



EHR PETROCHEMICAL COMPANY

MATERIAL SAFETY DATA SHEET

LOW POLYMER

TRADE NAME: LOW POLYMER (LP)
MANUFACTURER: MEHR PETROCHEMICAL COMPANY

1- PRODUCT IDENTIFICATION

COMMON NAME: LOW POLYMER
USE OF THE SUBSTANCE /PREPARATION: USE AS ADDITIVES FOR MASTER BATCH, LUBRICANT AGENT, PAPER COATING, SPRAY COATING, EMULSION, PRINTING INK & ETC.
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 FLAKES
ODOR: HYDROCARBON ODOR

2- CHEMICAL DATA

CHEMICAL FAMILY: POLYOLEFIN
CHEMICAL NAME: MIXTURE OF LOW MOLECULAR WEIGHT POLYETHYLENE, HEXANE, OLIGOMER AND WATER
FORMULA/ COMPOSITION: $-[C_2H_4]_n-$ n=350 - 7000

3- PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE: SOLIDIFIED FLAKE (AMBIENT), MOLTEN MATERIAL (> 90°C)
COLOUR: WHITE
ODOUR: HYDROCARBON ODOR
VAPOUR PRESSURE (KPA): 100 mm.HG at 15.8 °C (HEXANE)
BOILING POINT(760 mmHg): 68.8 (HEXANE)
MELTING POINT(°C): 85 ~115 (LOW POLYMER)
BULK DENSITY (KG./M3): 0.88 ~ 0.94 (LOW POLYMER)
SPECIFIC GRAVITY:
LIQUID (H2O=1): 0.66 at 20°C (HEXANE)
VAPOUR (AIR=1): 3 (HEXANE)
VISCOSITY (Cp): APPROX. 4 ~5000 CP at 149°C (LOW POLYMER)

4- FIRE AND EXPLOSION DATA

FLASH POINT (°C): 140
LOWER FLAMABLE LIMIT IN AIR: 1.2 VOL%
UPPER FLAMABLE LIMIT IN AIR: 7.5 VOL% (HEXANE)
AUTO IGNITION TEMPRATURE (°C): 233
EXTINGUISHING MEDIA: CARBON DIOXIDE, POWDER TYPE OR FOAM TYPE EXTINGUISHER
CHEMICAL REACTIVITY: GOOD REACTION WITH OXIDISING AGENTS AT HIGH TEMPERATURES



5-HEALTH HAZARD INFORMATION

ROUTE OF ENTRY	FROM RESPIRATION
TARGET ORGANS	RESPIRATORY SYSTEM
SKIN CONTACT	NO EFFECT
INHALATION EFFECTS	MAYBE INTOXICATED IF INHALE FOR LONG TIME

6- EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT	EYE WASHING WITH WATER DURING 15 MINUTES
SKIN CONTACT	AFTER WASHING THE SKIN, FIRST AID FOR A BURN OF SKIN
INGESTION CONTACT	MOVING TO THE PLACE OF FRESH AIR, KEEPING QUIET
NOTE TO PHYSICIAN	AFTER FIRST AID PROCEDURE, IMMEDIATELY GO TO HOSPITAL

7- SAFETY MEASURES

SPECIAL PROTECTION INFORMATION

a) VENTILATION

LOCAL EXHAUST	NECESSARY
MECHANICAL GENERAL	EXPLOSION PROOF TYPE

b) RESPIRATION PROTECTION TYPE (RESPIRATOR FOR MOLTEN LOW POLYMER)

EYE PROTECTION TYPE	EYE GLASS
HAND PROTECTION TYPE	HAND GLOVES

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 HOUSEKEEPING AND CONTROLLING OF DUSTS ARE NECESSARY FOR SAFE HANDLING OF PRODUCT. AVOID BREATHING PROCESS FUMES. USE WITH ADEQUATE 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
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.
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	SWEEPED 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. ADVISE 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

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 CONDITIONS, MATERIAL IS HEATED TO ELEVATED TEMPERATURE; CONTACT WITH THE MATERIAL MAY CAUSE THERMAL BURNS.
SKIN ABSORPTION	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 CONSIDRATIONS

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 NATIONAL AND 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 ADAPTIONS, AS IMPLEMENTED IN NATIONAL LAWS AND REGULATIONS, AS WELL AS EU DIRECTIVES DEALING WITH PRIORITY WASTE STREAMS. TRANSBOUNDARY SHIPMENT OF WASTES MUST BE IN COMPLIANCE WITH EU REGULATION 259/93 AND SUBSEQUENT MODIFICATIONS.