Noltex, L.L.C. Material Safety Data Sheet

REVISED DATE: 07/13/2011

REVISION: 01

SECTION 1: MATERIAL IDENTIFICATION AND COMPANY IDENTIFICATION

PRODUCT NAME: ETHYLENE VINYL ALCOHOL COPOLYMER

SYNONYMS: SOARNOL BARRIER RESIN

CHEMICAL NAME: EVOH
MANUFACTURER: Noltex L.L.C.

12220 Strang Road LaPorte, TX 77571-9740

SOARNOL GRADES: ET3803RB
PRODUCT INFORMATION: 281-842-5000
CHEMTREC: 1-800-424-9300
MEDICAL EMERGENCY: 281-842-5035

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

This product is not hazardous as defined in 29 CFR 1910.1200.

SECTION 3: HEALTH HAZARD INFORMATION

There is no information available to describe the human health effect by skin contact. However, based on experience with handling these polymers and others, which are similar chemically, no unusual dermatitis hazard is expected from routine handling. Skin contact with molten polymer will cause thermal burns. Eye contact is expected to cause no more than mechanical irritation. Polymer is not respirable as marketed. At processing temperatures (245 deg. C, 473 deg. F), fumes irritating to the eyes, nose and throat may be produced. This exposure may result in reddening, tearing and itching of the eyes and soreness in the nose and throat together with coughing. Ingestion is not a probable route of exposure. Toxicity by ingestion is predicted to be low (LD $_{50}$ (oral, rat) is > 5,000 mg/kg; Feeding (oral, rat) 5% in diet no observable change due to Soarnol was observed).

CARCINOGENICITY

None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen. Soarnol is not mutagenic.

EXPOSURE LIMITS

TLV (ACGIH) : None Established PEL (OSHA) : None Established

SAFETY PRECAUTIONS

Avoid breathing dust. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling.

SECTION 4: FIRST AID

INHALATION

If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician.

SKIN CONTACT

Wash with soap and plenty of water.

If molten polymer contacts skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical attention for thermal burns.

EYE CONTACT

Irrigate with water for 15 minutes. Consult a physician.

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SECTION 5: FIRE AND EXPLOSION DATA

The solid polymer can be combusted only with difficulty. Under fire conditions, SOARNOL may decompose to form a flammable and/or explosive mixture in air.

FIRE AND EXPLOSION HAZARDS

Complete combustion gives carbon dioxide and water.

Incomplete combustion gives carbon monoxide and hydrocarbon oxidation products including organic acids, aldehydes and alcohols.

EXTINGUISHING MEDIA

Water, Foam, Dry Chemical, CO2

SPECIAL FIRE FIGHTING INSTRUCTIONS

Keep personnel removed & upwind of fire. Wear self-containing breathing apparatus. Wear full protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Note: Review FIRE AND EXPLOSION HAZARDS AND SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

Pick up spilled polymer to avoid slipping hazard.

SECTION 7: HANDLING AND STORAGE

Store in cool, dry place.

Keep containers and packages closed to prevent contamination.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION INFORMATION

GENERALLY APPLICABLE CONTROL MEASURES AND PRECAUTIONS

Local exhaust ventilation should be used over processing equipment.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face : Safety Glasses.

Respirator : Not required if ventilation is adequate.

Additional : Protective gloves and long sleeve shirt should be worn when handling hot polymer.

SECTION 9: PHYSICAL DATA AND CHEMICAL PROPERTIES

Appearance: White to slightly yellowish translucent pellet

Odor: Odorless
Boiling point: Not relevant

Melting point: 150 - 200° C (302-392°F) Flash point: More than 200°C (392°F)

Ignition point: 500° C (932 $^{\circ}$ F)

Explosive properties: None
Oxidizing properties: None
Bulk Density: 0.64 - 0.74
Relative Density: 1.12 - 1.24

Solubility: Soluble - Water-Alcohol Mixed Solvent, DMSO

Insoluble - Water, Ethyl acetate, Benzene, Toluene, MIBK

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SECTION 10: STABILITY AND HAZARDOUS REACTIVITY

INSTABILITY: Stable at room temperature. Avoid temperature above 245 deg. C (473 deg. F)

INCOMPATIBILITY: Strong oxidizing material.

DECOMPOSITION: Hazardous gases/vapors produced are carbon monoxide and hydrocarbon oxidation products

including organic acids, aldehydes and alcohols. Begins at 250°C (482°F)

POLYMERIZATION: Polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

AQUATIC TOXICITY Toxicity is expected to be low based on the polymer's negligible water solubility.

SECTION 12: ECOLOGICAL INFORMATION

N/A

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL Treatment, storage, transportation and disposal must be in accordance with applicable Federal,

State/Provincial, and Local regulations.

Incinerate or landfill.

SECTION 14: TRANSPORT INFORMATION

DOT Proper Shipping Name: Not Regulated by DOT

SECTION 15: REGULATORY INFORMATION

N/A

SECTION 16: ADDITIONAL INFORMATION

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for Noltex Product MSDS

Noltex L.L.C. 12220 Strang Road LaPorte, TX 77571-9740

Quality Department 281-842-5045