



Effective Date: 04/03/2017

REGULATORY INFORMATION PACKET

Flexelene™ 84E

THERMOPLASTIC ELASTOMER

Product Manufacturer

This product is manufactured by Eldon James in Denver, Colorado U.S.A.

Manufacturing Facility Certifications

ISO 9001:2008 and ISO 13485:2003 Quality Standards, ISO Class 7 Cleanroom.

Chemical Inventories

Please see SDS for chemical inventory listings.

Food Contact Status

All components used in manufacture of this product comply with Title 21 CFR 177.2600. Final article compliance may require that extraction testing be performed on the final article. It is the responsibility of the customer to determine the applicability of this regulation in the development of the finished food contact article.

It is up to the customer to determine the applicability of this regulation in the development of the finished food contact article. Based on references to 21 CFR 176.170 Table 1 and Table 2, this product may be used in contact with the following food types, subject to the Conditions of Use Limitations and/or Use Restrictions included below:

| Food Type | Description |
|-----------|---|
| I | Nonacid, aqueous products; may contain salt or sugar or both (pH above 5.0) |
| II | Acid, aqueous products; may contain salt or sugar or both, and including oil-in-water emulsions of low- or high-fat content. |
| III | Aqueous, acid or nonacid products containing free oil or fat; may contain salt, and include water-in-oil emulsions of low- or high-fat content. |
| IV | Dairy products and modifications: A: Water-in-oil emulsions, high- or low-fat B: Oil-in water emulsions, high- or low-fat |
| V | Low-moisture fats and oils |
| VI | Beverages: A: Containing up to 8% alcohol. B: Nonalcoholic C: Containing more than 8% alcohol. |
| VII | Bakery products other than those included in Types VIII or IX (below) A: Moist bakery products with surface containing free fat or oil |



| | |
|--|---|
| | B: Moist bakery products with surface containing no free fat or oil |
| VIII | Dry solids with the surface containing no free fat or oil (<i>no end test required</i>) |
| IX | Dry solids with the surface containing free fat or oil |
| Limitations ¹ | Condition for use A – High temperature heat-sterilized (e.g., over 212°F) <i>through</i> Condition for use H – Frozen or refrigerated storage; Ready - prepared foods intended to be reheated in the container at time of use. |
| | |
| ¹ For limitations se CFR 21, 176.170 Tables | |

This product can be used in compliance with the above FDA regulations is predicated on the assumption that the chemical composition will not be altered or adulterated by the addition of other unregulated substances, and that the food contact surfaces will be manufactured and employed in accordance with Good Manufacturing Practices outlined in 21 CFR 174.5 and the general provisions applicable to indirect food additives listed there.

The use in medical devices and drug packaging applications is not covered by the above or any other general regulation. It is the responsibility of the device or package manufacturer to establish safety with the FDA through the submission of individual applications on the device or drug.

Commission Regulation (EU) No. 10/2011

The composition of this product complies with the formulary provisions (inclusion in Union list in Table I of Annex I) of Regulation (EU) No. 10/2011 involving plastic materials intended to come into contact with food.

Commission Regulation (EU) No. 10/2011 (repealing Commission Directive 2002/72/EC) is a specific measure defining the compositional requirements for plastic materials intended to come into contact with foodstuff according to the general framework Regulation (EC) 1935/2004.

Monomers, additives, and polymer production aids (PPA) used to manufacture this product are included in the Union list within the regulation and comply with any applicable restrictions and limitations. In addition, listed below are substance(s) within this product that have a restriction or limitation:

- 1,3-butadiene (Ref No 13630) SML = ND and 1 mg/kg in final product
- Lithium (Annex II) SML = 0.6 mg/kg
- Phthalic acid, dibutyl ester (Ref No 74880) SML = 0.3 mg/kg

Technical support agent in polyolefins in concentrations up to 0.05% in final product.

SML(T) – 60 mg/kg expressed as the sum of the substances.



Food Allergens

Allergen Substances as defined and listed in Annex II of the REGULATION (EU) No 1169/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 October 2011, on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, of the European Parliament and of the Council as regards certain food ingredients. Allergen Substances as defined by Food Allergen Labeling & Consumer Protection Act of 2004 (FALCPA). No major food allergens such as milk, eggs, fish, Crustacean shellfish, tree nuts, peanuts, wheat and soybeans, Gluten or Lactose.

US Pharmacopeia (USP)

This product has been certified as a USP Class VI Plastic (USP<88>, Biological Reactivity Tests, *In Vivo*).

European Pharmacopoeia (EPHC)

Information is unavailable as this product has not been assessed under European Pharmacopoeia.

Animal Derived Components (BSE/TSE)

Based on the information provided to us by our raw material suppliers, review of their product formula and materials handling and processing procedures, this product should not contain any animal derived ingredients. Based on this information there would be no known sources of Bovine Spongiform Encephalopathy (BSE) or Transmissible spongiform encephalopathy (TSE).

Plant Derived Components

Based on the information provided to us by our raw material suppliers and their formulation reviews, they have found that this product does not contain the following plant derivative:

- Not JATROPHA OIL derived.

Kosher

This product is not Kosher certified, should not contain any animal derived ingredients.

Halal

This product is not Halal certified, should not contain any animal derived ingredients.

REACH 173 Substances (January 12, 2017)

Based on the information provided to us from our raw material supplier and their formulation reviews, they confirm that this product does not contain SVHC Candidate List Annex XIV materials above the applicable threshold (0.1%) as updated by the European Chemical Agency as of January 12, 2017 (173 substances).



EU Directive 2011/65/EU Restriction of Hazardous Substances (RoHS)

Restriction on use of: lead, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants, at levels of greater than 0.1%; cadmium, at levels greater than 0.01%; and Pentabromodiphenylether, Octabromodiphenylether, and Decabromodiphenyl oxide, in concentrations higher than 0.1%; and HBCDD, DEHP, BBP, DBP, DIBP in concentrations greater than 0.1%.

Heavy Metals (ELV Directive 2000/53/EC)

Coalition of Northeastern Governors (CONEG)

Council Directive 94/62/EC

Article 11 states: Concentration levels of heavy metals present in packaging 1. Member States shall ensure that the sum of concentration levels of lead, mercury, cadmium, and hexavalent chromium present in packaging or packaging components shall not exceed 100 ppm by weight.

Model Toxics in Packaging Legislation (formerly referred to as CONEG)

Total amount of lead, mercury, cadmium, and hexavalent chromium to be less than 100 ppm by weight. Please note that that this product has not been tested for the presence of these substances.

We certify that the regulated metals of lead, mercury, cadmium, and hexavalent chromium were not intentionally added to this product during our manufacturing process. Based on the information provided by our raw material suppliers, we further certify that, to the best of our knowledge, the sum of incidental concentration levels of lead, mercury, cadmium, and hexavalent chromium (if present) should not exceed 100 parts per million by weight (0.01%).

European Directive (94/62/EC) Packaging and Packaging Waste

EU Directive 2012/19/EU Waste Electrical & Electronic Equipment (WEEE)

Article 11 of European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (last amended by Directive 2013/2/EU). EC Directive on Waste Electrical and Electronic Equipment (WEEE) and EC Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS), Recast 2011/65/EU (HBCDD, DEHP, BBP, DBP, DIBP) as amended through 2015/863/EU on 31 March 2015

European Regulation (EC) No. 1895/2005 (BADGE, BFDGE, NOGE)

Therefore, compliance with European Union Commission Regulation 1895/2005/EC of 18 November 2005 on the restriction of use of certain epoxy derivatives in materials and articles intended to come into contact with food (repeals Directive 2002/16/EC & 2004/13/EC).

California Proposition 65

(Safe Drinking Water and Toxic Enforcement Act of 1986)

This product does not contain any chemical known to the State of California to cause cancer, or birth defects or other reproductive harm, in concentrations that require a warning notice under California's Proposition 65.



Conflict Materials (Dodd-Frank Wall Street Reform and Consumer Protection Act)

According to the recipe and manufacturing processes of the above-mentioned product, we have no reason to believe any of the following metals or their derivatives originating from the Democratic Republic of the Congo or adjoining countries, which include Angola, Burundi, Central African Republic, the Republic of the Congo, Rwanda, South Sudan, Tanzania, Uganda, and Zambia, and which are so-called “Conflict Minerals” under US laws and regulations.

The absence has not been checked by tests. The investigation on those substances does not belong to our quality and production controls, thus the fact that the above listings of substances are to all intents and purposes absent from these product(s), does of course, not absolutely exclude that that toxicologically and/or regulatory irrelevant extremely low trace levels of these substances may be unintentionally present.

Based on the information provided to us by our suppliers and their formulation reviews, we have this product does not contain any conflict substances (tin, tantalum, tungsten and gold). We do not intentionally add or use these materials in the manufacture or handling of this products and do not test for these materials.

Ozone Depleting Chemicals (ODCs)

Complies with Class I/Class II ozone depleting substances as listed in the Clean Air Act of 1990.

Phthalates

This product is not intentionally manufactured or formulated with phthalate esters; however, we do not analyze for these specific substances or compounds.

Materials from Genetically Modified Organisms

Based on the information provided to us by our raw material suppliers and their formulation reviews, they have found that this product does not contain the following plant derivative(s):

- Not JATROPHA OIL derived.

Additional Substance Information

This product is not intentionally manufactured or formulated with the following substances or compounds; however, we do not analyze for these substances or compounds.

2-Mercaptobenzothiazole (MBT)

Aflatoxin-like compounds

Aldehydes

Azoxy compounds

Bis(2-ethylhexyl) Adipate (DEHA)

Bisphenol compounds, incl. but not limited to: BPA, BPB, BPC, BPE, BPF, BPS, and BPZ



Butylated Hydroxyanisole (BHA)
Butylated Hydroxytoluene (BHT)
Dioxins and similar compounds
Endocrine Disruptors (proven by the industry)
Epoxy Resin
Formaldehyde
Halogenated (Brominated or chlorinated) or phosphorous based flame retardants
Isocyanate
Melamine
Natural rubber latex, dry natural rubber, or synthetic latex
Nitroso compounds
Nitrosamines
Novolac Glycidyl Ethers (NOGE)
Organic phosphates
Parabens
Perfluorooctane Sulfonate (PFOS)
Phthalates / Phthalate esters
Plasticizers
Polybrominated Biphenyls (PBB's)
Polybrominated Diphenyl Ethers (PBDEs)
Polybrominated Terphenyls (PBTs)
Polychlorinated Biphenyls (PCBs)
Polycyclic aromatic hydrocarbon (PAH)
Polyurethane
Polyvinyl Chloride (PVC)
Polyvinylidene Chloride (PVDC)
Tris-nonylphenol Phosphite (TNPP)

Sterilization Methods

| | |
|--------------|---|
| E-beam/Gamma | 25 to 35 kGy, no deficiencies, may color shift at higher doses. |
| EtO | No issues. Can safely be used. |
| Autoclave | Limited to 135 °C. |



Shelf Life and Expiration Date

Eldon James has tight controls on inventory, so finished products are manufactured and sold quickly. Consequently, raw materials are stored for a relatively short time before use in the manufacturing process. Eldon James cannot commit to a shelf life on products, but we stand by the quality and use of new raw materials. Resin manufacturers usually make no commitment on shelf life. Eldon James does not make any claims regarding Expiration Date because our customers use our products in many different applications and conditions. Eldon James cannot make any assessment or claims regarding expiration. Each individual condition and application must be tested by the customer to determine the limits of each product, material, and use.

Use of this Regulatory Information Data Sheet

The information provided as requested is intended to be used for informational purposes only. The information is provided on a without prejudice basis and should not be viewed as giving technical advice, instruction, or otherwise. The information is furnished free of charge and is based on supplier knowledge and understanding. Eldon James Corporation makes no representation or warranty as to the completeness or accuracy of the information contained herein. It is intended for use by persons having technical skill, at their own discretion and risk, who will make their own determination as to its suitability for their purposes prior to use. As with any material, evaluation of any compound under end-use conditions prior to specification is essential. Ultimately, customers must make their own determination that use of this product is safe, lawful, and technically suitable for their intended applications.