

ABS

PFV deluxe found vents

02/03/93 PAGE 01/06

General Purpose ABS  
Polymerland, Inc.

Material Safety Data Sheet

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MANUFACTURER / SUPPLIER

Polymerland, Inc.  
501 Avery Street  
Parkersburg, WV 26102  
USA

Polymerland Canada, Inc.  
180 Attwell Drive, Suite 505  
Rexdale, Ontario M9W 6A9  
Canada

EMERGENCY TELEPHONE

(800) 424-9300 (CHEMTREC)

(304) 424-5427 (Product Safety)  
(304) 424-5910

NON-EMERGENCY TELEPHONE

(800) 752-7842 (Service Center)

(304) 424-5742 Parkersburg  
W. Va.

PRODUCT IDENTIFIER: ABS GENERAL PURPOSE  
PRODUCT DESCRIPTION: ABS Polymer, SAN Polymer, MABS Polymer, PLN -  
SD, Alpha-methylstyrene ABS Polymer. 9003-56-9, 9003-54-7, 25213-88-1,  
25120-20-1.

PRODUCT USE: May be used to produce molded or extruded  
articles or as a component of other industrial products.

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product consists primarily of high molecular weight polymers which are  
not expected to be hazardous.

Additional compositional data are provided in the REGULATORY INFORMATION  
section for WHMIS, SARA 313, California Proposition 65, and various state  
right-to-know laws.

CAS NUMBER CHEMICAL NAME	OSHA PEL	ACGIH TLV	OSHA CEILING
100-42-5 styrene	50 ppm TWAE	50 ppm	100 ppm

These materials are high-molecular-weight polymers not expected to be  
chemically active under recommended conditions of use. Trace amounts of  
residual monomers, including acrylonitrile and styrene, suspected  
carcinogens, are present and may be released under suggested processing  
temperature ranges. For Hazard Communication Purposes under OSHA Standard  
29 CFR 1910.1200 styrene monomer is listed as a possible carcinogen based  
upon an evaluation from IARC. (See Health Hazard Information).

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Solid pellets with slight or no odor.  
Spilled pellets create slipping hazard. Can burn in a fire creating dense  
toxic smoke. Molten plastic can cause severe thermal burns. Fumes produced  
during melt processing may cause eye, skin and respiratory tract irritation.  
Secondary operations, such as grinding, sanding or sawing, can produce dust  
which may present an explosion or respiratory hazard.

POTENTIAL HEALTH EFFECTS  
EYE: Product may cause irritation or injury due to

**SKIN:** Mechanical action.  
**INGESTION:** Pellets not likely to cause skin irritation.  
**INHALATION:** Not acutely toxic.  
 Pellet inhalation unlikely due to physical form.

**CHRONIC/CARCINOGENICITY**

**NTP:** Not Tested  
**OSHA:** Not Regulated  
**IARC:** Listed

**MELT PROCESSING HEALTH EFFECTS:** Molten plastic can cause severe burns.

Processing fumes may cause irritation to the eyes, skin and respiratory tract, and in cases of severe over-exposure, nausea and headache.

Grease-like processing fume condensates on ventilation duct work, molds and other surfaces can cause irritation and injury to skin.

**MEDICAL RESTRICTIONS:** There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing fumes.

**NOTE:** Additives containing certain heavy metal compounds may be present. These ingredients are essentially bound in the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

**4. FIRST AID MEASURES**

**EYES:** Remove contact lenses at once. Immediately flush eyes well with copious quantities of water or normal saline for at least 20-30 minutes. Seek medical attention.

**SKIN:** Wash skin thoroughly with soap and water. Seek medical attention if rash or burn occurs.

**INGESTION:** Not probable. If a large amount is swallowed, seek medical attention.

**INHALATION:** Not likely to be inhaled due to physical form.

**MELT PROCESSING:** For molten plastic skin contact, cool rapidly with water and immediately seek medical attention. Do not attempt removal of plastic without medical assistance. Do not use solvent for removal.

For processing fume inhalation irritation, leave contaminated area and breathe fresh air. If coughing, difficult breathing or any other symptoms develop seek medical attention at once, even if symptoms develop at a later time.

For skin contact with fume condensate, immediately wash thoroughly with soap and water. If irritation develops seek medical attention.

**5. FIRE FIGHTING MEASURES**

**FIRE FIGHTING:** Approved pressure demand breathing apparatus and protective clothing should be used for all fires. Water spray is the preferred extinguishing medium. This product will melt but will not be carried on the surface of water.

**EXTINGUISHING MEDIA:** Water spray and foam. Water is the best

02/03/93 PAGE 01/06

extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition.  
**HAZARDOUS COMBUSTION PRODUCTS:** Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, hydrogen cyanide, hydrocarbon fragments and carbon dioxide.

**FLASH POINT:** Not Applicable  
**LOWER FLAMMABLE LIMIT:** Not Established  
**UPPER FLAMMABLE LIMIT:** Not Established  
**AUTOIGNITION:** 508C (946F), estimated  
**CONDITIONS OF FLAMMABILITY:** Requires a continuous flame source to ignite.  
**EXPLOSION DATA**  
**IMPACT SENSITIVITY:** Not sensitive to mechanical impact.  
**STATIC DISCHARGE:** Not sensitive to static discharge.  
 (See HANDLING AND STORAGE)

#### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL:** Sweep or gather up material and place in proper container for disposal or recovery. (See DISPOSAL INFORMATION)

#### 7. HANDLING AND STORAGE

**HANDLING:** Follow recommendations on label and in processing guide. Prevent contact with skin and eyes. Use good industrial hygiene practices. Provide adequate ventilation. Secondary operations such as grinding, sanding or sawing may produce a dust explosion hazard. Use aggressive housekeeping activities to prevent dust accumulation; employ bonding, grounding, venting and explosion relief provisions in accordance with accepted engineering practices.

**STORAGE:** Store in a dry place away from moisture, excessive heat and sources of ignition. Avoid storage near foods to prevent food contamination.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, duct work and other surfaces using appropriate personal protection. For powders and residual dusts refer to HANDLING AND STORAGE section.

Ventilation requirements must be locally determined to limit exposure to materials at their point of use. Design techniques and guidelines may be found in publications such as:

Industrial Ventilation; available from the American Conference of Governmental Industrial Hygienists, Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48901.

#### PERSONAL PROTECTION

**EYE/FACE:** Wear safety glasses with side shields or chemical goggles. In addition, use full face shield when cleaning processing fume condensates from hoods, ducts and other surfaces.

**SKIN:** When handling pellets avoid prolonged or repeated contact with skin. When melt processing product wear long pants,

02/03/93 PAGE 04/06

long sleeves, well insulated gloves and face shield when applicable. Use appropriate protective clothing, including chemical resistant gloves, to prevent any contact with processing fume condensates.

**RESPIRATORY:** When processing fumes are not adequately controlled, use respirator approved for protection from organic vapors and acid gases. When dust or powder from secondary operations, such as grinding sanding or sawing, are not adequately controlled use respirator approved for protection from dust.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Solid  
**ODOR AND APPEARANCE:** Plastic pellet with slight odor.  
**BOILING POINT:** Not Applicable  
**MELTING POINT:** See COMMENT below.  
**VAPOR PRESSURE (mmHg):** Negligible  
**VAPOR DENSITY (air=1):** Not Applicable  
**SPECIFIC GRAVITY (water=1):** >1  
**WATER SOLUBILITY:** Insoluble  
**% VOLATILES:** Negligible  
**pH:** Not Applicable  
**ODOR THRESHOLD:** Not Established  
**EVAPORATION RATE:** Negligible  
**COEFFICIENT WATER/OIL DISTR:** Not Established  
**COMMENT:** This product does not exhibit a sharp melting point, but softens gradually over a wide temperature range.

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under recommended conditions of storage and handling.  
**ACTIVITY:** Not reactive under recommended conditions of handling, storage, processing and use.  
**CONDITIONS TO AVOID:** Do not exceed melt temperature recommendations in product literature. In order to avoid autoignition/hazardous decomposition of hot thick masses of plastic, purgings should be collected in small, flat shapes or thin strands to allow for rapid cooling and quench in water. Do not allow product to remain in barrel at elevated temperatures for extended periods of time; purge with a general purpose resin. (See EXPOSURE CONTROLS/PERSONAL PROTECTION section for respiratory protection advice.)  
**HAZARDOUS DECOMPOSITION:** Processing fumes evolved at recommended processing conditions may include trace levels of styrene, acrylonitrile, acrolein, acetaldehyde, acetophenone, ethylbenzene, cumene, 4-vinylcyclohexane and phenols.

## 11. TOXICOLOGICAL INFORMATION

**PRODUCT:**  
**ACUTE ORAL:** Oral LD50 (Rat) >5 g/kg, estimated.  
**COMPONENTS:**  
 Styrene monomer is listed as a possible carcinogen by IARC. Rats exposed to acrylonitrile by inhalation or ingestion induced brain, zymball gland (no comparable human gland) and stomach tumors.

02/03/93 PAGE 05/06

## 12. ECOLOGICAL INFORMATION

GENERAL: Not expected to present any significant ecological problems.

## 13. DISPOSAL INFORMATION

RCRA HAZARDOUS WASTE: Product is not a RCRA hazardous waste.  
 WASTE DISPOSAL: Recycling is encouraged. Landfill or incinerate in accordance with federal, state and local requirements. Collected processing fume condensates should be tested to determine waste classification.

## 14. TRANSPORTATION INFORMATION

DOT HAZARD CLASS: Not Regulated  
 PROPER SHIPPING NAME: Not Regulated  
 IDENTIFICATION NUMBER: Not Listed  
 TDGA: Not Listed

## 15. REGULATORY INFORMATION

Listed below are chemical substances subject to supplier notification requirements. The percentages, when present, represent average values.

The chemical substance(s) identified under the California Proposition 65 column (B) is (are) known to the State of California to cause cancer.

CHEMICAL SUBSTANCE	CAS NUMBER	LOW WT%	HIGH WT%	A	B	C	D	E	F	G
Antimony	7440-36-0		6.00	*	*	*	*	*	*	*
Mercury	7439-97-6		2.00	*	*	*	*	*	*	*
Lead	7439-92-1		2.00	*	*	*	*	*	*	*
Chromium	7440-47-3		2.00	*	*	*	*	*	*	*
Cadmium	7440-43-9		2.00	*	*	*	*	*	*	*
Selenium	7782-49-2		2.00	*		*	*	*	*	*
Copper	7740-50-8		2.00	*		*	*	*	*	*
Barium	7440-39-3		2.00	*		*	*	*	*	*
Acrylonitrile	107-13-1				*		*			
Styrene	100-42-5	.200	.700	*		*	*	*	*	*

(1) An "\*" in one or more of these supplier notification requirement column(s) represents a reportable concentration or warning notification for California Proposition 65.

(2) This is a recycled product based on feed streams of varying composition. Concentrations given represent maximums for each individual item under worse case conditions.

A = SARA III  
 B = California Proposition 65  
 C = Illinois Right-To-Know  
 D = Massachusetts Right-To-Know  
 E = New Jersey Right-To-Know  
 F = Pennsylvania Right-To-Know

02/03/93 PAGE 06/06

G Canadian WHMIS

TSCA STATUS:

Substance Inventory requirements of the US EPA Toxic Substances Control Act (TSCA).

WHMIS CLASSIFICATION: D2

This product complies with the Chemical

16. OTHER

PREPARED BY:

Product Safety (phone) (304) 424-5427  
(fax) (304) 424-5689

The above information and recommendations are believed accurate and reliable. Because it is not possible to anticipate all conditions of use additional safety precautions may be required. POLYMERLAND INC. makes no warranty, either express or implied, including merchantability and fitness.

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it into individual site safety programs in accordance with applicable hazard communication standards and regulations.

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REVISIONS IN THIS MSDS SINCE YOUR LAST ORDER ARE IN THE FOLLOWING SECTION(S):