



MEHR PETROCHEMICAL COMPANY

Material Safety Data Sheet

High density Polyethylene

TRADE NAME: HIGH DENSITY POLYETHYLENE
MANUFACTURER: MEHR PETROCHEMICAL COMPANY

1- PRODUCT IDENTIFICATION

COMMON NAME: HIGH DENSITY POLYETHYLENE
USE OF THE SUBSTANCE /PREPARATION: A POLYETHYLENE PLASTIC - FOR INDUSTRIAL CONVERSION AS A RAW MATERIAL FOR THE MANUFACTURE OF ARTICLE OR GOODS
MANUFACTURER'S NAME: MEHR PETROCHEMICAL COMPANY
ADDRESS: PHASE-2, PEROCHEMICAL SITE, PARS ENERGY SPECIAL ECONOMIC ZONE, ASSALOUYEH, IRAN
EMERGENCY TELEPHONE: 0098 772 732 1093 - 6
CAS NUMBER: CAS: 9002-88-4
EC #: POLYMER
CLASSIFICATION: NOT CLASSIFIED
APPEARANCE: NATURAL, SLIGHTLY WHITE COLOURED CYLINDRICAL PELLETS
ODOUR: WAX-LIKE ODOR WHEN HEATED

2- CHEMICAL DATA

CHEMICAL FAMILY: POLYOLEFIN
FORMULA/ COMPOSITION: $-(C_2H_4)_n-$

3- PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE: PELLETS OR GRANULES
COLOUR: WHITE
ODOUR: NATURAL, SLIGHTLY WHITE COLOURED CYLINDRICAL PELLETS
FLASH POINT- CLOSED CUP (°C): 340
LOWER FLAMABLE LIMIT IN AIR: NOT APPLICABLE
UPPER FLAMABLE LIMIT IN AIR: NOT APPLICABLE
AUTO IGNITION TEMPRATURE (°C): >300
VAPOUR PRESSURE: NOT APPLICABLE
BOILING POINT(760 mmHg): NOT APPLICABLE
MELTING POINT: 130-140
VAPOUR DENSITY (AIR=1): NOT APPLICABLE
SPECIFIC GRAVITY(H₂O=1): 0.83 - 0.97
FREEZING POINT: 120-130
VISCOSITY (Cp): NOT APPLICABLE
SOLUBILITY IN WATER (BY WEIGHT): NEGLIGIBLE
PH: NOT APPLICABLE
KINEMATIC VISCOSITY: NOT APPLICABLE



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4- REACTIVITY INFORMATION

STABILITY	THIS MATERIAL IS STABLE
OXIDIZING AGENTS	AT ELEVATED TEMPERATURES, WILL REACT WITH STRONG OXIDIZING AGENTS
ACIDS	AT ELEVATED TEMPERATURES, WILL REACT WITH STRONG OXIDIZING ACIDS
ALKALIS	NO REACTION
SALT OR FRESHWATER	NO REACTION
AIR	NO REACTION
OTHER CHEMICALS	INCOMPATIBLE WITH FLUORINE
INCOMPATIBLE MATERIAL	NOT KNOWN
HAZARDOUS POLIMERIZATION	WILL NOT OCCUR
THERMAL DECOMPOSITION	DECOMPOSITION PRODUCTS DEPEND UPON TEMPERATURE, AIR SUPPLY AND THE PRESENCE OF OTHER MATERIALS.

5- FIRE AND EXPLOSION DATA

FLASH POINT- CLOSED CUP (°C)	340
LOWER FLAMABLE LIMIT IN AIR	NOT APPLICABLE
UPPER FLAMABLE LIMIT IN AIR	NOT APPLICABLE
AUTO IGNITION TEMPRATURE (°C)	>300
EXTINGUISHING MEDIA	WATER, FOAM OR DRY CHEMICAL POWDER
ESPECIAL FIRE FIGHTING PROCIDURES	RESPIRATORY AND EYE PROTECTION REQUIRED FOR FIRE FIGHTING PERSONNEL
UNUSUAL FIRE AND EXPLOSION HAZARD	OXYGEN LEAN CONDITIONS MAY PRODUCE CARBON MONOXIDE AND IRRITATING SMOKE

6-HEALTH HAZARD INFORMATION

TLV-TWA	ACGIH 1988 -1987 RECOMMENDS A TLV-TWA OF 10 mg/m TOTAL DUST FOR NUISNCE DUSTS SUCH AS POLYETHYLENE
EYE CONTACT	SOLID CAUSES TRANSIENT IRRITATION
SKIN CONTACT	NO EFFECT
INHALATION (ACUTE EFFECT)	EXPOSURE TO DUST AT CONCENTRATIONS GREATLY ABOVE THE HYGIENE STANDARD MAY CAUSE DAMAGE TO THE RESPIRATORY SYSTEM
INGESTION	ACUTE: PRACTICALLY NON TOXIC. SIGNIFICANT INGESTION MAY GIVE RISE TO GASTRO INTESTINAL DISTURBANCE
CAUTIONS	FLAMABLE / TOXIC GASES (HYDROCARBONS, CO , CO2 AND FUMES) WILL FORM UPON DECOMPOSITION, PRODUCT CAN ACCUMULATE STATIC CHANGES WHICH CAN CAUSE AN INCENDIARY ELECTRICAL DISCHARGE
REPEATED DOSE TOXICITY	ADDITIVES ARE ENCAPSULATED IN THE PRODUCT AND ARE NOT EXPECTED TO BE RELEASED UNDER NORMAL PROCESSING CONDITIONS OR FORSEEABLE EMERGENCY



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7- EMERGENCY AND FIRST AID PROCEDURES

PRODUCT IN EYE	REMOVE AS ONE WOULD REMOVE ANY FOREIGN OBJECT FOR HOT PRODUCT: IMMEDIATELY IMMERSE IN OR FLUSS AFFECTED AREA WITH LARGE AMOUNT OF COLD WATER TO DISSIPATE HEAT.
PRODUCT ON SKIN	COVER WITH CLEAN COTTON SHEETING OR GAUZE AND GET PROMPT MEDICAL ATTENTION. NO ATTEMPT SHOULD BE MADE TO REMOVE MATERIAL FROM SKIN OR TO REMOVE CONTAMINATED CLOTHING, AS THE DAMMAGED FLESH CAN EASILY TORN.
PRODUCT INHALED	IN CASE OF ADVERSE EXPOSURE TO VAPOURS AND/ OR AEROSOLS FORMED AT ELEVATED TEMPERATURES, IMMEDIATELY REMOVE THE EFFECTED VICTIM FROM EXPOSURE. ADMINISTER ARTIFICIAL RESPIRATION IF BREATHING IS STOPPED. KEEP AT REST CALL FOR PROMPT MEDICAL ATTENTION
PRODUCT INGESTED	FIRST AID IS NORMALLY NOT REQUIRED
SPILLAGE	PELLETS CREATE SLIPPERY CONDITIONS UNDER FOOT. VACUUM UP SPILLATES IMMEDIATELY. DISPOSE OF AS NON-HAZARDOUS WASTE

8- HANDLING AND STORAGE RECOMMENDATIONS AND PRECAUTIONS

STORAGE TEMPERATURE	AMBIENT
TRANSPORT TEMPERATURE	AMBIENT
LOADING / UNLOADING TEMPERATURE	AMBIENT
STORAGE / TRANSPORT PRESSURE	ATMOSPHERIC
GENERAL HANDLING	NO SMOKING, OPEN FLAMES OR SOURCES OF IGNITION IN HANDLING AND STORAGE AREA. GOOD HOUSKEEPING AND CONTROLLING OF DUSTS ARE NECESSARY FOR SAFE HANDLING OF PRODUCT. AVOID BREATHING PROCESS FUMES. USE WITH ADIQUATE VENTILATION . TO REDUCE THE POTENTIAL FOR DUST EXPLOSIONS, ELECTRICALLY BOND AND GROUND EQUIPMENT AND DO NOT PERMIT DUST TO ACCUMULATE. DUST CAN BE IGNITED BY STATIC DISCHARGE.
STORAGE	STORE IN ACCORDANCE WITH GOOD MANUFACTURING PRACTICES.

9- EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS	NON ESTABLISHED
EYE / FACE PROTECTION	USE SAFETY GLASSES. SAFETY GLASSES SHOULD BE CONSISTENT WITH DIRECTIVE 89/686/EEC CATEGORY 2. IF THERE IS A POTENTIAL FOR EXPOSURE TO PARTICLES WHICH COULD CAUSE EYE DISCOMFORT, WEAR CHEMICALGOGGLES. CHEMICAL GOGGLES SHOULD BE CONSISTENT WITH EN 166 OR EQUIVALENT. IF EXPOSURE CAUSES EYE DISCOMFORT, USE A FULL-FACE RESPIRATOR.
SKIN PROTECTION	NO PRECAUTIONS OTHER THAN CLEAN BODY -COVERING CLOTHING SHOULD BE NEEDED
HAND PROTECTION	CHEMICAL PROTECTIVE GLOVES SHOULD NOT BE NEEDED WHEN HANDLING THIS MATERIAL. CONSISTENT WITH GENERAL HYGENIC PRACTICE FOR ANY MATERIAL, SKIN CONTACT SHOULD BE MINIMIZED. USE GLOVES WITH INSULATION FOR THERMAL PROTECTION, WHEN NEEDED.



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RESPIRATORY PROTECTION	USE AN APPROVED AIR-PURIFYING RESPIRATOR WHEN VAPOURS ARE GENERATED AT INCREASED TEMPERATURES OR PRESENT USE A/AN PARTICULATE FILTER, TYPE P2. WHEN COMBINATIONS OF VAPOURS, ACIDS, OR DUSTS/ MISTS ARE PRESENT USE AN ORGANIC VAPOUR CARTRIDGE WITH A PARTICULATE PRE-FILTER, TYPE AP2.
LAND SPILL	SWEPT UP 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	STOP SOURCE IF POSSIBLE TO DO SO WITHOUT HAZARD. ADVICE AUTHORITIES OF POSSIBLE FLOATING SUBSTANCES. IF MATERIAL ENTERS WATER COURSES OF SEWERS. CONFINE IF POSSIBLE. SKIM FROM SURFACE. CONSULT AN EXPERT ON DISPOSAL OF ANY RECOVERED MATERIAL AND ENSURE CONFORMITY TO LOCAL DISPOSAL REGULATIONS.
INGESTION	USE GOOD PERSONAL HYGENE. DO NOT CONSUME OR STORE FOOD IN THE WORK AREA. WASH HANDS BEFORE SMOKING OR EATING
ENGINEERING CONTROLS/ VENTILATION	GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT FOR MOST CONDITIONS. LOCAL EXHAUST VENTILATION MAY BE NECESSARY FOR SOME OPERATIONS

10- TOXICOLOGICAL INFORMATION

INGESTION	VERY LOW TOXICITY IF SWALLOWED. HARMFUL EFFECTS NOT ANTICIPATED FROM SWALLOWING SMALL AMOUNTS. MAY CAUSE CHOKING IF SWALLOWED.
EYE CONTACT	SOLID OR DUST MAY CAUSE IRRITATION OR CORNEAL INJURY DUE TO MECHANICAL ACTION. VAPOUR MAY CAUSE EYE IRRITATION EXPERIENCED AS MILD DISCOMFORT AND REDNESS
SKIN CONTACT	PROLONGED CONTACT IS ESSENTIALLY NON-IRRITATING TO SKIN . MECHANICAL INJURY ONLY. UNDER NORMAL PROCESSING CONDIIONES, MATERIAL IS HEATED TO ELEVATED TEMPRERATURE; CONTACT WITH THE MATERIAL MAY CAUSE THERMAL BURNS.
SKIN ABSORBTION	NO ADVERSE EFFECTS ANTICIPATED BY SKIN ABSORPTION
INHALATION	NO ADVERSE EFFECTS ANTICIPATED FROM SINGLE EXPOSURE TO DUST.VAPOURS/FUMES RELEASED DURING THERMAL PROCESSING MAY CAUSE RESPIRATORY IRRITATION

DISPOSAL CONSIDERATIONS

FOR UNCONTAMINATED MATERIAL THE DISPOSAL OPTIONS INCLUDE MECHANICAL AND CHEMICAL RECYCLING OR ENERGY RECOVERY. IN SOME COUNTRIES LANDFILL IS ALSO ALLOWED. FOR CONTAMINATED MATERIAL THE OPTIONS REMAIN THE SAME, ALTHOUGH ADDITIONAL EVALUATION IS REQUIRED. FOR ALL COUNTRIES THE DISPOSAL METHODS MUST BE IN COMPLIANCE WITH NATIONALAND PROVINCIAL LAWS AND ANY MUNICIPAL OR LOCAL BY-LAWS. ALL DISPOSAL METHODS MUST BE IN COMPLIANCE WITH THE EU FRAMEWORK DIRECTIVES 91/156/EEC, 91/689/EEC AND THEIR SUBSEQUENT ADAPPTIONS, AS IMPLEMENTED IN NATIONAL LAWS ANDREGULATIONS, AS WELL AS EU DIRECTIVES DEALING WITH PRIORITY WASTE STREAMS. TRANSBOUNDRY SHIPMENT OF WASTES MUST BE IN COMPLIANCE WITH EU REGULATION 259/93 AND SUBSEQUENT MODIFICATIONS.