



H. MUEHLSTEIN & CO., INC.

MATERIAL SAFETY DATA BULLETIN

**I. PRODUCT IDENTIFICATION**

12-07-07

SUPPLIER: - H. MUEHLSTEIN & CO., INC.

HEALTH EMERGENCY PHONE:

**CHEMICAL NAMES & SYNONYMS:**

609-737-4411

LINEAR LOW DENSITY POLYETHYLENE,  
LLDPE RESIN, ETHYLENE-BASED POLYMER

TRANSPORT EMERGENCY PHONE:

800-424-9300 (CHEMTREC)

PRODUCT TECHNICAL INFO:

800-257-3746

**II. COMPOSITION / INFORMATION ON INGREDIENTS**

INGREDIENT	PERCENT	CAS NUMBER
Ethylene/Octene-1 Copolymer	>= 99.0	26221-73-8
or		
Ethylene/Hexene-1 Copolymer	>= 99.0	25213-02-9
or		
Ethylene/Butene-1 Copolymer	>= 99.0	25087-34-7

**III. HAZARDS IDENTIFICATION**

COLOR: WHITE ODOR: ODORLESS

APPEARANCE: PELLETS OR GRANULES

HAZARD: SLIP/FALL

**THIS PRODUCT IS NOT HAZARDOUS AS DEFINED IN 29 CFR1910.1200 OSHA**

**POTENTIAL HEALTH EFFECTS**

**EYE CONTACT:** PARICULATES MAY SCRATCH EYE SURFACES

**SKIN CONTACT:** EXPOSURE TO HOT MOLTEN MATERIAL MAY CAUSE THERMAL BURNS

**INHALATION:** VAPORS MAY FORM AT ELEVATED TEMPERATURES

**INGESTION:** MINIMAL TOXICITY

**IV. FIRST AID PROCEDURES**

**EYE CONTACT:** IF IN EYE, REMOVE AS ONE WOULD ANY FOREIGN OBJECT.

**SKIN CONTACT:** IMMEDIATELY IMMERGE IN OR FLUSH WITH COLD WATER. NO ATTEMPT SHOULD BE MADE TO REMOVE MATERIAL FROM SKIN, AS SKIN CAN BE EASILY TORN.

**INHALATION:** REMOVE AFFECTED VICTIM FROM ADVERSE EXPOSURE TO VAPORS.

ADMINISTER ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. CALL FOR PROMPT MEDICAL ATTENTION.

**INGESTION:** MINIMAL TOXICITY

**V. FIRE-FIGHTING MEASURES**

**FLASH POINT Deg. F (C):** 500 (260) (ASTM E136)

**FLAMMABLE LIMITS:** NOT APPLICABLE

**AUTOIGNITION TEMP.:** Deg. F (C): 649 (343) NOTE: ESTIMATED MINIMUM

**EXTINGUISHING MEDIA:** CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG.

**SPECIAL FIRE FIGHTING PROCEDURES:** WATER OR FOAM MAY CAUSE FROTHING. USE

WATER TO KEEP FIRE EXPOSED CONTAINERS COOL. WATER SPRAY MAY BE USED TO

FLUSH SPILLS AWAY FROM EXPOSURE. FOR FIRES IN ENCLOSED AREA, FIREFIGHTERS

MUST USE SELF-CONTAINED BREATHING APPARATUS. PREVENT RUNOFF FROM FIRE

CONTROL OR DILUTION FROM ENTERING STREAMS OR DRINKING WATER SUPPLY.

**DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:** CARBON MONOXIDE (CO)

## **VI. ACCIDENTAL RELEASE MEASURES**

**LAND SPILL** - RECOVER SPILLED MATERIAL AND PLACE IN SUITABLE CONTAINERS FOR RECYCLE OR DISPOSAL. CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND ENSURE CONFORMITY TO LOCAL DISPOSAL REGULATIONS.

**WATER SPILL** - PLASTIC PELLETS ARE DEFINED BY THE US EPA UNDER THE CLEAN WATER ACT (40CFR122.26) AS A "SIGNIFICANT MATERIAL" WHICH REQUIRES ANY INDUSTRIAL PLANT THAT MAY EXPOSE PELLETS TO STORM WATER TO SECURE A STORM WATER PERMIT. PELLETS FOUND IN STORM WATER RUNOFF ARE SUBJECT TO EPA REGULATIONS WITH THE POTENTIAL FOR SUBSTANTIAL FINES AND PENALTIES. CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND ENSURE CONFORMITY TO LOCAL DISPOSAL REGULATIONS. RECOVER THE SPILLED MATERIAL AND PLACE IN SUITABLE CONTAINERS FOR RECYCLE OR DISPOSAL.

## **VII. STORAGE AND HANDLING**

**ELECTROSTATIC ACCUMULATION HAZARD** - USE A GROUNDING PROCEDURE

**STORAGE AND LOADING/UNLOADING TEMPERATURE** - AMBIENT

KEEP CONTAINER CLOSED. HANDLE AND OPEN CONTAINERS WITH CARE. STORE IN COOL, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. DO NOT HANDLE OR STORE NEAR AN OPEN FLAME, HEAT OR OTHER SOURCES OF IGNITION. PROTECT MATERIAL FROM DIRECT SUNLIGHT.

## **VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

### **EXPOSURE CONTROLS**

LOCAL EXHAUST VENTILATION OF PROCESS EQUIPMENT MAY BE NEEDED TO CONTROL PARTICULATE EXPOSURES TO BELOW THE RECOMMENDED EXPOSURE LIMIT.

### **PERSONAL PROTECTION**

FOR OPEN SYSTEMS AT AMBIENT TEMPERATURE (-18 TO 38 DEGREES C) WHERE CONTACT IS LIKELY, WEAR SAFETY GLASSES WITH SIDE SHIELDS. WHERE CONTACT MAY OCCUR WITH HOT MATERIAL, WEAR THERMAL RESISTANT GLOVES, ARM PROTECTION, AND A FACE SHIELD.

### **WORKPLACE EXPOSURE GUIDELINES**

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS: 5 mg/m<sup>3</sup> (RESPIRABLE DUST) AND 15 mg/m<sup>3</sup> (TOTAL DUST) BASED ON THE

### **OSHA PEL FOR NUISANCE DUST:**

THE RECOMMENDED PERMISSIBLE EXPOSURE LEVELS INDICATED ABOVE REFLECT THE LEVELS REVISED BY OSHA IN 1989 OR IN SUBSEQUENT REGULATORY ACTIVITY.

### **THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:**

A TWA OF 10 mg/m<sup>3</sup> FOR INHALABLE PARTICULATE (TOTAL DUST) AND A TWA OF 3 mg/m<sup>3</sup> FOR RESPIRABLE PARTICULATE (TOTAL DUST) FOR PARTICULATES NOT OTHERWISE CLASSIFIED (PNOC).

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

VISCOSITY OF LIQUID, cSt at Deg F: NOT APPLICABLE (NA)  
RELATIVE DENSITY, AT Deg. F: 0.92-0.970  
FLASH POINT F (C): 500 (260)  
MELTING POINT F (C): 248 (120)  
SOLUBILITY IN WATER, wt%: INSOLUBLE  
BOILING POINT F (C): NA  
VAPOR PRESSURE mmHG at Deg. F: N

**X. STABILITY AND REACTIVITY**

**STABILITY-** STABLE

**CONDITIONS TO AVOID INSTABILITY-** TEMP. OVER 650 F (343 C)

**HAZARDOUS POLYMERIZATION-** WILL NOT OCCUR

**HAZARDOUS DECOMPOSITION PRODUCTS-** FLAMMABLE HYDROCARBONS

**AVOID INCOMPATIBILITY-** FLUORINE AND STRONG OXIDIZING AGENTS

**XI. TOXICOLOGICAL INFORMATION**

ORAL TOXICITY (RATS): L050: 15 G/KG NON TOXIC (ESTIMATED) BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY (RABBITS) L050 5 G/KG NON TOXIC (ESTIMATED) BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY (RATS): NON TOXIC (ESTIMATED) BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

EYE IRRITATION (RABBITS) EXPECTED TO BE NON-IRRITATING - BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION (RABBITS): EXPECTED TO NON-IRRITATING - BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

**XII. ECOLOGICAL INFORMATION**

NO SPECIFIC ECOLOGICAL DATA ARE AVAILABLE FOR THIS PRODUCT.

**XIII. DISPOSAL CONSIDERATIONS**

PLEASE REFER TO SECTIONS 5, 6, AND 15 FOR REGULATORY INFORMATION.

**XIV. TRANSPORT INFORMATION**

THIS PRODUCT IS NOT DEPARTMENT OF TRANSPORTATION (DOT) REGULATED.

**XV. REGULATORY INFORMATION**

**TSCA:** THIS PRODUCT IS LISTED ON THE TSCA INVENTORY.

**CERCLA:**

IF THIS PRODUCT IS ACCIDENTLTY SPILLED, IT IS NOT SUBJECT TO ANY SPECIAL REPORTING UNDER THE REQUIREMENTS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT. WE RECOMMEND YOU CONTACT LOCAL AUTHORITIES TO DETERMINE IF THERE MAY BE OTHER LOCAL REPORTING REQUIREMENTS.

**SARA TITLE III:**

UNDER THE PROVISIONS OF TITLE III, SECTIONS 311/312 OF THE SUPERFUND ADMENDMENTS AND REAUTHORIZATION ACT, THIS PRODUCT IS CLASSIFIED INTO THE FOLLOWING HAZARD CATEGORIES:

**NOT HAZARDOUS**

THIS PRODUCT DOES NOT CONTAIN SECTION 313 REPORTABLE INGREDIENTS.

**XVI. OTHER INFORMATION**

**NOTES:**

POLYMER CAS NUMBERS:

FOR POLYETHYLENE HOMOPOLYMER GRADES: 9002-88-4  
FOR ETHYLENE/BUTENE-1 COPOLYMER GRADES: 25087-34-7  
FOR ETHYLENE/HEXENE-1 COPOLYMER GRADES: 25213-02-9  
FOR ETHYLENE/OCTENE-1 COPOLYMER GRADES: 26221-73-8  
MELTING POINT RANGE: 240 TO 265 Deg F. (115 TO 129 Deg C)

**HAZARD RATING SYSTEMS:**

THIS INFORMATION IS FOR PERSONNEL TRAINED IN:  
National Paint & Coatings Association's (NPCA)  
Hazardous Materials Identification System (HMIS)  
National Fire Protection Association (NFPA 704)

**Identification of the Fire Hazards of Materials**

	<u>NPCA-HMIS</u>	<u>NFPA 704</u>	<u>KEY</u>
<b>HEALTH</b>	1	1	4= SEVERE
<b>FLAMMABILITY</b>	1	1	3= SERIOUS
<b>REACTIVITY</b>	0	0	2= MODERATE
			1= SLIGHT
			0= MINIMAL

*INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE, BUT WITHOUT GUARANTEE. THE CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR AN APPLICATION IS BEYOND OUR CONTROL. ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND OF NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THIS PRODUCT. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.*