

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Throat Seal

SECTION 1 – COMPANY IDENTIFICATION



Ultimate Linings

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800-989-9869 * www.ultimatelinings.com

PRODUCT

Product Name: DIDP-E

Product Description: High Molecular Weight General Purpose Plasticizer

Product Code:

Intended Use: Plasticizer for flexible PVC used for construction and industrial applications, and durable goods. Not for use in children's toys that can be placed in the mouth. See Section 15.

DATE REVISED: August 27, 2007

SECTION 2 - HAZARDOUS INGREDIENTS/SARA III INFORMATION

HAZARDOUS COMPONENTS

1,2-BENZENEDICARBOXYLIC ACID DIC9-11
BRANCHED ALKYLESTERS, C10 RICH

OCCUPATIONAL EXPOSURE LIMITS

CAS NUMBER
68515-49-1 > 99 %

CONCENTRATION
99%

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.
This product is a non-classified preparation.

POTENTIAL PHYSICAL / CHEMICAL EFFECTS

Material can accumulate static charges which may cause an incendiary electrical discharge.

POTENTIAL HEALTH EFFECTS

Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation.

NFPA Hazard ID: Health: 0 Flammability: 1 Reactivity: 0

HMS Hazard ID: Health: 1 Flammability: 1 Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
Information concerning non-hazardous ingredients is considered a Trade Secret

SECTION 3 – First Aid Measures

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

SECTION - FIRE AND EXPLOSION HAZARD DATA / MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames. Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

ANNOTATION

Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel. Hazardous Combustion Products: Smoke, Fume, Incomplete combustion products, Oxides of carbon

FLAMMABILITY PROPERTIES

Flash Point (Method): >225C (437F) (ASTM D-93) Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: >400 deg C (752 deg F)

SECTION 5 – ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. If liquid is too viscous for pumping, scrape it up with shovels into a suitable container for recycle or disposal. Recover by pumping or with suitable absorbent. Water Spill: Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek advice of a specialist
Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 6 – HANDLING AND STORAGE

HANDLING

Avoid contact with skin. Provide adequate ventilation if fumes or vapors are generated. Prevent small spills and leakage to avoid slip hazard. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Material can accumulate static charges which may cause an electrical spark (ignition source).

ANNOTATION

Loading/Unloading Temperature: (Ambient) Transport Temperature: (Ambient) Transport Pressure: (Ambient) Static Accumulator: This material is a static accumulator.

STORAGE

Do not store in open or unlabelled containers. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage Temperature: (Ambient) Storage Pressure: (Ambient) Suitable Containers/Packing: Drums; Barges; Tank Cars
Suitable Materials and Coatings: Carbon Steel; Stainless Steel; Polypropylene; Teflon; Aluminum; Nylon; Viton Unsuitable Materials and Coatings: Butyl Rubber; Natural Rubber; Vinyls

SECTION 7 – EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive) Source Form Limit / Standard Note Source 1,2-BENZENEDICARBOXYLIC Aerosol. TWA 5 mg/m³ N/A ExxonMobil ACID DIC9-11 BRANCHED ALKYLESTERS, C10 RICH NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: Adequate ventilation should be provided so that exposure limits are not exceeded.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage. Respiratory Protection: If engineering controls do not maintain airborne

ANNOTATION

contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. Eye Protection: If contact is likely, safety glasses with side shields are recommended. Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended. Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping. ENVIRONMENTAL CONTROLS See Sections 6, 7, 12, 13.

SECTION 8 – PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION

Physical State: Liquid
Form: Clear
Color: Colorless
Odor: Mild
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density: N/D Density (at 20 deg C): 970 kg/ms (8.09 lbs/gal, 0.97 kg/dm³) Flash Point (Method): >225C (437F) (ASTM D-93) Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D Autoignition Temperature: >400 deg C (752 deg F) Boiling Point / Range: > 250C (482F) Vapor Density (Air = 1): > 1 at 101 kPa

ANNOTATION

Vapor Pressure: < 0.01 kPa (0.08 mm Hg) at 20 C Evaporation Rate (n-butyl acetate = 1): < 0.01 pH: N/A Log Pow (n-Octanol/Water Partition Coefficient): 8.8 Solubility in Water: Negligible Viscosity: (N/D at 40 deg C) 130 cSt (130 mm²/sec) at 20C Oxidizing Properties: See Sections 3, 15, 16.

OTHER INFORMATION

Freezing Point: -50 deg C (-58 deg F)
Melting Point: N/D
Molecular Weight: 446
Hygroscopic: No
Coefficient of Thermal Expansion: 0.00076 V/VDEGC

SECTION 9 – STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 10 – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure Conclusion / Remarks Inhalation Toxicity (Rat): LC50 > 0.13 mg/L Minimally Toxic. Irritation: Data available. Negligible hazard at ambient/normal handling temperatures. Ingestion Toxicity (Rat): LD50 > 10 g/kg Minimally Toxic. Skin Toxicity (Rabbit): LD50 > 3.16 g/kg Minimally Toxic. Irritation: Data available. Mildly irritating to skin with prolonged exposure.

Eye

Irritation: Data available. May cause mild, short-lasting discomfort to eyes.

CHRONIC/OTHER EFFECTS

For the product itself: Annotation: Di-isodecyl phthalate (DIDP) has been tested in reproductive toxicology studies in laboratory rats (two-generation studies). There were no effects on fertility, reproductive performance, or evidence of alteration of endocrine processes. A small, statistically significant decrease in offspring survival was observed. In evaluating these and related studies, the EU Risk Assessment for DIDP has concluded that classification and labeling is not required for any effect including reproductive and developmental effects. In addition the NTP Center for Evaluation of Risks to Human Reproduction has concluded that there is negligible concern for reproductive effects in adults and minimal concern for developmental effects in fetuses and children due to DIDP exposure. Additional information is available by request. The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC 3 = IARC 1 5 = IARC 2B

2 = NTP SUS 4 = IARC 2A 6 = OSHA CARC

SECTION 11 – ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms. Material -- Not expected to demonstrate chronic toxicity to aquatic organisms.

MOBILITY

Material -- Expected to partition to sediment and wastewater solids. Minimally volatile.

PERSISTENCE AND DEGRADABILITY

Biodegradation: Material -- Expected to be readily biodegradable.

BIOACCUMULATION POTENTIAL

Material -- Potential to bioaccumulate is low.

SECTION 13 – DESPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate recycling methods in accordance with applicable regulations and material characteristics at the time of disposal.

ANNOTATION

REGULATORY DISPOSAL INFORMATION RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261 D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated. Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 - TRANSPORT INFORMATION

LAND (DOT) : Not Regulated for Land Transport

LAND (TDG) : Not Regulated for Land Transport

SEA (IMDG) : Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA) : Not Regulated for Air Transport

SECTION 15 - REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200. NATIONAL CHEMICAL INVENTORY LISTING: AICS, IECSC, DSL, EINECS, ENCS, KECI, PICCS, TSCA EPCRA: This material contains no extremely hazardous substances. SARA (311/312) REPORTABLE HAZARD CATEGORIES: None. SARA (313) TOXIC RELEASE INVENTORY: Chemical Name CAS Number Typical Value 4,4'-ISOPROPYLIDENEDIPHEN 80-05-7 0.1 - 0.5% OL (BISPHENOL A) The Following Ingredients are Cited on the Lists Below: Chemical Name CAS Number List Citations

ANNOTATION

1,2-BENZENEDICARBOXYLIC 68515-49-1 11, 13, 17, 18

ACID DIC9-11 BRANCHED

ALKYLESTERS, C10 RICH

4,4'-ISOPROPYLIDENEDIPHEN 80-05-7 17, 18

OL (BISPHENOL A)

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL 6 = TSCA 5a2 11 = CA P65 REPRO 16 = MN RTK

2 = ACGIH A1 7 = TSCA 5e 12 = CA RTK 17 = NJ RTK

3 = ACGIH A2 8 = TSCA 6 13 = IL RTK 18 = PA RTK

4 = OSHA Z 9 = TSCA 12b 14 = LA RTK 19 = RI RTK

5 = TSCA 4 10 = CA P65 CARC 15 = MI 293

Code key: CARC=Carcinogen; REPRO=Reproductive Additional information: For PVC Toys DINP is recommended, based on US Consumer Product Safety Commission review (2003) and on the EU Risk Assessment Report (2006). In the U.S., there is an interim prohibition on DINP and DIDP above 0.1 percent by weight (one thousand parts per million) in toys intended for children age 12 and under that can be placed in a child's mouth and child care articles for children age 3 and under (H.R. 4040, The Consumer Product Safety Improvement Act of 2008). In the EU and Brazil, DINP and DIDP are permitted only for toys and child care articles that cannot be placed in the mouth. In Argentina and Japan, DINP and DIDP are permitted only for toys not intended to be placed in the mouth. In the state of Washington, DEHP, DBP, BBP, DINP, DIDP, and DnOP, individually or in combination, are not permitted in children's products at more than 0.1 percent by weight (HB 2647, Regarding the Children's Safe Products Act).

SECTION 16 - OTHER INFORMATION

N/D = Not determined, N/A = Not applicable This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

DISCLAIMER: The information contained herein is, to the best of our knowledge and belief, accurate and current as of the date of this MSDS. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.