

EXTENDING THE LIFE OF EXTRACTED NATURAL RESOURCES

Origins Material Data Sheet

SECTION 1 - PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

SUPPLIER:	YEMM & HART LTD	EMERGENCY TELEPHONE NO:	573-783-5434
CHEMICAL NAME:	High Density Polyethylene (HDPE) (#2)	REGULAR TELEPHONE NO:	573-783-5434
CHEMICAL FAMILY:	Thermoplastics	CAS NUMBER:	9002-88-4
TRADE NAMES:	Origins	PERCENTAGE (%):	100

SECTION 2 - TYPICAL CHEMICAL & PHYSICAL PROPERTIES

APPEARANCE:	Waxy Solid	ODOR:	Slight paraffin odor
BOILING POINT:	N/A	MELTING POINT:	248° - 275° F
VAPOR PRESSURE - mm Hg 20C:	N/A	SPECIFIC GRAVITY gr/cc (WATER = 1):	.952
VAPOR DENSITY (AIR = 1):	>10	PERCENT VOLATILE BY VOLUME (%):	<0.4
SOLUBILITY IN WATER % BY WEIGHT:	Insoluble	EVAPORATION RATE (BUTYL ACETATE = 1):	N/A
FORMULA: (CH₂-CH₂)+Additives (if any)	pH: N/A	VOC:	N/A

SECTION 3 - POTENTIALLY HAZARDOUS INGREDIENTS

MATERIAL:	N/A	PERCENTAGE (%):	N/A	TLV-TWA VALUES ADOPTED BY ACGIH:	N/A
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SECTION 4 - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: **Problems not expected** THRESHOLD LIMIT VALUE: **N/A**

SECTION 5 - EMERGENCY FIRST AID PROCEDURES

EYE CONTACT: **Flush thoroughly with water. If irritation persists, call a physician.**
 SKIN CONTACT: **If hot material contacts skin, flush with cold water and secure treatment of thermal burn.**
 INHALATION: **Problems not expected.**
 INGESTION: **Problems not expected when ingested, if uncomfortable seek a physician.**

SECTION 6 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	640° F (338° C) (ASTM D56)	AUTOIGNITION TEMPERATURE::	640° F (338° C)
FLAMMABLE LIMITS IN AIR % x VOLUME - LEL:	N/A	UEL:	N/A
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 materials cool. Use standard chemical fire fighting procedures. For fires in enclosed areas, firefighters must use self-contained breathing apparatus. Prevent fire control or dilution runoff from entering streams, sewers or drinking water supply.		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Exposure to fire can generate highly toxic fumes. Dust may be flammable when finely divided and suspended in the air.		
NFPA HAZARD ID:	HEALTH: 1	FLAMMABILITY: 1	REACTIVITY: 0

SECTION 7 - REACTIVITY DATA

STABILITY (THERMAL, LIGHT, ETC.) - STABLE:	Yes	UNSTABLE:	No	CONDITIONS TO AVOID:	Extreme heat
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong Oxidizers				
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, acetaldehyde, formaldehyde, formic & acetic acid				
HAZARDOUS POLYMERIZATION - MAY OCCUR:	WILL NOT OCCUR:	X	CONDITIONS TO AVOID: None Known		

SECTION 8 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: **Sweep up and collect as harmless organic waste.**
 WASTE DISPOSAL METHOD: **Recycle, landfill or incineration in accordance with regulations.**

SECTION 9 - SPECIAL PROTECTION INFORMATION

EYE PROTECTION: **When cutting, drilling or sanding** PROTECTIVE GLOVES: **When handling hot material**
 RESPIRATORY PROTECTION (SPECIFY TYPE): **When cutting or sanding, approved dust respirators must be worn.**
 VENTILATION: **Use adequate ventilation when cutting, sanding or thermo processing.**
 OTHER PROTECTIVE EQUIPMENT: **Gloves are recommended when handling heavy material with sharp edges.**

SECTION 10 - SPECIAL PRECAUTIONS

HANDLING: **Thin polyethylene sheets, when slid across one another can build up a static electrical charge. Do not slide sheets from a stack where potentially flammable air/dust or air/vapor mixtures exist. To minimize static electricity buildup, lift sheet straight up from stack. Thermo degradation products of polyethylene may include acetaldehyde, formaldehyde, formic acid and acetic acid.**
 STORAGE: **Store in a cool area.**
 PRECAUTIONARY LABELING: **Do not slide thin polyethylene sheets off of a stack where potentially flammable air/dust or air/vapor mixtures exist due to possible fire or explosion hazard from static electrical charge.**

SECTION 11 - TOXICOLOGICAL DATA - Acute toxicology

TOXICITY: ORAL (RATS), DERMAL (RABBITS), INHALATION (RATS): **Nontoxic - Based on testing of similar products and/or components.**
 EYE & SKIN IRRITATION (RABBITS): **Non-irritating - Based on testing of similar products and/or components.**

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