1) PRODUCT AND COMPANY IDENTIFICATION

Company: Videolar S.A.
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2) COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name: Polystyrene
Chemical Formula: \((C_8H_8)n\)
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

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

Eyes

Heated Polymer: Eye contact can cause serious thermal burns.

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

No known 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.

Skin

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.
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.

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

Skin Contact

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, CO₂) 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.
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.

Small Fire: Use DRY chemicals, CO₂, 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.

Fire Fighting Media and Instructions

Protective Clothing (Fire)

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

Special Remarks on Fire Hazards

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 STOREGE

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.
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**


9) PHYSICAL AND CHEMICAL PROPERTIES

**Physical State and Appearance**

Solid. Transparent Pellets.

**Molecular Weight**

Not available.

**Molecular Formula**

(-CH (C₆H₅)-CH₂-)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.
Vapor Density: Not available.
Volutility: Negligible.
Odor Threshold: Not available.
Evaporation Rate: Not available.
VOC: 0 (%).
Viscosity: Not available.
LogKow: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available.
Solubility in Water: Insoluble in Water.
Physical Chemical Comments: No additional remark.
Exclusivity Limit: Not available.
Flash Point: Not available.
Auto-ignition Temperature: 420 ºC
Decomposition Temperature: > 250 ºC
Odor: Odorless
Taste: Not available.
Color: Polystyrene is a colorless, transparent, glassy solid or a soft colorless form.

10) STABILITY AND REACTIVITY

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

Toxicity Animals
LD50: Not available.
LC50: Not available.

Carcinogenic Effects: Classified none by NTP, none by OSHA. 3 (Not classifiable for human) by IARC.

Chronic Effects on Humans

Other Toxic Effects on Humans
Not considered to be dangerous for humans according to our database.

Special Remarks on Toxicity to Animals
No additional remark.

Special Remarks on Chronic Effects on Humans
No additional remark.

Special Remarks on Other Toxic Effects on Humans
No additional remark.

12) ECOLOGICAL INFORMATION

Ecotoxicity
Not available.

BOD5 and COD
Not available.

Biodegradable/OECD
Not available.

Mobility
Not available.

Toxicity of the Products of Biodegradable
Not available.

Special Remarks on the Products of Biodegradation
Not available.
## 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 States)

**DOT Proper Shipping Name**
Not applicable.

**UN Number**
Not Established.

**Packaging Group**
Not available.

**USCG Proper Shipping Name**
Not available.

**Marine Pollutant**
Not available.

**Hazardous 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).

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
identification: No products were found.

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.