cup
UEL: Not Available.
LEL: 1.5
AUTOIGNITION TEMPERATURE: Not Available.

EXTINGUISHING MEDIA:
Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IB flammable liquid fires. Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

PROTECTION OF FIREFIGHTERS:
Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
When this product is used, the overspray and other combustible materials such as paint booth filters, rags, masking materials, etc., contaminated by coating material are subject to spontaneous combustion. Wetting the contaminated materials and not packing them tightly together in refuse containers will minimize the potential for this to occur. Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed contains may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat. May produce hazardous decomposition products when exposed to extreme heat. Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbent should be placed in this container.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:
Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.

STORAGE:
Do not store above 120 degrees F. (48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IB flammable liquids.

SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

ENGINEERING CONTROLS:
Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 8 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

PERSONAL PROTECTIVE EQUIPMENT

EYES:
Wear chemical-type splash goggles when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

SKIN/GLOVES:
Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of: nitrile rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment. Clean contaminated clothing and shoes.

RESPIRATOR:
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. Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

GENERAL HYGIENE - ESTABLISHED EXPOSURE LIMITS
If Threshold Limit Values (TLVs) have been established by ACGIH, OSHA, Ontario or PPG, they will be listed below. These limits are intended for use in the practice of industrial hygiene as guidelines or recommendations in the control of potential workplace health hazards. These limits are not a relative index of toxicity and should not be used by anyone without industrial hygiene training.

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Number</th>
<th>Percent</th>
<th>ACGIH TLV</th>
<th>ACGIH STEL</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ISOBUTYL KETONE</td>
<td>108-10-1</td>
<td>15 - 40</td>
<td>50 PPM</td>
<td>75 PPM</td>
<td>50 ppm</td>
<td>75 ppm</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>10 - 30</td>
<td>S- 50 ppm</td>
<td>Not established</td>
<td>100 ppm</td>
<td>150 ppm</td>
</tr>
<tr>
<td>METHYL ETHYL KETONE</td>
<td>78-93-3</td>
<td>5 - 10</td>
<td>200 ppm</td>
<td>300 ppm</td>
<td>200 ppm</td>
<td>300 ppm</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>67-63-0</td>
<td>1 - 5</td>
<td>200 PPM</td>
<td>400 PPM</td>
<td>400 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td>ZINC STEARATE</td>
<td>557-05-1</td>
<td>1 - 5</td>
<td>Not established</td>
<td>Not established</td>
<td>H- 5 mg/m³</td>
<td>Not established</td>
</tr>
<tr>
<td>XYLENES</td>
<td>1330-20-7</td>
<td>0.1-1.0</td>
<td>100 ppm</td>
<td>150 PPM</td>
<td>100 ppm</td>
<td>150 ppm</td>
</tr>
<tr>
<td>ETHYL BENZENE</td>
<td>100-41-4</td>
<td>0.1-1.0</td>
<td>100 ppm</td>
<td>125 ppm</td>
<td>100 ppm</td>
<td>125 ppm</td>
</tr>
<tr>
<td>(As Stearates)</td>
<td>557-05-1</td>
<td>*</td>
<td>10 mg/m³</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>
SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Material/ CAS Number | Percent | Ontario TWA | Ontario STEL | PPG IPEL | PPG STEL
--- | --- | --- | --- | --- | ---
METHYL ISOBUTYL KETONE 108-10-1 | 15 - 40 | 50 ppm | 75 PPM | Not established | Not established
TOLUENE 108-88-3 | 10 - 30 | 50 PPM | Not established | Not established | Not established
METHYL ETHYL KETONE 78-93-3 | 5 - 10 | 200 ppm | 300 ppm | Not established | Not established
ISOPROPYL ALCOHOL 67-63-0 | 1 - 5 | 200 ppm | 400 PPM | Not established | Not established
XYLENES 100-41-4 | 0.1-1.0 | 100 ppm | 150 ppm | Not established | Not established
ETHYL BENZENE 100-41-4 | 0.1-1.0 | 100 ppm | 125 PPM | Not established | Not established
(Ass Stearates) 557-05-1 | * | R-3 | Not established | Not established | Not established

Key: ACGIH = American Conference of Governmental Industrial Hygienists; OSHA = Occupational Safety and Health Administration; TLV = Threshold Limit Value; TWA = Time Weighted Average; PEL = Permissible Exposure Limit (1989 Vacated values); IPEL = Internal Permissible Exposure Limit; Ceiling = TLV or PEL Ceiling Limit; STEL = TLV or PEL Short-Term Exposure Limit; Skin = Skin Absorption Designation. [C- Ceiling Limit; S- Potential Skin Absorption; R- Respirable Dust]

Additional Information: Not applicable.

SECTION 11 - TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

<table>
<thead>
<tr>
<th>Material/ CAS Number</th>
<th>Percent</th>
<th>ORAL LD50 (g/kg)</th>
<th>DERMAL LD50 (g/kg)</th>
<th>INHALATION LC50 (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ISOBUTYL KETONE 108-10-1</td>
<td>15 - 40</td>
<td>2.08 g/kg</td>
<td>Not Available</td>
<td>32.77 g/L, 4 hr.</td>
</tr>
<tr>
<td>TOLUENE 108-88-3</td>
<td>10 - 30</td>
<td>.64 g/kg</td>
<td>8.39 g/kg</td>
<td>12.50 g/L, 4 hr.</td>
</tr>
<tr>
<td>METHYL ETHYL KETONE 78-93-3</td>
<td>5 - 10</td>
<td>2.74 g/kg</td>
<td>13.00 g/kg</td>
<td>Not Available</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL 67-63-0</td>
<td>1 - 5</td>
<td>4.40 g/kg</td>
<td>12.80 g/kg</td>
<td>72.60 g/L, 4 hr.</td>
</tr>
<tr>
<td>ZINC STEARATE 557-05-1</td>
<td>1 - 5</td>
<td>10.00 g/kg</td>
<td>2.00 g/kg</td>
<td>Not Available</td>
</tr>
<tr>
<td>XYLENES 1330-20-7</td>
<td>0.1-1.0</td>
<td>4.30 g/kg</td>
<td>1.70 g/kg</td>
<td>21.88 g/L, 4 hr.</td>
</tr>
<tr>
<td>ETHYL BENZENE 100-41-4</td>
<td>0.1-1.0</td>
<td>3.50 g/kg</td>
<td>17.80 g/kg</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

### CHRONIC TOXICITY

Ingredient Target Organ/Chronic Effects:
- Carcinogen - Ear - Kidney - Liver - Embryotoxic - Teratogen - Brain - Central nervous system - Lung

Mutagenicity Toxicity:
This has not been tested for this product.

Reproductive Toxicity:
This has not been tested for this product.

### SUPPLEMENTAL HEALTH INFORMATION

<table>
<thead>
<tr>
<th>Material/ CAS Number</th>
<th>Percent</th>
<th>Ingredient Specific Animal Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE 78-93-3</td>
<td>5 - 10</td>
<td>This product contains methyl ethyl ketone (MEK). MEK has been shown to cause minor embryotoxic/fetotoxic effects in laboratory animals exposed for prolonged periods at high concentrations via inhalation. The potential for human exposure to high concentrations is expected to be low due to the irritating effects of MEK at low concentrations.</td>
</tr>
<tr>
<td>ETHYL BENZENE 100-41-4</td>
<td>0.1-1.0</td>
<td>Ethylbenzene has been reported by NTP to cause cancer in laboratory animals following a chronic (2 year) inhalation exposure. Dose levels of 75, 250 and 750 ppm were used, with evidence of carcinogenicity found in the kidneys of rats and the lung and liver of mice at 750 ppm. The No Observed Effect Level (NOEL) was 75 ppm. The relevance of these findings to humans is uncertain, but appropriate safeguards should be employed to reduce or eliminate inhalation exposure to ethylbenzene.</td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL FATE

Ecotoxicity: No Information Available.

Mobility: No information available.

Biodegradation: No information available.

Bioaccumulation: No Information Available.

### PHYSICAL/CHEMICAL

Hydrolysis: No information available.

Photolysis: No information available.

SECTION 12 - ECOLOGICAL INFORMATION

Potential Environmental Effects:

- CARBON MONOXIDE
- CARBON DIOXIDE
- OXIDES OF ZINC

Hazards: None Known.

Incompatible Materials:
Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.

Hazardous Polymerization:
None Known.

Hazardous Decomposition Products:
- Carbon monoxide - Carbon dioxide - Oxides of zinc
### SECTION 13 - DISPOSAL CONSIDERATIONS

Provide maximum ventilation, only personnel equipped with proper respiratory and skin and eye protection should be permitted in the area. Take up spilled material with sawdust, vermiculite, or other absorbent material and place in containers for disposal.

Waste material must be disposed of in accordance with federal, state, provincial and local environmental control regulations. Empty containers should be recycled by an appropriately licensed reconditioner/salvager or disposed of through a permitted waste management facility. Additional disposal information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

### SECTION 14 - TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>Paint</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOS Technical Name:</td>
<td>None</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>3</td>
</tr>
<tr>
<td>Subsidiary Class(es):</td>
<td>None</td>
</tr>
<tr>
<td>UN Number:</td>
<td>UN1263</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>II</td>
</tr>
</tbody>
</table>

**USA - RQ Hazardous Substances:**
- Toluene, Methyl Isobutyl Ketone, Xylenes

**USA-RQ Hazardous Substances**
- Toluene=4800.82 Pounds, Methyl Xylenes=14421.71 Pounds, Xylenes=19998 Po

**Marine Pollutant Name:** None

**USA Shipments Only - RQ Threshold Ship Weight:** This is the total weight of this product that must be shipped to exceed the RQ quantity.

### SECTION 15 - REGULATORY INFORMATION

**INVENTORY STATUS**

U.S. TSCA: This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

**FEDERAL REGULATIONS**

<table>
<thead>
<tr>
<th>Material/ CAS Number</th>
<th>Percent</th>
<th>CERCLA HS - RQ (LBS)</th>
<th>SARA EHS - TPQ (LBS)</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ISOBUTYL KETONE 108-10-1</td>
<td>15 - 40</td>
<td>5000 lbs</td>
<td>Not Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>TOLUENE 108-88-3</td>
<td>10 - 30</td>
<td>1000 lbs</td>
<td>Not Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>METHYL ETHYL KETONE 78-93-3</td>
<td>5 - 10</td>
<td>5000 lbs</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL 67-63-0</td>
<td>1 - 5</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>ZINC STEARATE 557-05-1</td>
<td>1 - 5</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>XYLENES 1330-20-7</td>
<td>0.1-1.0</td>
<td>100 lbs</td>
<td>Not Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>ETHYL BENZENE 100-41-4</td>
<td>0.1-1.0</td>
<td>1000 lbs</td>
<td>Not Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>(As Zinc Cmpnds) 557-05-1</td>
<td>*</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**SARA 311/312**
- Health (acute): Yes
- Health (chronic): Yes
- Fire (flammable): Yes
- Pressure: No
- Reactivity: No

**WHMIS HAZARD CLASS:**
- Class B, Division 6 - Class D, Division 2, Subdivision A - Class D, Division 2, Subdivision B

**STATE/PROVINCIAL REGULATIONS**

**CALIFORNIA PROP. 65:** WARNING: This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

**Additional Information**

**Key:** IARC= International Agency on the Research of Cancer; ACGIH-American Conference of Governmental Industrial Hygienists; NTP-National Toxicology Program *Denotes chemical as NTP Known Carcinogen; + Denotes NTP Possible Carcinogen; OSHA-Occupational Safety and Health Administration.

**SECTION 16 - OTHER INFORMATION**

**Hazard Rating Systems**
- NFPA Rating: 2 31
- HMIS Rating: 2 31

**Rating System:** 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe, *=Chronic Effects.

**HMS=** Hazardous Materials Identification System; NFPA=National Fire Protection Association;

Safe handling of this product requires that all of the information on the MSDS be evaluated for specific work environments and conditions of use.

**PREPARED BY:** Product Safety Department

**REASON FOR REVISION:** Section 2 has been updated. Changes to this section may also result in changes in sections 8, 11 and/or 15. Section 9 has been updated. Section 14 has been updated. Date. Edition. Updated MSDS format.

This Material Safety Data Sheet has been prepared in accordance with Canada’s Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200), the supplier notification requirements of SARA Title III, Section 313 and other applicable right-to-know regulations. Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

77-9200 000003 (00451131.001)(03/01/07) 070301, 000, 0876

*** END OF MSDS ***