MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

MATERIAL NAME (TRADE NAME): PVC Homopolymer Resins All
1000 Series Resins, including
1160, 1185, 1195, 1225, 1230.

MANUFACTURER: Westlake Vinyls Company LP
36045 Hwy 30, Geismar, LA 70734
Westlake PVC Corporation; Calvert City, KY

CHEMICAL FAMILY: Polyvinyl Chloride Resin, PVC

EMERGENCY TELEPHONE NUMBERS
SALES & PRODUCT INFO PHONE
1–225-673-0651

EFFECTIVE DATE: January 2005        REVISION: August 2011

SECTION 2: INGREDIENTS

The basic product is a homogeneous white powdered polyvinyl chloride resin. Only trace quantities of ingredients such as suspending agent, buffer, catalyst fragments, heavy metals, and moisture used in the preparation of product may remain. The CAS number is 9002-86-2.

The product contains residual vinyl chloride monomer, a cancer suspect agent (refer to Section 5 for specific information).

SECTION 3: PHYSICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILING POINT</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>Degrades @ 250°F - 300°F</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Insoluble</td>
</tr>
<tr>
<td>VAPOR PRESSURE (mm Hg)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>VAPOR DENSITY</td>
<td>No Data</td>
</tr>
<tr>
<td>% VOLATILE BY VOLUME</td>
<td>0.5% Maximum</td>
</tr>
<tr>
<td>PH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY (H₂O=1)</td>
<td>1.35-1.40</td>
</tr>
<tr>
<td>APPEARANCE/ODOR</td>
<td>White, solid, free flowing powder/odor of plastic</td>
</tr>
</tbody>
</table>
SECTION 4: FIRE AND EXPLOSION DATA

FLASH POINT : Not Applicable
FLAMMABLE LIMITS (%) : Not Applicable

SPECIAL FIREFIGHTING PROCEDURES:
Special firefighting procedures require a self-contained air breathing apparatus such as the Scott Air Pak.

FIRE AND EXPLOSION HAZARD:
PVC homopolymer resins are self-extinguishing plastic materials. They will burn in the presence of other materials which support combustion and will generate hydrogen chloride, benzene, water, carbon monoxide, carbon dioxide, and smoke.

SECTION 5: HEALTH HAZARD INFORMATION/FIRST AID

PVC Homopolymer Resin contains residual (less than 2 PPM) vinyl chloride monomer (VCM), which has been determined to be a cancer suspect agent by the Occupational Safety and Health Administration (OSHA). At the present product specification level of 0-5 PPM free vinyl chloride monomer, it is possible that, in a working area with inadequate ventilation, vapor levels of VCM may exceed the 1 PPM Timed Weighted Average (TWA) Permissible Exposure Level (PEL) for eight hours or the 5 PPM TWA Short Term Exposure Limit (STEL) for 15 minutes. Such an area would be a regulated area as defined by the OSHA regulation 29 CFR 1910.1017. Personnel in the immediate working area, plus the area itself, should be monitored periodically in accordance with the regulation to determine the possible extent of exposure to unsafe levels of VCM.

If the PEL or STEL levels are exceeded, respiratory protection is required to be available to all personnel in the area and is to be used in accordance with the cited OSHA regulation. It has been the experience of most fabricators of PVC resin that the normal ventilation procedures, exposure to working personnel should not exceed the maximum levels stated in the regulation.

Studies have shown that workers exposed for long period to high concentrations of respirable PVC dust may retain the dust in the lungs.
There is no evidence of fibrotic change or a toxic response associated with such PVC dust retention and pulmonary function appears not to be affected to any significant degree. PVC dust is regulated as a nuisance dust requiring control of the respirable dust level to below 5 mg/m3, calculated as a time weighted average. It is recommended that adequate personal and industrial hygiene practices be employed to minimize exposure to all dusts, including PVC dust.

There are no known toxicological effects from ingestion of PVC homopolymer resin.

FIRST AID:

INGESTION:
If resin is ingested, consult a physician. Treat as an inert granular material.

INHALATION:
If dust is inhaled, remove patient from area. Consult a physician if there are symptoms. Treat as an inert nuisance dust.

SECTION 6: REACTIVITY DATA
STABILITY: The product is stable.

INCOMPATIBILITY (SPECIFIC MATERIALS TO AVOID): Direct exposure to flame is to be avoided.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride gas, a respiratory irritant, is emitted at elevated temperatures (>120 - 150 C).

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 7: SPILL, LEAK AND DISPOSAL PROCEDURES
If material is released or spilled on concrete or hard surface, a slipping and falling hazard is created. Spilled resin should be swept into containers for disposal as solid waste.

DISPOSAL:
Incinerate or use for landfill in compliance with local regulations. If incinerating, care should be taken as hydrogen chloride is generated.
SECTION 8: SPECIAL PROTECTION INFORMATION

VENTILATION: Use and store in space with sufficient ventilation to maintain the VCM concentration in air below the 1 PPM permissible exposure limit or provide respiratory equipment per OSHA regulation exposure limit or provide respiratory equipment per OSHA regulation (29 CFR 1910.1017).

EYE PROTECTION: Use safety goggles for protection against dust.

HAND PROTECTION: Cloth or leather gloves.

RESPIRATORY PROTECTION: If 1.0 PPM VCM level is exceeded, respiratory protection would be available to all personnel in the area in accordance with the cited OSHA regulation. It has been the experience of most fabricators of PVC resins that exposure to working personnel does not exceed the action level (0.5 PPM) stated in the regulation when normal ventilation procedures are followed.

Use a dust mask when dusting conditions prevail.

OTHER: None.

SECTION 9: SPECIAL PRECAUTIONS AND HANDLING INFORMATION

HANDLING:

1. Labeling according to OSHA regulation 29CFR1910.1017 is required. Each container of product shall display in a prominent place the wording:

"PVC Homopolymer Resin Contains Vinyl Chloride. Vinyl Chloride Is A Cancer Suspect Agent."

2. Normal cleanliness should be observed.

3. Store at ambient temperature in a ventilated area.

4. Avoid prolonged exposure to temperatures in excess of 150 C (300°F).

5. Avoid direct contact with flame.

SECTION 10: ADDITIONAL INFORMATION

All components are included in the EPA Toxic Substance Control Act Chemical Substance Inventory.

H.M.I.S. Ratings:

- HEALTH: 1
- FLAMMABILITY: 1
- REACTIVITY: 0

These ratings should be used only as part of H.M.I.S. program.

N.F.P.A. Ratings:

- HEALTH: 1
- FLAMMABILITY: 1
- REACTIVITY: 0
- SPECIAL HAZARD WARNING: NONE

EPA SARA Title III hazard class: NONE.

OSHA Hazard Communication Standard Hazard Class: NONE.

Substance(s) listed by California under the "Safe Drinking Water and Toxic Enforcement Act of 1986" (Proposition 65): NONE.