J. DRASNER & CO., INC.

MATERIAL SAFETY DATA SHEET

LM-1 and LM-145 FILM AND BAGS

MSDS No. JD0002

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

NAME AND ADDRESS: J. Drasner & Co., Inc.

23600 Mercantile Road, Unit I

Beachwood, OH 44122 TEL.: 216-765-8805 FAX: 216-765-8816

CHEMICAL NAME: Olefin Copolymer film/bag

SYNONYMS: Polyolefin Plastomer, Metallocene film

Trade Name: LM-1, LM-145, LM-205

SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

Component	CAS Number	Amount	EINECS	SYM	R-PHRASES
Proprietary	Various	100% weight	NA	NA	NA
Materials					

EXPOSURE LIMITS include ACGIH TLVs and OHSA (vacated) PELs.

PEL/TWA (OHSA Permissible Exposure Limit/Time-Weighted Average): No OHSA PEL for this mixture. For particulates not otherwise regulated (dust): 15 mg/m³ for total dust and 5 mg/m³ for respirable dust.

TLV/TWA (ACGIH Threshold Limit Value/Time-Weighted Average): No ACGIH TLV for this mixture. For particulates not otherwise classified (dust): 10 mg/m³ for total dust and 3 mg/m³ for respirable dust.

The additives (if any are present in this product) are encapsulated in the film/bag with limited release under normal conditions of use, transportation, and storage. Increased release may occur when the film is subject to excessive heat or other processes which enhance the potential for the

generation of particulates, fumes, and/or vapors. The specific potential for release under user's conditions of handling of this material should be evaluated by a qualified health specialist.

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Does not contain materials which may contribute to immediate health, physical, or environmental hazards.

PRIMARY ROUTES OF ENTRY: Swallowing, Skin Contact, Eye, or Inhalation.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED: There are no known medical conditions aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing emissions.

POTENTIAL HEALTH EFFECTS OF THIS FILM/BAG:

In solid form, this film/bag is not considered to be a health hazard. If swallowed, film/bag may pose possible intestinal obstruction or choking hazard. Dust created during handling or processing may be mildly irritating to the respiratory system.

When heated, this fil/bag may release fumes and/or vapors that are irritating to the eyes, nose, throat, and skin. Overexposure to fumes or vapors may also cause headache, nausea, shortness of breath, and coughing. Molten or heated material can cause serious burns to unprotected skin and eyes.

SECTION 4 – FIRST AID MEASURES

FOR OVEREXPOSURE BY:

SWALLOWING: If product is ingested, contact a physician or Poison Control Center as appropriate whenever any foreign object is swallowed.

SKIN CONTACT: If contacted by molten polymer, cool immediately with cold or ice water. Do not attempt removal of any solidified material. GET MEDICAL ATTENTION PROMPTLY.

EYE CONTACT: If contacted by molten polymer, IMMEDIATELY flush eyes with plenty of cool water for at least 15 minutes. Do not permit victim to rub eyes. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION: Immediately remove victim to fresh air. If victim has stopped breathing give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

NOTE TO PHYSICIANS: In case of most burns, allow solidified material to slough off on its

own. Attempted removal may lead to more damage of the skin and underlying tissues. If removal is indicated (e.g., solidified material is located on a critical part of the hand or face), removal with mineral oil is recommended. Due to the extremely high temperature of the molten polymer at the time of contact, bacterial infection under the solidified material is unlikely to be present.

SECTION 5 – FIRE FIGHTING MEASURES

NFPA RATING: Health: 1 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES: Flashpoint: Does not apply Autoignition: Not determined

Flammability Limits (% by volume in air): Lower: Does not apply Upper: Does not apply

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.

FIRE FIGHTING INSTRUCTIONS: Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with a full facepiece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products. If possible, water should be applied as a spray from a fogging nozzle since this polymer is a surface burning material.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Protective Measures: Shovel and sweep up or use industrial vacuum cleaner.
Spill Management: If heated material is spilled. Allow it to cool before proceeding with disposal methods. Avoid creating dust clouds. Shovel, sweep up or use industrial vacuum cleaner to pick up. Place in container for proper disposal. Reduce airborne dust and prevent scattering by moistening with water.

SECTION 7 – HANDLING AND STORAGE

Unusual Handling Hazards: Potentially toxic/irritating fumes may be evolved from heated material.

General Handling Information: Avoid work practices that may release volatile components in the atmosphere. Local air pollution regulations should be consulted to determine if the release of volatile components is regulated or restricted in the area in which this film/bag is used. Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this film/bag. To minimize this hazard, bonding and groundig may be necessary but may not, by themselves, be sufficient. Review all operations, which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere and use appropriate mitigating rocedures. For more information, refer to OHSA Standard 29 CFR 1910.106,"Flammable and Combustible Liquids", National Fire Protection Association (NFPA 77), "Recommended Practice on Static Electricity", and/or the American Petroleum Institute

(API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents".

General Storage Information: Treat as a solid that can burn. Store away from oxidizing materials, in a cool, dry place with adequate ventilation. Bond and ground transfer equipment. DO NOT USE OR STORE NEAR HEAT, SPARKS OR OPEN FLAME.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

CONTROL MEASURES: Engineering controls should be used whenever feasible to maintain concentrations below acceptable exposure limits (Section 2) including, but not limited to, enclosures, local ventilation and dilution ventilation.

RESPIRATORY PROTECTION: Where engineering controls are not feasible or sufficient to achieve full conformance with acceptable exposure limits (Section 2), use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminant(s) in air and in accordance with OSHA (29 CFR 1910.134)/ ANSI Standard z88 2

PROTECTIVE CLOTHING: Wear heat protective gloves and clothing if there is a potential for contact with heated film/bag.

EYE PROTECTION: Wear safety glasses meeting the specifications of OSHA 29 CFR 1910.133/ ANSI Standard z87.1 where no contact with the eye is anticipated. Chemical safety goggles meeting the specifications of OSHA 29 CFR 1910.133 / ANSI Standard z87.1 should be worn whenever there is the possibility of splashing or other contact with the eyes.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Translucent film or bag/various colors/ mild odors.

BOILING POINT: Does not apply.

MELTIN POINT: 136 – 224 degrees F (58 – 112 degrees C)

VAPOR PRESSURE: Does not apply.

DENSITY: 0.92 – 0.95 gm/cc @ 25 degrees C VAPOR DENSITY (AIR=1): Does not apply.

SOLUBILITY IN WATER: Insoluble.

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Generally stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

HAZARDOUS POLYMERIZATION: Not likely.

CONDITIONS AND MATERIALS TO AVOID: Reacts violently with fluorine/oxygen mixtures with 50 to 100% fluorine. Reacts with acids, halogenated hydrocarbons, aldehydes, ketones and strong oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, nitrogen oxides, vinyl acetate, acrolein, formaldehyde, other aldehydes, ketones, alcohols, acetic acid, methane, ethane, acetylene when burned.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Oral Toxicity: The oral LD50 is not known.

Acute Dermal Toxicity: The dermal LD50 is not known. Acute Inhalation Toxicity: The inhalation LC50 is not known.

Eye irritation: This material is not expected to be irritating to the eyes. Skin irritation: This material is not expected to be irritating to the skin.

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY: The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE: This material is generally inert and insoluble and is not expected to have any adverse effect on the environment. This material may deteriorate by a number of mechanisms including photo- and thermo-oxidative degradation.

SECTION 13 – DISPOSAL CONSIDERATIONS

Use film/bag for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

SECTION 14 - TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult appropriate Dangerous

Goods Regulations, for additional description requirements (e.g., technical name) and modespecific or quantity-specific shipping requirements.

Shipping Description per regulatory authority.

US DOT: NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

ICAO/IATA: NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

IMO/IMDG: NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

RID/ADR: NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

SECTION 15 - REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA): This product is (or if a mixture, the components of this product are) listed in the TSCA Inventory of Chemical Sustances.

SARA TITLE III (Sections 311/312) HAZARD CATEGORIES: This product does not meet the criteria of any SARA hazard categories.

SARA TITLE III (Section 313): This product contains no SARA 313 "toxic chemicals" above threshold levels.

CALIFORNIA PROPOSITION 65: This product may be found to contain one or more of the listed chemicals covered by Proposition 65. Some of these chemicals could be intentionally added ingredients.

However, there may also be others that are naturally occurring contaminants or unintentionally introduced impurities that appear in the raw materials or manufacturing process used to produce the product. While we do not routinely analyze our products or supplier raw materials for such impurities and contaminants, the possibility of their presence in trace quantities exists.

In order to comply with the California law we are therefore providing the following statement.

WARNING: This product contains (or may contain) a chemical (or chemicals) known to the State of California to cause cancer, birth defects and/or other reproductive harm.

NOTE: The regulatory information presented here should not necessarily be considered as all inclusive. Other local, state, federal, and international regulations may also apply.

SECTION 16 - OTHER INFORMATION

Disclaimer of Liability: The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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