

**1) PRODUCT AND COMPANY IDENTIFICATION**

**Company:** Videolar S.A.  
**Address :** 1616, Avenue Abiurana, Industrial District - Manaus-AM. IL: 69075-010  
**Telephone :** (+55 0XX92) - 2101 - 7800  
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**2) COMPOSITION AND INFORMATION ON INGREDIENTS**

**Chemical Name:** Polystyrene  
**Chemical Formula:** (C<sub>8</sub>H<sub>8</sub>)<sub>n</sub>  
**Synonym:** General Purpose Polystyrene, GPPS  
**CAS#:** 9003-53-6

**3) HAZARDS IDENTIFICATION**

**Physical State and appearance** Solid. Transparent Pellets

**Emergency Overview** Irritating vapors to respiratory system and eyes may form when polymer is processed at high temperatures. Molten or heated material in skin contact can cause severe burns.

**Routes of Entry** **FOR HOT MATERIAL:** Skin contact. Eye contact. Inhalation

**Eyes** This product is not known to cause eye irritation. However, as with any chemical, some sensitive individuals may experience eye irritation upon contact.

**Heated Polymer:** Eye contact can cause serious thermal burns.

Vapors formed when polymer is heated may be irritating to the eye.

**Skin** No know acute effects of this product resulting from skin contact. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.

**Heated Polymer:** Eye contact can cause serious thermal burns.

**Inhalation** Negligible hazard at room temperature. Nuisance dusts can be irritation to the upper respiratory tract. Irritation vapors may form when polymer is processed at high temperatures.

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**Ingestion** No effects are expected for ingestion of small amounts.

**Potential Chronic Health Effects** **CARCINOGENIC EFFECTS** : Classified NONE by NTP, NONE by OSHA.  
Not classification for human by IARC  
**MUTAGENIC EFFECTS** : Not Available.  
**TERATOGENIC EFFECTS** : Not Available

**Medical Conditions Aggravated by Overexposure** There is no known effect from chronic exposure to this product. Repeated or prolonged exposure is not known to aggravate medical condition.

**Overexposure / Signs / Symptoms** Not available.

#### 4) FIRST AID MEASURES

**Inhalation** Allow the victim to rest in a well ventilated area.

**Skin Contact** **Polymer:** No know EFFECT on skin contact, rinse with water for a few minutes.

**Heated Polymer:** For serious burns from heated polymer, get medical attention.

**Eye Contact** Rinse with water for a few minutes. Seek medical attention if necessary.

**Ingestion** No first aid procedures are needed.

#### 5) FIRE FIGHTING MEASURES

**Flammability of the Product** May be combustible at high temperature.

**Auto-ignition Temperature** 427°C (800.6°F)

**Flash Points** Not available.

**Flammable Limits** Not available.

**Products of Combustion** Carbon oxides (CO, CO<sub>2</sub>) and soot.

**Fire Hazards in Presence of Various Substances** No specific information is available in our database regarding the flammability of this product in presence of various materials.

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**Explosion Hazards in Presence of Various Substances**

Risks of explosion of the product in presence of mechanical impact: Not expected.  
Risks of explosion of the product in presence of static discharge: Possible.  
No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.

**Fire Fighting Media and Instructions  
Protective Clothing (Fire)**

**Small Fire:** Use DRY chemicals, CO<sub>2</sub>, water spray, halon or foam.  
**Large Fire:** Use water spray, fog or foam. **DO NOT** use water jet.  
Wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

**Special Remarks on Fire Hazards**

Fire may produce irritating gases and dense smoke. Flowing material may produce static discharge, ignition dust accumulations.

**Special Remarks on Explosion Hazards**

No additional remark.

**6) ACCIDENTAL RELEASE MEASURES**

**Small Spill and Leak**

Pellets on the floor could present a serious slipping problem. Good housekeeping must be maintained at all times to avoid this hazard. Sweep, shovel or vacuum material into clean containers.

**Large Spill and Leak**

Use a shovel to put the material into a convenient waste disposal container. Do not allow any potentially contaminated water with pellets to enter any waterway, sewer or drain.

**7) HANDLING AND STORAGE**

**Handling**

Avoid Temperatures of 600°F (316°C) or above. Handling of plastic may form nuisance dust.  
Protect personnel. Pneumatic transport of material may produce dust. Use filters in pneumatic transport lines to reduce dust. If dusting is a problem, care should be taken to dissipate potential static electricity build-up. Normal precautions for finely divided powders should be made.

**Storage**

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

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## 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Eyes:** Safety Glasses.

**Body:** Coveralls.

### Personal Protection

**Respiratory:** Ventilation is normally required when handling this product at high temperatures. Wear appropriate respirator when ventilation is inadequate.

**Hands:** Thermally insulated gloves required when handling hot material.

**Feet:** Safety slip proof shoes in areas where spills or leaks can occur.

### Personal Protection in Case of a Large Spill

Safety glasses. Gloves. Coveralls.

## 9) PHYSICAL AND CHEMICAL PROPERTIES

### Physical State and Appearance

Solid. Transparent Pellets.

### Molecular Weight

Not available.

### Molecular Formula

$(-CH(C_6H_5)-CH_2-)_x$

### pH (1% Soln/Water)

Not applicable.

### Boiling/Condensation Point

Not applicable.

### Melting/Freezing Point

>132.22°C (270°F)

### Critical Temperature

Not available.

### Specific Gravity

1.04 (Water = 1)

### Vapor Pressure

Not available.

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<b>Vapor Density</b>	Not available.
<b>Volatility</b>	Negligible.
<b>Odor Threshold</b>	Not available.
<b>Evaporation Rate</b>	Not available.
<b>VOC</b>	0 (%).
<b>Viscosity</b>	Not available.
<b>LogKow</b>	Not available.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	Not available.
<b>Solubility in Water</b>	Insoluble in Water.
<b>Physical Chemical Comments</b>	No additional remark.
<b>Exclusivity Limit</b>	Not available.
<b>Flash Point</b>	Not available.
<b>Auto-ignition Temperature</b>	420 °C
<b>Decomposition Temperature</b>	> 250 °C
<b>Odor</b>	Odorless
<b>Taste</b>	Not available.
<b>Color</b>	Polystyrene is a colorless, transparent, glassy solid or a soft colorless form.

## 10) STABILITY AND REACTIVITY

<b>Stability and Reactivity</b>	The product is stable. Avoid temperatures of 600 deg F (316 ° C )or above.
<b>Conditions of Instability</b>	No additional remark.
<b>Incompatibility with Various Substances</b>	Reactive with strong oxidizing agents.

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**Hazardous Decomposition Products**

Hazardous decomposition products are carbon monoxide, carbon dioxide, dense smoke and hydrocarbons. Exposure of polystyrene to extremely high temperatures (600 deg F or higher) may cause partial decomposition. Chemicals that may be release include styrene monomer, benzene and other hydrocarbons.

**11) TOXICOLOGICAL INFORMATION**

<b>Toxicity Animals</b>	LD50: Not available. LC50: Not available.
<b>Chronic Effects on Humans</b>	<b>Carcinogenic Effects:</b> Classified none by NTP, none by OSHA. 3 (Not classifiable for human) by IARC.
<b>Other Toxic Effects on Humans</b>	Not considered to be dangerous for humans according to our database.
<b>Special Remarks on Toxicity to Animals</b>	No additional remark.
<b>Special Remarks on Chronic Effects on Humans</b>	No additional remark.
<b>Special Remarks on Other Toxic Effects on Humans</b>	No additional remark.

**12) ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Biodegradable/OECD</b>	Not available.
<b>Mobility</b>	Not available.
<b>Toxicity of the Products of Biodegradable</b>	Not available.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

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**13) DISPOSAL CONSIDERATIONS**

**Waste Information** Transfer to an approved disposal area in accordance with federal, state and local regulations.

**Waste Stream** Not available.

**Consult your local or regional authorities**

**14) TRANSPORT INFORMATION**

**DOT Classification or bulk shipments (non bulk shipments May differ)** Not a DOT controlled material (United State)

**DOT Proper Shipping Name** Not applicable.

**UN Number** Not Established.

**Packaging Group** Not available.

**USCG Proper Shipping Name** Not available.

**Marine Pollutant** Not available.

**Hazards Substances Reportable Quantity** Not available.

**Special Provisions for Transport** Not additional remark.

**TDG Classification** Not controlled under TDG (Canada).

**ADR/RID Classification** Not controlled under ADR (Europe).

**IMO/IMDG Classification** Not controlled under IMDG.

**ICAO/IATA Classification** Not controlled under IATA.

**15) REGULATORY INFORMATION**

**HCS Classification** Not controlled under the HCS (United States).

**U.S. Federal Regulations**

TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard

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identification: No products were found.

**International Regulations**

Clean water act (CWA) 307: No products were found.  
 Clean water act (CWA) 311: No products were found.  
 Clean air act (CAA) 112 accidental release prevention: No products were found.  
 Clean air act (CAA) 112 regulated flammable substances: No products were found  
 Clean air act (CAA) 112 regulated toxic substances: No products were found.

**International Regulations**

**WHMIS (CANADA)**

Not controlled under WHMIS (Canada)

**EINECS**

Not available

**DSCL (EEC)**

Not controlled under DSCL (Europe)

**International Lists**

No products were found

**State Regulations**

California prop. 65: There are no Proposition 65 chemicals present in our polystyrene resins at levels that would required a warning under the California Safe Drinking Water and Toxic Enforcement Act.

**16) OTHER INFORMATION**

**Label Requirements**

Irritating vapors to respiratory system and eyes may form when polymer is processed at high temperatures.  
 Molten or heated material in skin contact can cause severe burns.

**References**

HSDB – Hazardous Substances Data Bank.  
 RTECS – Registry of Toxic Effects of Chemicals Substances

**Other Special Considerations**

This MSDS covers all Polystyrene grades made by Videolar: GPPS-500, GPPS- 535 and GPPS-585.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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