**Safety Data Sheet (SDS)**

**DuraForm™ – EVA (Ethylene Vinyl Acetate)**

**SECTION 1: PRODUCT AND COMPANY INFORMATION**

Acor Orthopaedic, Inc.

18530 South Miles Parkway

Cleveland, OH 44128

800-237-2267

216-662-4500

Product Family: Polymer

Trade Names: Ethylene Vinyl Acetate ‐ EVA

P-Cell®, Microcel Puff® 35, Microcel Puff® 45, Microcel Puff® 55, FM™, Impression Puff™, DuraForm™, MultiCork™, Microcel Puff SBR®

Other Means of Identification: None

Recommended Uses:  Film‐forming and molding resins, packaging, hot melt adhesive, medical and consumer articles

**SECTION 2: HAZARD IDENTIFICATION**

|  |  |  |  |
| --- | --- | --- | --- |
| EMERGENCY OVERVIEW | | | |
| GHS CLASSIFICATION | Non-hazardous | HMIS | |
| Physical State | Solid | HEALTH | 0 |
| Color |  | FLAMMABILITY | 1 |
| Odor |  | PHYSICAL HAZARD | 0 |
|  |  | PERSONAL PROTECTION | See Section 8 |

**Primary Routes of Exposure** Eyes or skin contact

**Potential Health Effects**

**Acute Effects**

Inhalation Health injuries not expected. Not a probable route of exposure

under ordinary conditions.

Skin contact Health injuries not expected. Possible mechanical irritation.

Eye contact Health injuries not expected. Possible mechanical irritation from

dust or powder.

Ingestion Health injuries not expected. Not a probable route of exposure. Chronic effects    Ongoing exposure may aggravate acute effects.

Carcinogenicity    See Section 11

Medical conditions aggravated Ongoing exposure may aggravate acute effects.

by long term exposure

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

|  |  |  |
| --- | --- | --- |
| Component | CAS Number | Percentage |
| Ethylene vinyl acetate | 24937-78-8 | 100 (+/-) |
| Vinyl acetate monomer | 203-545-4 | <0.1% |

**SECTION 4: FIRST AID MEASURES**

Skin Contact: If in contact with solid material, wash with soap and water. If in contact with molten material, submerge injured area in cold water. Do not attempt to remove material adhering to the skin. Get medical attention if irritation develops or persists.

Eye Contact: Flush eyes with plenty of water. Get medical attention if irritation develops or persists.

Inhalation: This material is not likely to be hazardous by inhalation. Consult a physician if symptoms develop or persist.

Ingestion: Not a probable route of exposure.

**SECTION 5: FIRE FIGHTING MEASURES**

Use water fog, dry chemical, carbon dioxide or foam as appropriate for materials in surrounding fire. Avoid using direct streams of water on molten burning material as it may scatter and spread the fire. Melts in proximity to fires resulting in slippery floors and stairs. Static charges or on powders or powders in liquids may ignite combustible atmospheres. Airborne dusts of this product in an enclosed space and in the presence of an ignition source may constitute an explosion hazard. See NFPA Bulletin 654, “Standard for the Prevention of Fire and Dust Explosions from the Manufacturing Processing, and Handling of Combustible Particulate Solids,” for safe handling procedures. As in any fire, wear NIOSH/MSHA approved positive pressure self‐contained breathing apparatus and full protective clothing. Watch footing on floors and stairs because of possible spreading of molten material.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Refer to Section 8: Exposure Control and Personal Protection

Emergency Action:

No special environmental precautions required.

Spill/Leak Procedure:

Containment of this material should not be necessary. Sweep up or gather material and place in appropriate container for disposal.

**SECTION 7: HANDLING AND STORAGE**

Refer to Section 8: Exposure Control and Personal Protection

Handling: Keep away from heat, flame and strong oxidizing agents.

Storage: Keep away from heat, sparks, and flame. Store in a cool place in original container and protect from sunlight.

**SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION**

Engineering Controls:

Use recommended safe handling practices to minimize unnecessary exposure. General room ventilation is adequate for storage and ordinary handling. Use local exhaust at points of fume generation or if dusty conditions prevail.

Personal Protective Equipment:

Wear safety glasses with side shields or chemical goggles to prevent eye contact. Have eye‐washing facilities readily available where eye contact can occur. It is recommended to wear contact lenses behind safety glasses when working with this substance. Wear impervious gloves and protective clothing to prevent skin contact. Use NIOSH or MSHA approved equipment.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Boiling Point** | Not applicable | **Vapor Density (Air=1)** | Not determined |
| **Specific Gravity (@ 60°F)** | 0.92 - 0.93 | **Soluble (% in Water)** | Negligible |
| **Melting/Freezing Point** | 167 - 216°F / 72 - 102°C | **Appearance** | Multiple solids / Mixes |
| **Evaporation Rate** | Negligible | **Odor** | Mild, Waxy |
| **Vapor Pressure** | Not determined | **pH** | Not applicable |
| **Odor Threshold** | Not determined | **Auto Ignition Temp** | Not applicable |
| **Partition Coefficient** | Not determined | **Viscosity (SUS @ 100°F)** | Not applicable |
| **Decomposition Nature** | Not determined | **Flash Point** | >515°F / >270°C |
| **Ventilation: Flammability Limits in Air (% by Volume)** | | Not applicable | |

**SECTION 10: STABILITY AND REACTIVITY**

Reactivity: Not reactive under normal conditions of storage and use.

Chemical Stability:   Stable under normal conditions of storage and use.  Avoid exposure to open flame or exceeding recommended processing conditions.

Stability/Incompatibility:

Avoid contact with strong oxidizers, strong acids or flammable materials.

Conditions to Avoid:   Avoid dust‐air mixtures or static charge buildup. Avoid contact with incompatible materials such as oxidizing agents or amines.

Hazardous Reactions/Decomposition Products:

Material does not decompose at ambient temperatures.  Combustion or high heat may produce thermal decomposition products that may include carbon monoxide, carbon dioxide, dense smoke, and other toxic vapors.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Likely Routes of Exposure:      Eyes and skin contact.

Acute Effects:    Mechanical irritation of eyes and skin.

Oral Toxicity LD50 Not Available;   Inhalation Toxicity LD50 Not Available.

Chronic Effects:       None known.

Symptoms:       Irritation of eyes and skin.

Carcinogenicity:       This product has not been found to be carcinogenic by the NTP, ACGIH, IARC or OSHA.

Further information:     This product has no known adverse effect on human health.

**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity:      No known or expected ecotoxicity.

Persistence and Biodegradability:   Not determined.

Bioaccumulative Potential:     Not determined.

Mobility in Soil:       Not determined

**SECTION 13: DISPOSAL CONSIDERATION**

Dispose of this product in compliance with all applicable federal, state and local regulations. The unused  product is  not  specifically  listed  by  EPA  as   a    hazardous    waste (40 CFR, Part 261D), 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).

**SECTION 14: TRANSPORT INFORMATION**

Refer to Section 6: Accidental Release Measures

D.O.T. 49 CFR 172.101:     Not regulated

TDG:          Not regulated

UN Proper Shipping Name/Number:      Not regulated

IMDG:          Not regulated

IATA:         Not regulated

**SECTION 15: REGULATORY INFORMATION**

SARA TITLE III Information: Hazard categories for the Superfund Amendments and Reauthorization Act (SARA) Section 311/312/313 (40 CFR 370):

Immediate Hazard:   No

Delayed Hazard:   No

Fire Hazard:   No

Pressure Hazard:   No

Reactivity Hazard:   No

**SECTION 16: OTHER INFORMATION**

Notice: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet; however, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license.   In additional, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.