



MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL COMPANY POLYMERS GROUP, P.O. BOX 3273, HOUSTON, TEXAS 77263-3273
A DIVISION OF EXXON CORPORATION

POLYMERS GROUP -- a Quality business

ESCORENE GRADE: DL1015

PAGE: 1
DATE PREPARED: AUG 20, 1992
MSDS NO.: 89177044

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: DL1015

CHEMICAL NAME:
Polyethylene or Ethylene-Olefin Copolymer

CHEMICAL FAMILY:
Ethylene-Based Polymer

PRODUCT DESCRIPTION:
Odorless opaque white pellets or granules.

EMERGENCY TELEPHONE NUMBERS: EXXON CHEMICAL AMERICAS 713-870-6000
CHEMTREC 800-424-8300

SECTION 2 HAZARDOUS INGREDIENT INFORMATION

This product is not hazardous as defined in 29 CFR 1910.1200

SECTION 3 HEALTH INFORMATION & PROTECTION

NATURE OF HAZARD

EYE CONTACT:

Particulates may scratch eye surfaces/cause mechanical irritation.

SKIN CONTACT:

Negligible hazard at ambient temperatures (-18 to +38 degrees C; 0 to 100 degrees F).

Exposure to hot material may cause thermal burns.

INHALATION:

Negligible hazard at ambient temperature (-18 to 38 Deg C; 0 to 100 Deg F)

Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Low order of toxicity.

INGESTION:

Minimal toxicity.

FIRST AID

EYE CONTACT:

This product is an inert solid. If in eye, remove as one would any foreign object.

SKIN CONTACT:

For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. 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 damaged flesh can be easily torn.

INHALATION:

First aid is normally not required.

INGESTION:

First aid is normally not required.

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WORKPLACE EXPOSURE LIMITS

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:

5 mg/m³ (respirable dust), and 15 mg/m³ (total dust) based on the OSHA PEL for nuisance dust.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:

a TWA of 10 mg/m³ (total dust) for nuisance dust.

PRECAUTIONS

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.

VENTILATION:

Local exhaust ventilation of process equipment may be needed to control particulate exposures to below the recommended exposure limit. See personal protection recommendations.

SECTION 4 FIRE & EXPLOSION HAZARD

FLASHPOINT: 649 Deg F. METHOD: ASTM E136 NOTE: Estimated Minimum

FLAMMABLE LIMITS: NOTE: Not applicable

AUTOIGNITION TEMPERATURE: 649 Deg F. NOTE: Estimated Minimum

GENERAL HAZARD:

Solid material, may burn at or above the flashpoint, and airborne dust may explode if ignited.
Toxic gases will form upon combustion.
Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces, protect personnel, and extinguish the fire.
Respiratory and eye protection required for fire fighting personnel.

HAZARDOUS COMBUSTION PRODUCTS:

Oxygen-lean conditions may produce carbon monoxide and irritating smoke.

SECTION 5 SPILL CONTROL PROCEDURE

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.



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WATER 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.

Plastic pellets are defined by the U. S. EPA as a "significant material" thereby requiring any industrial plant that may expose pellets to storm water to secure a storm water permit. Violations of the rule (e. g. failing to apply for a permit) carry the same penalties as other Clean Water Act violations. Pellets found in storm water runoff are subject to EPA regulation with the potential for substantial fines and penalties.

SECTION 9 - NOTES

NOTES:

National Fire Protection Association standards NFPA 654 and 68 indicate possible explosion hazard of dust particles. Uniform accordingly. Avoid accumulation of dust or dust clouds; operate handling and storage systems leak free, practice good housekeeping.

Keep from sources of ignition. Do not store near heat, flame, or strong oxidizers.

Assure proper electrical grounding of all handling equipment.

For more information see "Guide for Handling and Storage of ESCORENE Polyethylene Resins."

Product may also contain varying levels of additives, such as slip and antiblocking agents (talc or silica), antioxidants, stabilizers, and corrosion inhibitors.

SPECIAL PRECAUTIONS:

Should significant vapors/fumes be generated during thermal processing of this product, it is recommended that work stations be monitored for the presence of thermal degradation by-products which may evolve at elevated temperatures. It is recommended that the current ACGIH-TLVs for these materials be observed. Contact your Exxon representative for further information.

HAZARD RATING SYSTEMS:

This information is for people 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

	NPCA-HMIS	NFPA 704	KEY
HEALTH	2	2	4 = Severe
FLAMMABILITY	1	1	3 = Serious
REACTIVITY	0	0	2 = Moderate
			1 = Slight
			0 = Minimal



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SECTION 7 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT):
DOT HAZARD CLASS: Not regulated
DOT IDENTIFICATION NUMBER: Not Available

FLASHPOINT: 649 Deg F. METHOD: ASTM E136 NOTE: Estimated Minimum

TSCA:

This product is listed on the TSCA Inventory.

CERCLA:

If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). 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 Amendments and Reauthorization Act, this product is classified into the following hazard categories:

Not Hazardous.

This product does not contain Section 313 Reportable Ingredients.

SECTION 8 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

SPECIFIC GRAVITY:

0.92 - 0.970

SOLUBILITY IN WATER, WT. % AT °F:

Insoluble

SP. GRAV. OF VAPOR, at 1 atm (Air=1):

Not applicable

EVAPORATION RATE, n-Bu Acetate=1:

Not applicable

VAPOR PRESSURE, mmHg at °F:

Not applicable

VISCOSITY OF LIQUID, CST AT °F:

Not applicable

FREEZING/MELTING POINT, °F:

225 to 228 Deg F

BOILING POINT, °F:

Not applicable

SECTION 9 REACTIVITY DATA

STABILITY:

Stable

CONDITIONS TO AVOID INSTABILITY:

Temperatures over 650 F (343 C) may cause resin degradation.

HAZARDOUS POLYMERIZATION:

Will not occur

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:

Fluorine

Strong Oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS:

Not applicable

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Yes, use proper grounding procedure

STORAGE TEMPERATURE, °F:

Ambient

STORAGE/TRANSPORT PRESSURE, mmHg:

Atmospheric

LOADING/UNLOADING TEMPERATURE, °F:

Ambient

VISC. AT LOADING/UNLOADING TEMP., cSt:

5011d

REVISION SUMMARY:

Since JULY 19, 1992 this MSDS has been revised in Section(s):

7

REFERENCE NUMBER:

HDHA-K-10103

DATE PREPARED:

August 20, 1992

SUPERSEDES ISSUE DATE:

July 19, 1992

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR TECHNICAL SALES REPRESENTATIVE
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 713-870-6884

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.

MATERIAL SAFETY DATA SHEET

HMIS Code

1 - 0
2 - 1
3 - 0*****
* AMPACET CORPORATION *
*****Issued: 05/13/86
Revised: 02/04/94

SECTION I IDENTIFICATION

Manufacturer's Name:
AMPACET Corporation
660 White Plains Road
Tarrytown, New York 10591-5130Emergency Telephone No.
(914) 631-6600 Days
(318) 443-6001 NightsPRODUCT NAME: 15114 RED PE MB
TRADE NAME AND SYNONYMS: Polyolefin compounds and concentrates
CHEMICAL FAMILY: COLOR CONCENTRATE FORMULA: PROPRIETARY FORMULATION

SECTION II HAZARDOUS INGREDIENTS

The following ingredients are listed as hazardous materials according to 29CFR1910.1200 (Hazard Communication Standard-USA) and as controlled substances under WHMIS (Workplace Hazardous Materials Information System-Canada)

PIGMENTS: NOT APPLICABLE
VEHICLE: NOT APPLICABLE
ADDITIVES: NOT APPLICABLEA more detailed disclosure will be provided to appropriate medical or industrial hygiene personnel as privileged information upon request in case of need for specific treatment.
For details regarding CAS content, see Sect. X of this document.

SECTION III PHYSICAL DATA

SOLUBILITY IN WATER: NONE SPECIFIC GRAVITY: 1.06
APPEARANCE AND ODOR: RED OPAQUE PELLETS WITH NO ODOR.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT/AUTO-IGNITION TEMPERATURE: > 600 DEGREES F.

FLAMMABLE LIMITS: NOT APPLICABLE
EXTINGUISHING MEDIA: WATER SPRAY, WATER FOG, FOAM, CO2, DRY CHEMICALS.SPECIAL FIRE FIGHTING PROCEDURES: NONE
UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE.

AMPACET CORPORATION MATERIAL SAFETY DATA SHEET
PRODUCT NAME: 15114 RED PE MB

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NOT APPLICABLE
EFFECTS OF OVEREXPOSURE: NOT APPLICABLE
EMERGENCY FIRST AID PROCEDURES: NOT APPLICABLE

SECTION VI REACTIVITY DATA

STABILITY: STABLE UNSTABLE
CONDITIONS TO AVOID: NONE.
INCOMPATIBILITY: NONE.
HAZARDOUS DECOMPOSITION PRODUCTS: NONE.
HAZARDOUS POLYMERIZATION: MAY OCCUR WILL NOT OCCUR
CONDITIONS TO AVOID: NONE.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
STOP SOURCE OF SPILL.
IF MATERIAL ENTERS A SEWER OR WATERWAY, NOTIFY
RESPONSIBLE AUTHORITIES OF NON-TOXIC PLASTIC PELLETS.
WASTE DISPOSAL METHOD:
SWEEP UP SPILLED MATERIAL AND PLACE IN SUITABLE
CONTAINER FOR RECYCLE OR DISPOSAL. CONSULT AN
EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND ENSURE
CONFORMITY TO LOCAL DISPOSAL REGULATIONS.

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SECTION VIII

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

NOT NEEDED UNLESS DUST, SMOKE OR FUMES ARE GENERATED IN PROCESSING OR HANDLING. THE PELLET FORM OF THIS PRODUCT AND LOW SOLUBILITY OF THE POLYOLEFIN CARRIER PRECLUDE SIGNIFICANT INHALATION EXPOSURE TO SOLID INGREDIENTS DURING ORDINARY HANDLING.

VENTILATION:

LOCAL EXHAUST: NOT NEEDED IN OPEN AREAS.
SPECIAL: NOT APPLICABLE
MECHANICAL: IF DUSTING CONDITIONS EXIST,
PROVIDE VENTILATION EQUAL TO OUTDOORS.

PROTECTIVE GLOVES: NOT NEEDED.

EYE PROTECTION: NOT NEEDED.

OTHER PROTECTIVE EQUIPMENT: NOT NEEDED.

SECTION IX

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

DO NOT STORE NEAR HEAT, FLAME, NOR STRONG OXIDANTS.

OTHER PRECAUTIONS: NOT APPLICABLE

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SECTION X

TOXIC SUBSTANCES CONTROL ACT (TSCA)

This Act requires that ALL chemicals imported, produced or used in U.S. manufacture be registered in the Chemical Substance Inventory. This product contains the following chemicals therein registered:

CAS#	Chemical Name
1309-37-1	IRON OXIDE YELLOW IRON OXIDE RED IRON OXIDE
5160-02-1	BENZENESULFONIC ACID, 5-CHLORO-2-[(2-HYDROXY-1-NAPHTHALANENYL)AZO]-4-METHYL-, BARIUM SALT C. I. PR93:1 (15585:1)
7023-61-2	C. I. PR48:2 (15865)
9002-88-4	POLYETHYLENE HOMOPOLYMER
57455-37-5	C. I. P829 (77007)

SUPER FUND AMENDMENT REAUTHORIZATION ACT (SARA TITLE III, SECTION 313)
SUPPLIER NOTIFICATION

This product contains the following chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and 40 CFR 372:

NONE

This information must be included in all MSDSs that are copied and distributed for this material.

OZONE DEPLETING SUBSTANCES

This product is not formulated with, nor does the process utilize any known Class I or Class II Ozone Depleting Substances regulated by the EPA Clean Air Act (40CFR Part 82)

HAZARD DATA CONTAINED HEREIN WAS OBTAINED FROM RAW MATERIAL SUPPLIERS

PREPARED BY: DENISE R. HOLL, ENVIRONMENTAL COORDINATOR (914) 631-6600

MATERIAL SAFETY DATA SHEET

Sun Chemical
Corporation
General Printing Ink Division

I Product Identification

Manufacturer's Name	Sun Chemical Corporation	MSDS Number :	170001
Street Address	631 Central Avenue Carlstadt New Jersey 07072	Revision Date :	8/21/90
		Supersedes :	1/16/90
Telephone Number	(201) 933-4500		
Product Class	SOLVENT BASED FLEXOGRAPHIC		
Manufacturer's Code	SEE ATTACHED LIST		

II Hazardous Ingredients

Component	Hazard	Exposure Limits	
		OHSA	ACGIH
Ethanol (CAS# 64-17-5) N-Propyl Acetate (CAS# 109-60-4) Isopropanol (CAS# 67-63-0) N-Propanol (CAS# 71-23-8) Heptane (CAS# 142-82-5)		PEL-1000ppm	TLV-1000ppm
		PEL-200ppm STEL-250ppm	TLV-200ppm STEL-250ppm
		PEL-400ppm STEL-500ppm	TLV-400ppm STEL-500ppm
		PEL-200ppm STEL-250ppm	TLV-200ppm (skin) STEL-250ppm
		PEL-400ppm STEL-500ppm	TLV-400ppm STEL-500ppm

III Health Effect Information - Finished Product

Primary Hazard : Can cause eye and skin irritation. Can cause central nervous system depression.

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IV Health Effect Information - Hazardous Ingredients (100% Concentration)**Eye Contact** May cause severe irritation, tearing or blurred vision.**Skin Contact** Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis.**Inhalation** Breathing high concentration of vapors may cause dizziness, headache, nausea, drowsiness and respiratory tract irritation.**Ingestion** May cause nausea, vomiting and diarrhea.**Health Data** Overexposure to components has been reported to cause liver, lung, kidney, eye, nervous system and brain cell damage in laboratory animals.**Medical Conditions Aggravated By Exposure** Existing skin and respiratory disorders.**V Emergency & First Aid Procedures****Eye Contact** Flush with water for 15 minutes. If irritation develops, consult a physician.**Skin Contact** Wash with soap and water. Remove any contaminated clothing and launder before reusing.**Inhalation** Remove affected person to fresh air. If necessary administer oxygen and consult a physician.**Ingestion** Induce vomiting and consult a physician immediately.

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VI Personal Health Protection Information

Eye Protection Safety glasses or goggles recommended to prevent accidental contact.

Skin Protection Impervious gloves should be worn.

Ventilation Sufficient to maintain TLV's. (See Section II)

Respiratory Protection Where TLV's are not exceeded, none required. However, if TLV's are greatly exceeded, appropriate respiratory equipment should be supplied.

Other Eye bath and safety shower are recommended.

VII Fire & Explosion Data

Flash Point (lowest) < 60°F

Flash Point Method T.C.C.

Flash Point Category (OSHA/NFPA) IB

Lower Flammability Limit in Air (% by Vol) < 2.0%

Extinguishing Media Carbon dioxide, dry chemical or foam.

Special Fire Fighting Procedures Self-contained breathing apparatus and protective clothing should be worn in chemical fires.

Unusual Fire and Explosion Hazards Can ignite explosively.

VIII Reactivity Data

Stable X	Unstable	Conditions to Avoid Heat, sparks and open flame
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Incompatibility Strong alkalies, acids or oxidizing agents

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IX Physical Data

Boiling Range	140 - 250°F	Density (lbs/gal)	7 - 11
Percent Volatile (weight)	40 - 80%	Evaporation Rate (vs. Butyl Acetate)	Slower
Vapor Density (vs. air)	Heavier	Appearance/Odor	Colored fluid Charac of solvent odor

X Environmental Precautions

Procedure if Material is Spilled or Released Eliminate all sources of ignition, use suitable protective equipment. Clean up with absorbent material.

Waste Disposal Method In accordance with federal, state and local regulations.

XI Special Precautions

Handling and Storage Requirements Keep containers closed in a cool, well ventilated area.

Precautionary Statements Avoid contact with eyes, skin and clothing. Keep away from heat, sparks, and open flame.

XII Additional Comments

None.

Disclaimer of Liability

The above information is based on data available to us and is believed to be correct. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or to be implied regarding the accuracy of such data, the results to be obtained from the use thereof, the hazards connected with the use of the material, or any such use will not infringe any patent. Since the information contained herein may be applied under conditions beyond our control, and with which we may be unfamiliar, we do not assume any responsibility resulting from its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.