

# MATERIAL SAFETY DATA SHEET

**DYLITE® EXPANDABLE POLYSTYRENE - REGULAR GRADE**

MSDS No.  
HCRO03182

Rev. Date



ARCO CHEMICAL COMPANY  
DIVISION OF ATLANTIC RICHFIELD COMPANY  
1500 MARKET STREET  
P.O. BOX 7258  
PHILADELPHIA, PENNSYLVANIA 19101

**IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to 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 the rule.

## I. General

<b>Trade Name</b> DYLITE EXPANDABLE POLYSTYRENE - REGULAR GRADE		<b>Telephone Numbers</b> EMERGENCY 800/424-9300 CHEMTREC 215/353-8300 ARCO CHEM CUSTOMER SERVICE 800/321-7000 INFO ONLY	
<b>Other Names</b> EXPANDABLE POLYSTYRENE; FOAM POLYSTYRENE			
<b>Chemical Family</b> EXPANDABLE POLYSTYRENE		<b>DOT Hazardous Materials Proper Shipping Name</b> NOT REGULATED	
<b>Generic Name</b> N/P		<b>DOT Hazard Class</b> NOT REGULATED	
<b>CAS No.</b> SEE SECTION IX	<b>Company ID No.</b> E000319200	<b>UN/NA ID No.</b> NOT REGULATED	

## II. CAUTION Summary of Hazards

<b>PHYSICAL HAZARDS:</b>	EXTREMELY FLAMMABLE (BASED ON BLOWING AGENT)
<b>ACUTE HEALTH EFFECTS:</b> (SHORT-TERM)	SLIGHT INHALATION HAZARD SLIGHT EYE IRRITANT SLIGHT SKIN IRRITANT SLIGHT INGESTION HAZARD NOT A SKIN ABSORPTION HAZARD
<b>CHRONIC HEALTH EFFECTS:</b> (LONG-TERM)	NO CHRONIC HEALTH HAZARDS FOR THIS MATERIAL HAVE BEEN REPORTED

## III. Fire and Explosion

<b>Flash Point (Method)</b> -49° C ( CC ) BASED ON BLOWING AGENT	<b>Autoignition Temperature (Method)</b> AP 260° C BASED ON BLOWING AGENT	<b>Flammable Limits (% Vol. in Air)</b> At Normal Atmospheric Temperature and Pressure <b>Lower</b> 1.5 <b>Upper</b> 8.0 BASED ON BLOWING AGENT
<b>Fire and Explosion Hazards</b> WHEN CONTAINER IS OPENED/BROKEN, FLAMMABLE VAPOR IS RELEASED WHICH IS HEAVIER THAN AIR/CAN TRAVEL LONG DISTANCE ALONG GROUND/IGNITE/FLASH BACK TO SOURCE. ASSURE GOOD VENTILATION TO PREVENT FLAMMABLE VAPOR FORMATION. WHEN MATERIAL IS HANDLED STATIC CHARGE IS GENERATED WHICH CANNOT BE COMPLETELY DISSIPATED DUE TO INSULATING PROPERTY, CAUSING SPARK/IGNITION/EXPLOSION.		
<b>Extinguishing Media</b> DRY CHEMICAL      WATERSPRAY      WATER FOG CO2 WATER              FOAM		

**Special Firefighting Procedures**  
DO NOT ENTER AREA WITHOUT PROPER PROTECTION-SEE SECTION X - DECOMPOSITION PRODUCTS. FIREFIGHT FROM SAFE DISTANCE/PROTECTED AREA. BEADS CAN RESULT IN DANGEROUS WALKING ON SMOOTH HARD SURFACE/INTERFERE WITH FIREFIGHTING UNLESS COVERED OVER. FOR LARGE FIRE, USE MUCH WATER AS STRAIGHT STREAM TO "DIG" INTO HOT MOLTEN MASS FROM OUTSIDE TO OPEN AND COOL INTERIOR/PREVENT REIGNITION. INTERMITTENT FOG APPLICATION WILL PROVIDE SURFACE COOLING/PROTECTION OF FIREFIGHTERS. PRODUCES DENSE BLACK SMOKE WHEN BURNING, OBSCURING VISION.

**IV. Health Hazards**

**Summary of Acute Hazards** SLIGHT HEALTH HAZARD. SEE BELOW FOR ROUTE-SPECIFIC DETAILS.

ROUTE OF EXPOSURE	SIGNS AND SYMPTOMS	Primary Route(s)
Inhalation	NO SIGNIFICANT SIGNS OR SYMPTOMS INDICATIVE OF ANY ADVERSE HEALTH HAZARD ARE EXPECTED TO OCCUR AS A RESULT OF INHALATION EXPOSURE.	<input type="checkbox"/>
Eye Contact	MAY CAUSE MINOR EYE IRRITATION.	<input checked="" type="checkbox"/>
Skin Absorption	NO SIGNIFICANT SIGNS OR SYMPTOMS INDICATIVE OF ANY HEALTH HAZARD ARE EXPECTED TO OCCUR AS A RESULT OF SKIN ABSORPTION EXPOSURE.	<input type="checkbox"/>
Skin Irritation	MAY PRODUCE SKIN IRRITATION.	<input checked="" type="checkbox"/>
Ingestion	NO SIGNIFICANT SIGNS OR SYMPTOMS INDICATIVE OF ANY ADVERSE HEALTH HAZARD ARE EXPECTED TO OCCUR AS A RESULT OF INGESTION.	<input type="checkbox"/>
<b>Summary of Chronic Hazards and Special Health Effects</b>	CHRONIC HEALTH EFFECTS: NO CHRONIC HEALTH HAZARDS FOR THIS MATERIAL HAVE BEEN REPORTED.  NO ADDITIONAL MEDICAL INFORMATION FOUND.	

**V. Protective Equipment and Other Control Measures**

Respiratory	IF EXPOSURE EXCEEDS THE PEL/TLV, USE NIOSH/MSHA APPROVED RESPIRATORY PROTECTION EQUIPMENT AS SPECIFIED IN THE NIOSH/OSHA 1981 OCCUPATIONAL HEALTH GUIDELINES FOR CHEMICAL HAZARDS.
Eye	SAFETY GLASSES WITH SIDE GUARDS SHOULD BE WORN TO PREVENT INJURY FROM FLYING PARTICLES AND/OR OTHER EYE CONTACT WITH THIS PRODUCT.
Skin	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.
Engineering Controls	BOTH LOCAL EXHAUST AND GOOD GENERAL ROOM VENTILATION MUST BE PROVIDED NOT ONLY TO CONTROL EXPOSURE BUT ALSO TO PREVENT FORMATION OF FLAMMABLE MIXTURES.
Other Hygienic and Work Practices	NON-STATIC CREATING CLOTHING AND CONDUCTIVE SHOES SHOULD BE WORN.  MATERIAL SPILLED ON HARD SURFACE CAN BE A SERIOUS SLIPPING/FALLING HAZARD. USE CARE IN WALKING ON SPILLED MATERIAL. SPREAD COARSE, INERT GRANULAR COVER SUCH AS SAND, ON ANY AFFECTED WALKING SURFACE.

**VI. Occupational Exposure Limits**

Substance	Source	Date	Type	Value/Units	Time
PENTANE	OSHA	1971	PEL	2950 MG/M3	8 HRS
	ACGIH	1985	TLV	1800 MG/M3	8 HRS
			STEL	2250 MG/M3	15 MIN
NUISANCE DUST (TOTAL)	OSHA	1971	PEL	15 MG/M3	8 HRS
	ACGIH	1985	TLV	10 MG/M3	8 HRS



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## VII. Emergency and First Aid

<b>Inhalation</b>	IF OVERCOME BY EXPOSURE, REMOVE VICTIM TO FRESH AIR IMMEDIATELY. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED. OBTAIN EMERGENCY MEDICAL ATTENTION. PROMPT ACTION IS ESSENTIAL.
<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>	TREAT SYMPTOMATICALLY.  AFTER ADEQUATE FIRST AID, NO FURTHER TREATMENT IS REQUIRED, UNLESS SYMPTOMS REAPPEAR.

## VIII. Spill and Disposal

**Precautions if Material is Spilled or Released**

SPILL RELEASES FLAMMABLE VAPOR. KILL IGNITION SOURCES/VENTILATE CONFINED SPACES BEFORE ENTERING. CREATES DANGEROUS SLIPPING HAZARD ON ANY HARD SMOOTH SURFACE. SPREAD GRANULAR COVER/OPEN GRATING ON WALKWAYS. EQUIP CLEANUP CREW WITH PROPER PROTECTION. PREVENT FLOW TO LOW AREAS. FLAMMABLE VAPORS HEAVIER THAN AIR/CAN ACCUMULATE. ON LAND, VACUUM/SHOVEL INTO SUITABLE DISPOSAL CONTAINERS. MINIMIZE STATIC SPARKS/AVOID FLASH FIRE. ON WATER SOLIDS FLOAT. CONTAIN/COLLECT/TRANSFER TO SUITABLE DISPOSAL CONTAINERS. RECOVERED SOLIDS CAN RELEASE FLAMMABLE VAPOR FOR EXTENDED TIME. KEEP CONTAINERS TIGHTLY CLOSED. REPORT PER REGULATORY REQUIREMENTS.

**Waste Disposal Methods**

LANDFILL SOLIDS AT PERMITTED SITES. USE REGISTERED TRANSPORTERS. COMPLY WITH FEDERAL/STATE/LOCAL SOLID WASTE REGULATIONS. SOLIDS MAY ALSO BE BURNED, IF MIXED/FIRED WITH SUPPLEMENTAL FUEL. VAPORS GENERATED FROM SOLIDS CAN LOWER FLASH POINT OF SOLID-FUEL MIXTURE. AVOID FLAMEOUTS. ASSURE EMISSIONS COMPLY WITH APPLICABLE REGULATIONS. CONTAMINATED PRODUCT, SOIL OR WATER SHOULD BE CONSIDERED DANGEROUS DUE TO POTENTIAL EVOLUTION OF FLAMMABLE VAPOR.

## IX. Components This may not be a complete list of components

Component Name	CAS No.	Carcinogen##	Composition amount (Wt.) (See Qualification on Page 4)
POLYSTYRENE	9003-53-6	N/AP	90 TO 93 PERCENT
PENTANE	109-66-0	N/AP	7 TO 10 PERCENT

##Listed By: 1 = NTP, 2 = IARC, 3 = OSHA, 4 = Other

Compositions given are typical values, not specifications.



**XII.**

**Component Health Hazards**

**Component Name**

**Component Health Hazards**

PENTANE

MODERATE EYE IRRITANT



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**XIII**

**Label Information**

<b>Manufacturer:</b>	<b>ARCO CHEMICAL COMPANY</b> DIVISION OF ATLANTIC RICHFIELD COMPANY 1500 MARKET STREET P.O. BOX 7258 PHILADELPHIA, PENNSYLVANIA 19101	<b>Telephone Numbers</b> EMERGENCY 800/424-9300 CHEMTREC 215/353-8300 ARCO CHEM CUSTOMER SERVICE 800/321-7000 INFO ONLY
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**Use Statement:** FOR INDUSTRIAL USE ONLY  
KEEP OUT OF REACH OF CHILDREN

**Signal Word:** CAUTION

**Physical Hazards:**  
EXTREMELY FLAMMABLE

<b>Health Hazards:</b>	INHALATION HAZARD	INGESTION HAZARD
	SKIN IRRITANT	EYE IRRITANT

**Precautionary Measures:** DO NOT HANDLE NEAR HEAT, SPARKS, OR OPEN FLAME.  
KEEP CONTAINER CLOSED WHEN NOT IN USE.  
DO NOT STORE NEAR COMBUSTIBLE MATERIALS.  
AVOID CONTACT WITH EYES.  
AVOID PROLONGED OR REPEATED BREATHING OF VAPOR.  
AVOID PROLONGED OR REPEATED CONTACT WITH SKIN.  
USE WITH ADEQUATE VENTILATION.  
PREVENT CONTACT WITH FOOD, CHEWING, OR SMOKING MATERIALS.  
WASH THOROUGHLY AFTER HANDLING.  
DO NOT TASTE/SWALLOW.

<b>DOT Information:</b>	UN/NA ID Number-	NOT REGULATED
Hazard Class-		NOT REGULATED
Proper Shipping-		NOT REGULATED

<b>Instructions:</b>	DRY CHEMICAL	WATERSPRAY	WATER FOG
In case of fire, use-	CO2	FOAM	

<b>First Aid -Inhalation</b>	IF OVERCOME BY EXPOSURE, REMOVE VICTIM TO FRESH AIR IMMEDIATELY. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED. OBTAIN EMERGENCY MEDICAL ATTENTION. PROMPT ACTION IS ESSENTIAL.
<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.

In case of spill,

<b>Protective Equipment:</b>	
-Respiratory	USE NIOSH/MSHA APPROVED AIR-PURIFYING OR SUPPLIED AIR RESPIRATOR AS APPROPRIATE.
-Eye	SAFETY GLASSES WITH SIDE SHIELDS.
-Skin	NO SPECIAL CLOTHING NORMALLY REQUIRED. WHERE USE CAN RESULT IN SKIN CONTACT, WASH THOROUGHLY BEFORE EATING, DRINKING, SMOKING, OR LEAVING WORK.