

# Material Safety Data Sheet

**ARPAK<sup>®</sup> EXPANDED POLYETHYLENE BEADS**

MSDS No.: G000692-1-OSHA-AE

MSDS CLASS: H

Ver. No.: 2

Ver. Date: February 25, 2000

*JSP International*  
**273 Great Valley Parkway**  
**Malvern, PA 19355**

**IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to the employees, customers, and users of this product.**  
**This product is covered by the OSHA Hazard Communication Rule and this document has been prepared in accord with the MSDS requirements of this rule**

1. General			
<b>Trade Name</b>	ARPAK <sup>®</sup> EXPANDED POLYETHYLENE BEADS		<b>Telephone Numbers:</b>
<b>Other Company Names</b>	This document covers all members of the series of products identified as ARPAK <sup>®</sup> Expanded Polyethylene Beads G000692-001 through G000692-025		EMERGENCY 800/424-9300 CHEMTREC 610/651-8600 <i>JSP International</i>
<b>Synonyms</b>	ARPAK <sup>®</sup> Beads		CUSTOMER SERVICE 800/72 ARPRO Information Only (800/722-7776)
<b>Other Industry Names</b>	None		
<b>Chemical Family</b>	Organic polymers	<b>DOT Hazardous Material Proper Shipping Name</b> Not regulated	
<b>Generic Name</b>	Ethylene Homopolymer	<b>DOT Hazard Class</b> Not regulated	<b>DOT Reportable Quantity</b> N/AP
<b>CAS No.</b>	(See Sec. 9 Components)	<b>JSPI Material I.D.</b> BE668	<b>UN/NA ID No.</b> N/AP
2. Summary of Hazards			
<b>Signal Word</b>	CAUTION		
<b>Physical Hazards</b>	Slipping hazard if spilled on hard smooth walking surface		
<b>Acute Health Effects (Short Term)</b>	Slight inhalation hazard - particulates/dust Dust may be an eye irritant No data found; no expected ingestion hazard No data found; no expected skin irritation hazard No data found; no expected skin absorption hazard (See Section 4 - Health Hazards)		
<b>Chronic Health Effects (Long-Term)</b>	No appropriate human or animal data are known to exist on adverse chronic health effects from repeated or prolonged exposure to this material Repeated or prolonged breathing of dust should be avoided		
3. Fire and Explosion			
<b>Flash Point</b>	<b>Autoignition Temperature</b>	<b>Flammable Limits</b>	
N/AP	GT 600° F	<b>Lower:</b> N/AP <b>Upper:</b> N/AP	
<b>Fire and Explosion Hazard</b>	Heat from fire may melt, decompose, and generate flammable vapors. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Melting alone may cause steam explosion on contact with water.		
<b>Extinguishing Media</b>	Water CO2 Dry chemical Foam		
<b>Extinguishing Media Use Comment</b>	No additional information available		
<b>Special Firefighting Procedures</b>	Do not enter fire area without proper protection. (See Section 12 - Physical and Chemical Data - Hazardous Decomposition Products). Fight fire from a safe distance/protected location. Walking surface contact results in slipping/falling hazard. For large fire, use lots of water as straight stream to "dig" into hot molten mass from outside to open up. Cool interior/prevent reignition; spray/fog for surface cooling. Keep above burning material. Molten material forms flaming drops after igniting. Notify authorities if liquid enters sewer/public waters.		

4. Health Hazards						
<b>Summary of Acute Hazards</b>	Dust, if generated from this material, may cause respiratory irritation following an excessive inhalation exposure. Some eye irritation is also possible following exposure to the dust.					
<b>ROUTE OF EXPOSURE</b>	<b>SIGNS AND SYMPTOMS</b>					<b>PRIMARY ROUTE(S)</b>
<b>Inhalation</b>	Dust from this product may cause respiratory irritation following an excessive inhalation exposure. Follow exposure limits given on this material safety data sheet.					Yes
<b>Eye Contact</b>	Dust from this product may cause eye irritation.					Yes
<b>Skin Absorption</b>	Although no appropriate human or animal health effects data are known to exist, this material is not expected to be a health hazard by skin absorption.					No
<b>Skin Irritation</b>	Although no appropriate human or animal health effects data are known to exist, this material is not expected to be a skin irritant.					No
<b>Ingestion</b>	Although no appropriate human or animal health effects data are known to exist, this material is not expected to be an ingestion hazard.					No
<b>Summary of Chronic Hazards</b>	No appropriate human or animal data are available on the chronic health effects from prolonged or repeated exposure to this material. Repeated or prolonged inhalation exposure to dusts and particulates of this material should be avoided. This material contains trace amounts of polynuclear aromatics which are known animal carcinogens.					
<b>Special Health Effects</b>	This material or its emissions may aggravate pulmonary/bronchial disease and/or cause breathing difficulty.					
5. Protective Equipment and Other Controls						
<b>Respiratory</b>	NIOSH/MSHA approved dust or mist respirator should be used if airborne particulate is generated when handling this material.					
<b>Eye</b>	Dust service goggles should be worn to prevent mechanical injury or other irritation to eyes due to airborne particles which may result from handling this product.					
<b>Skin</b>	Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, and when leaving work.					
<b>Engineering Controls</b>	No special ventilation is usually required to meet exposure standard(s) beyond that needed for normal comfort control.					
<b>Other Hygienic Practices</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.					
<b>Other Work Practices</b>	No special work practices are needed beyond the above recommendations under anticipated conditions of normal use.					
6. Occupational Exposure Limits						
<b>Substance</b>	<b>Source</b>	<b>Date</b>	<b>Type</b>	<b>Value/Units</b>	<b>Time</b>	<b>Skin</b>
Nuisance Particulates	ACGIH	1992	TWA	10MG/M3	8 HRS	No
Particulates Not Otherwise Regulated (Total Dust)	OSHA	1989	TWA	15MG/M3	8 HRS	No
Particulates Not Otherwise Regulated (Respirable Fraction)	OSHA	1989	TWA	5 MG/M3	8 HRS	No
Carbon Black	ACGIH	1992	TWA	3.5MG/M3	8 HRS	No
	OSHA	1989	TWA	3.5MG/M3	8 HRS	No
There may be OSHA PELs and/or ACGIH TLVs for one or more components which are trade secrets. Chemical identities will be revealed to treating physicians in an emergency, or to purchasers after execution of a secrecy agreement.						
<b>Industrial Hygiene Comments</b>	No additional Occupational Exposure Limit information available					
7. Emergency and First Aid						
<b>Inhalation</b>	Remove victim to fresh air immediately. Obtain emergency medical attention if breathing difficulty persists beyond 15 minutes.					
<b>Eye Contact</b>	In case of eye contact with this solid material, immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Obtain emergency medical attention if pain, blinking, tears or redness persist.					
<b>Skin Contact</b>	Not expected to present a significant skin hazard under anticipated conditions of normal use.					
<b>Ingestion</b>	Not expected to present a significant ingestion hazard under anticipated conditions of normal use.					
<b>Emergency Medical Treatment Procedures</b>	If large quantity swallowed, give lukewarm water (pint) if victim completely conscious, alert. Do not induce vomiting/ risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.					
<b>Detoxification Procedures</b>	Treat symptomatically.					

**8. Spill and Disposal****Precautions if Material is Spilled or Released**

Creates dangerous slipping hazard on any hard surface. Material is similar to ball bearings on walking surface, making it difficult to keep steady footing. Spread granular cover on walkways or provide open grating flooring (or equivalent). Limit access to essential cleanup personnel. Stop release. On land, sweep or shovel into suitable disposal containers. On water, material is insoluble. Collect and contain as any solid. Report per regulatory requirements.

**Waste Disposal Methods**

Landfill solids at permitted sites. Use registered transporters. Comply with federal/state/local regulations for solid waste disposal. Solids may be burned, if fired with supplemental fuel. Avoid flameouts. Assure emissions comply with applicable regulations. Contaminated product, soil or water should not be designated RCRA hazardous waste.

**9. Components**

(This may not be a complete list of components)

Compositions are typical values, not specifications

Component Name	CAS No.	Composition Amount	Carcinogen ###
Polyethylene Homopolymer	25087-34-7	95.0 to 99.5 %	N/P
Carbon Black	1333-86-4	0.0 to 5.0 %	N/P

###1=National Toxicology Program 2=International Agency for research and cancer 3=Occupational Health and Safety Administration 4= Other

**10. Component Health Hazards**

Component	Component Health Hazards
Polyethylene Homopolymer	No significant hazards
Carbon Black	Slight health hazard

**11. Additional Toxicological Information****Component Name / Comments**

Carbon Black

Some sources identify carbon black as a suspected human carcinogen. IARC concludes that the data are insufficient to classify carbon black as a human carcinogen.

**Material**

No additional toxicology information is available for this material.

**12. Physical and Chemical Data**

<b>Boiling Point</b> N/AP	<b>Viscosity</b> N/AP	<b>Dry Point</b> N/AP
<b>Freezing Point</b> N/AP	<b>Vapor Pressure</b> N/DA	<b>Volatile Characteristics</b> Negligible
<b>Specific Gravity</b> AP .02 to .15 (H <sub>2</sub> O = 1.0 at 39.2° F)	<b>Vapor Specific Gravity</b> N/AP	<b>Solubility in Water</b> Negligible (Less than .1 Percent)
<b>pH</b> N/AP	<b>Hazardous Polymerization</b> Not expected to occur	<b>Stability</b> Stable
<b>Other Chemical</b>	No additional information available	
<b>Reactivity</b>	No additional information available	
<b>Other Physical and Chemical Properties</b>	No additional information available	
<b>Appearance and Odor</b>	Black expanded plastic pellets with little or no odor	
<b>Conditions to avoid</b>	High temperatures, oxidizing conditions	
<b>Materials to avoid</b>	Strong oxidizing agents	
<b>Hazardous</b>	Incomplete combustion may produce carbon monoxide and other toxic gases	
<b>Decomposition Products</b>		

**13. Hazards Rating Information**

**National Fire Protection Association**

No hazards rating information is available for this system

**National Paint and Coatings Association**

**Hazardous Materials Information System (HMIS)**

No hazards rating information is available for this system

**14. Additional Precautions**

**Handling and Storage Procedures**

Due to the extremely slippery nature of this material, more care than usual must be exercised in material handling practices to keep off all walking surfaces. The hazard of any unavoidable spillage can be reduced by using as walking surface an open grating which will permit this material to fall into the open spaces between grating bars for later recovery.

**Decontamination Procedures**

No special decontamination procedures needed.

**15. Regulatory Information****FEDERAL:****Toxic Substance Control Act (TSCA)**

The following is the TSCA Chemical Substance Inventory Status of the components of this material with CAS numbers listed in Section 9 - Components:

CHEMICAL	CAS NO.	STATUS
Polyethylene Homopolymer	25087-34-7	1. Listed - Non Confidential
Carbon Black	1333-86-4	1. Listed - Non Confidential

**Superfund Amendments and Reauthorization Act of 1988 (SARA), Title III****- Section 302/304**

Requires emergency planning based on "Threshold Planning Quantities" (TPQs), and release reporting based on Reportable Quantities (RQs) of "Extremely Hazardous Substances" (EHS) listed in Appendix A of 40 CFR 355. There are no components of this material with known CAS numbers which are on the EHS list.

**- Section 311 & 312**

Based upon available information, this material and/or components are classified as the following health and/or physical hazards according to Section 311 & 312:

Immediate (Acute) Health Hazard

**- Section 313**

The material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels established by SARA Title III, Section 313 and 40 CFR 372.

**Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)**

No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.

**OSHA Regulation**

"Chemical-specific" OSHA regulations presented under 29 CFR 1910 do not apply to this material or its components.

**Other EPA Regulations**

No additional information is available.

**Department of transportation (DOT)**

Other than the normal shipping instructions and information given in this MSDS, there are no other specific DOT regulations governing the shipment of this material.

**STATE REGULATIONS:****California Safe Drinking Water and Toxic Enforcement Act of 1988 - Proposition 65**

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

**California South Coast Air Quality Management District (SCAQMD) Rule 443.1 (VOC's)**

A Volatile Organic Compound (VOC) is any volatile compound of carbon excluding methane, carbon monoxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, 1,1,1-trichloroethane, methylene chloride, (FC-23), (CFC-113), (CFC-12), (CFC-11), (CFC-22), (CFC-114), and (CFC-115). By this definition, this is not a VOC material.

**Massachusetts Right-to-Know Substance List (MSL) [105 CMR670.000]**

Hazardous Substances (MSL-HS) on the MSL must be identified when present in materials at levels greater than state specified criterion. The criterion is  $\geq 1\%$ . Components with CAS numbers present in this material at a level which could require reporting under the statute are:

CHEMICAL	CAS NO.
Carbon Black	1333-86-4

Extraordinarily Hazardous Substances (MSL-EHS) must be identified when present in materials at levels greater than state specified criterion. The criterion is  $\geq 0.0001\%$ . Components with CAS numbers present in this material, at levels specified in Section 9 - Components, do not require reporting under the statute.

**New Jersey Registration**

None of the trade secrets listed in Section 9 - Components have been registered with the State of New Jersey.

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## 15. Regulatory Information (Cont'd)

### Pennsylvania Right-to-Know Hazardous Substance Lists

Hazardous Substances (PA-HS) must be identified when present in materials at levels greater than the state specified criterion. The criterion is  $\geq 1\%$ .

Components with CAS numbers in this material at a level which could require reporting under the statute are:

CHEMICAL	CAS NO.
Carbon Black	1333-86-4

Special Hazardous Substances (PA-SHS) must be identified when present in materials at levels greater than the state criterion. The criterion

is  $\geq 0.01\%$ . Environmental Hazards (PA-EH) must be identified when present in materials at levels greater than the state specified criterion.

The criterion is  $\geq 0.01\%$ . Components with CAS numbers present in this material, at levels specified in Section 9 - Components, do not require reporting under the statute.

### Regulatory Advisory

**If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in Section 9, based on the final composition of your product.**

One or more of the trade secret components of this material, listed in Section 9 - Components, may be on states' regulatory lists. Chemical identities will be revealed to treating physicians in an emergency, or to purchasers after execution of a secrecy agreement.

**16. Label Information**

<b>Manufacturer:</b>		<i>JSP International</i> 273 Great Valley Parkway Malvern, PA 19355		<b>Telephone Numbers:</b>	
				EMERGENCY	
				800-424-9300      CHEMTREC	
				610-359-8300 <i>JSP International</i>	
				CUSTOMER SERVICE	
				800-722-7776      Information Only	
				<b>Signal Word</b> CAUTION	
<b>Other JSPI Names</b>	This document covers all members of the series of products identified as ARPAK <sup>R</sup> Expanded Polyethylene Beads G000692-001 through G000692-025				
<b>Use Statement</b>	Keep out of the reach of children				
<b>Physical Hazards</b>	Slipping hazard on smooth, hard walking surface		<b>Health Hazards</b>		
			Inhalation hazard - particulates/dust Eye irritant-particulates/dust		
<b>Precautionary Measures</b>					
Avoid contact with eyes					
Avoid prolonged or repeated breathing of dust					
Use with adequate ventilation					
Remove spillage immediately from hard, smooth walking areas					
<b>DOT Information:</b>	<b>UN/NA ID No.</b>	N/AP	<b>DOT Hazardous Class</b>	Not regulated	<b>DOT Reportable Quantity</b> N/AP
<b>DOT Hazardous Material Shipping Name</b>	Not regulated				
<b>Component Name</b>	<b>CAS No.</b>	<b>Composition Amount (Wt.)</b>			<b>RQ</b>
Polyethylene Homopolymer	25087-34-7	95.0	to	99.5 %	N/AP
Carbon Black	1333-86-4	0.0	to	5.0 %	N/AP
<b>Instructions:</b>	<b>In case of fire use:</b> Water; CO2; Dry chemical; Foam				
<b>First Aid:</b>	<b>Inhalation</b>	Remove victim to fresh air immediately. Obtain emergency medical attention if breathing difficulty persists beyond 15 minutes.			
	<b>Eye Contact</b>	In case of eye contact with this solid material, immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Obtain emergency medical attention if pain, blinking, tears or redness persist.			
	<b>Skin Contact</b>	Not expected to present a significant skin hazard under anticipated conditions of normal use.			
	<b>Ingestion</b>	Not expected to present a significant ingestion hazard under anticipated conditions of normal use.			
	<b>In case of Spill,</b>	Material creates dangerous slipping hazard on hard surfaces. Spread granular cover or provide open grating flooring. Limit access to essential personnel. On land, sweep/shovel into disposal containers. On water, material is insoluble; collect and contain as any solid. Report per regulatory requirements.			
<b>Protective Equipment</b>	<b>Respiratory</b>				
		Use NIOSH/MSHA approved dust or mist respirator where excessive dust or mist may result from use.			
<b>Eye</b>	Dust service goggles should be worn to prevent mechanical injury to eyes due to airborne particles when handling.				
<b>Skin</b>	No special clothing normally required. Where use can result in skin contact, wash thoroughly before eating, drinking, smoking, or leaving work.				
<b>Label No. :</b>	LG000692	<b>Version No.</b>	1	<b>Date:</b>	SEP 1 93

**17. General Comments**

**General Comments**

No additional information available.

**Other Comments**

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the material itself.

Note	EQ=Equal	AP=Approximately	N/P=No applicable information found
Qualifications:	LT=Less Than	UK=Unknown	N/AP=Not Applicable
	GT=Greater Than	TR=Trace	N/DA=No Data Available

**Disclaimer of liability**

The information in the MSDS was obtained from sources which we believe are reliable,

**HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.**

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge.

**FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE USE OR DISPOSAL OF THE PRODUCT.**

This MSDS was prepared and is to be used only for this product.

If the product is used as a component in another product, this MSDS information may not be applicable.