

MATERIAL SAFETY DATA SHEET

Product: PN Red Developer

MSDS No.: Lastra / DA12a

Date: August 3, 2004

Revised: August 18, 2003

Hazardous Material
Identification System

HEALTH HAZARD	1- Slight
FLAMMABILITY HAZARD	2- Moderate
REACTIVITY HAZARD	0- Minimal

SECTION 1. PRODUCT IDENTIFICATION

Trade/Material Name:

PN RED DEVELOPER

LASTRA AMERICA CORPORATION
2034 N. Jackson
Jacksonville, Texas, 75766

24 HOUR EMERGENCY PHONE NUMBER:
Only for a chemical emergency involving an
accident, spill, leak, fire, or exposure.

Telephone (8am-5pm, Central): (903) 589-9500
CHEMTREC - (800) 424-9300
(International - US (202) 483-7616)

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS NUMBER	PERCENT	EXPOSURE LIMITS	
			OSHA PEL	ACGIH TLV
HAZARDOUS INGREDIENTS:				
Ethylene Glycol*	107-21-1	5 - 10	50ppm	vapor
Cyclohexanone	108-94-1	5 - 10	25ppm	
Cyclohexanol	108-93-0	1 - 5	50ppm	
Acetic acid	64-19-7	1 - 5		
Propylene glycol methyl ether acetate	108-65-6	1 - 5		

OTHER INGREDIENTS:

Red Pigment

* INGREDIENT SUBJECT TO REPORTING OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 40CFR PART372.45.

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SECTION 3. HAZARDOUS IDENTIFICATION

OVERVIEW: Red viscous liquid. Pungent odor. Irritating to eyes, skin and respiratory tract.

TARGET ORGANS: Eyes and skin. Ingestion may cause kidney damage. Upper respiratory tract.

PRIMARY ENTRY ROUTE(S): Eyes, skin and inhalation

POTENTIAL HEALTH EFFECTS:

EYE CONTACT:	Causes eye irritation.
SKIN CONTACT:	Irritation with discomfort and rash. Prolonged or repeated skin contact may cause dermatitis.
INHALATION:	Inhalation may cause nose & throat irritation.
INGESTION:	Central nervous system depression. May cause kidney failure.

SECTION 4. FIRST AID MEASURES

FIRST AID:

EYE CONTACT:	Flush eyes immediately with copious amounts of water for at least 15 minutes and get medical advice as soon as possible.
SKIN CONTACT:	Remove contaminated clothing. Wash affected area immediately with plenty of soap and water for at least 15 minutes and get medical advice. Wash contaminated clothing before re-use.
INHALATION:	In any case of breathing difficulty, move the person to fresh air and get medical advice immediately.
INGESTION:	Induce vomiting and get medical advice immediately. Never give anything by mouth to an unconscious person.

Wear protective equipment specified in Section 8.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT and METHOD: 131°F (ASTM-D93)

AUTOIGNITION TEMP.: Not Applicable

EXTINGUISHING MEDIA: CO2, Dry Chemical or Foam.

UNUSUAL FIRE or EXPLOSION HAZARDS: None

SPECIAL FIRE-FIGHTING PROCEDURES: None

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SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL / LEAK PROCEDURE: Observe all cautions and safety measures that appear in other Sections of this safety data sheet. Contain spill by diking. Spilled material can be wiped up or absorbed by using sorbent pads or granular sorbent materials. Collect waste in proper container. Wash spill area with water to remove residues. Do not allow spilled material to enter waterways, groundwater or surrounding soil.

EYE PROTECTION: See Section 8.

OTHER PROTECTIVE EQUIPMENT: See Section 8.

WORK/HYGIENIC PRACTICES: See Section 8.

SECTION 7. HANDLING and STORAGE

STORAGE: Keep container tightly closed when not in use. Store in cool, dry, and well-ventilated place.

HANDLING: Avoid contact with eyes, skin, or clothing. Do not swallow. Routinely wash hands, arms and face with soap and water after handling. See Section 8 for personal protection equipment recommendations.

PREVENTION OF FIRE AND EXPLOSION: Flammable liquid under normal conditions. Avoid open flame and electrical sparks.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use good local exhaust ventilation.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION:	Wear chemical splash goggles.
SKIN PROTECTION:	Use appropriate gloves and other appropriate protection to avoid skin contact.
RESPIRATORY PROTECTION:	Not normally required. Use an approved NIOSH respirator if exposed to high levels of mist.

OTHER PROTECTIVE EQUIPMENT: Wear apron or lab coat.

WORK/HYGIENIC PRACTICES: Routinely wash hands, arms, and face with soap and water after handling. Wash contaminated clothing before re-use.

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SECTION 9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE and ODOR: Black, opaque liquid. Pungent odor.
BOILING POINT: 212 °F
EVAPORATION RATE (Butyl Acetate = 1): < 1
VAPOR PRESSURE (psi @ 37.8OC.100OF): N/A
WATER SOLUBILITY (%): Appreciable
VAPOR DENSITY (Air = 1 @ 25OC/77OF): N/A
SPECIFIC GRAVITY H2O = 1): 1.240
pH: 2.8
VOLATILE ORGANICS (lbs. / gallon): 2.07 lbs of VOC per gallon of product

SECTION 10. STABILITY and REACTIVITY

STABILITY: Stable at normal temperature and storage conditions.
CHEMICAL INCOMPATIBILITIES: None
CONDITIONS TO AVOID: None
DECOMPOSITION PRODUCTS OR HAZARDOUS
COMBUSTION: None
POLYMERIZATION: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

NO TESTING HAS BEEN PERFORMED ON THIS PRODUCT.

Ethylene Glycol

Oral rat LD50: 4700 mg/kg; skin rabbit LD50: 9530 mg/kg.

Irritation - skin rabbit: 555mg(open), mild; eye rabbit: 500mg/24H, mild.

Investigated as a tumorigen, mutagen, reproductive effector.

Reproductive Toxicity:

Has shown teratogenic effects in laboratory animals.

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Ethylene Glycol (107-21-1)	No	No	None

Cyclohexanone

Oral rat LD50: 1620 mg/kg; Inhalation rat LC50: 8000ppm/4-hour; Skin rabbit LD50: 1 mL/kg; Irritation: eye rabbit, Standard Draize: 20 mg, severe; skin rabbit, Open Draize: 500 mg, mild. Investigated as a tumorigen, mutagen and reproductive effector.

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Cyclohexanone (108-94-1)	No	No	3

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Cyclohexanol

LD50 Oral rat: 2060 mg/kg; Irritation: Skin, open, rabbit: 14600 ug/24H Mild; Eye, rabbit: 2 mg Severe; Investigated as a mutagen and reproductive effector.

Ingredient	---NTP Carcinogen--		IARC Category
	Known	Anticipated	
Cyclohexanol (108-93-0)	No	No	None

SECTION 12. ECOLOGICAL INFORMATION

NO TESTING HAS BEEN PERFORMED ON THIS PRODUCT.

Ethylene Glycol

LC50/96-hour values for fish are over 100 mg/l.

Cyclohexanone

LC50/96-hour values for fish are over 100 mg/l.

Cyclohexanol

LC50/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

SECTION 13. DISPOSAL INFORMATION

Waste generally can be discharged to a wastewater treatment system after mixing with other facility wastes. Consult appropriate Federal, State, and/or local regulatory agencies to assure proper disposal procedures.

SECTION 14. TRANSPORT INFORMATION

Transportation information provided herein is offered as a guideline. Each shipper is responsible for assuring compliance with D.O.T. and other regulations.

D.O.T. Shipping/Classification and I.D. Number: Flammable liquid, N.O.S., 1993

D.O.T. Regulations permit non-bulk packagings of this product to be reclassified as combustible and offered, accepted, and transported as Non-Hazardous Material when shipped by truck within the U.S.A. ref. 49cfr 173.150.

SECTION 15. REGULATORY INFORMATION

SARA:

The following ingredient(s) subject to reporting of Section 313 of Title III of the Superfund Amendment and Reauthorization Act (SARA) of 1986, C.F.R. Part 372.45:

Ethylene Glycol

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SECTION 16. OTHER INFORMATION

REVISIONS: Rev. a – All

MANUFACTURED AT: 2034 North Jackson, Jacksonville, TX 75766

MSDS PREPARED BY: EH&S Departments

FOR FURTHER INFORMATION: (903) 589-9500 (8am-5pm, Central)

THIS MATERIAL SAFETY DATA SHEET INCLUDES INFORMATION OBTAINED FROM SOURCES BELIEVED TO BE RELIABLE. WESTERN LITHOTECH® HAS MADE A GOOD FAITH EFFORT TO INCLUDE DATA THAT IS ACCURATE AND CURRENT AT THE TIME OF ISSUE. THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND. LIABILITY IS EXPRESSLY DISCLAIMED FOR ANY LOSS OR INJURY ARISING OUT OF THE USE OF THIS INFORMATION OR THE USE OF ANY MATERIALS DESIGNATED.