Product Regulatory Overview (PRO)
K-Resin® KRDEV035A Styrene-Butadiene Copolymer

Product Manufacturer
K R Copolymer Company Ltd. (KRCC)

Chemical Inventories
All the components of this product are listed on
AUSTRALIA: Australian Inventory of Chemical Substances (AICS)
CANADA: Non-Domestic Substances List (NDSL)
PEOPLE'S REPUBLIC OF CHINA: Inventory of Existing Chemical Substances (IECSC)
EUROPEAN UNION: All necessary components have been registered according to Regulation (EU) No. 1907/2006 (REACH)
SWITZERLAND: Exemptions from the obligation to notify/register
JAPAN: Existing & New Chemical Substances (ENCS) Inventory
KOREA: Existing Chemicals List (ECL)
PHILIPPINES: Philippine Inventory of Chemicals and Chemical Substances (PICCS)
NEW ZEALAND: Exemptions from the obligation to register
UNITED STATES: Toxic Substances Control Act (TSCA) Chemical Inventory

Food Contact
European Union (EU) Food Contact
The monomer(s) and the additive(s) of this resin are listed in Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food and all its Amendments.

Representative grades of K-Resin were tested for the overall and specific migration compliance per Commission Regulation (EU) No 10/2011. The tested sample thickness was 2.1 mm (82 mils). The surface-to-volume ratio was 0.557 dm$^2$ sample immersed in 86 ml simulant. For measuring the overall migration limit (OML), this product was tested with 3% acetic acid for 10 days at 40°C, with 10% ethanol for 10 days at 40°C, and with 50% ethanol for 10 days at 40°C. For measuring specific migration limits (SML), this product was tested with 3% acetic acid for 10 days at 60°C, with 10% ethanol for 10 days at 60°C, and with 50% ethanol for 10 days at 60°C. This product complies with the OML and SMLs.

No dual-use additives were used in amount that can significantly (more than 1% of its limit) increase the amount in food.

This product meets the requirements of the Framework Regulation (EC) No. 1935/2004 on materials and articles intended to come in contact with food.

This product is produced in accordance with good manufacturing practice (GMP) as outlined in GMP Regulation (EC) No 2023/2006.

U.S. FDA Food Contact
This product meets the specifications of the United States FDA Food Packaging Regulation 21 CFR 177.1640 (polystyrene and rubber modified polystyrene). By virtue of this compliance, this resin
may be used as a component of articles for use in contact with food. There are no regulatory food type or temperature restrictions on this resin as defined under 21 CFR 176.170 (c).

This product is produced in accordance with good manufacturing practices (GMP) as outlined in 21 CFR 174.5.

*It is the responsibility of the converter to verify that the finished article meets both the technical and regulatory requirements of the intended application.*

**Regulation 1223/2009 of 2009-11-30 on Cosmetic Products**
Regulation 1223/2009 is not applicable to this product. This product is not defined in the regulation as a cosmetic product, and it does not contain any substances listed as prohibited in cosmetic products.

**EU Classification and Labeling**
This product is not a dangerous substance according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. It is also not a hazardous substance or mixture according to EC directives 67/548/EEC or 1999/45/EC.

**Animal-Derived Materials / Kosher**
No animal-derived materials are used in the manufacture or formulation of this product. This product can be considered free from bovine spongiform encephalopathy (BSE) and other transmissible spongiform encephalopathies (TSE). Chevron Phillips Chemical Company has not made any efforts to certify its Polyethylene resins as Kosher/Halal or in compliance with Kosher/Halal guidelines.

**California’s Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)**
This product, as shipped, does not intentionally contain any carcinogens or reproductive toxins presently known by the State of California to cause cancer or reproductive toxicity at a level of exposure subject to the requirements of California Proposition 65.

**Consumer Product Safety Improvement Act of 2008 (H.R. 4040)**
This product does not contain lead and phthalates. It therefore complies with the relevant sections of the Consumer Product Safety Improvement Act of 2008 (H.R. 4040).

**Clean Air**
This product does not contain any ozone depleting substances, including those listed in Regulation (EC) No 1005/2009.

This product does not contain any of the following substances regulated by the Clean Air Act:

- Class I or Class II Ozone-Depleting Substances (CAA Section 602)
- Hazardous Air Pollutants (CAA Section 112)
- Accidental Release Prevention Substances (CAA Section 112(r))
- Volatile Organic Chemicals (CAA Section 111)

**Heavy metals, RoHS, WEEE, Waste packaging, CONEG**
No heavy metals (i.e., antimony, arsenic, barium, cadmium, chromium, lead, mercury, selenium, or silver) are purposely added to this product in quantities that would violate governmental guidelines.
The summation of lead, cadmium, mercury, and hexavalent chromium in this product is less than 20 ppm. No polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), Deca Brominated Diphenyl Ethers (Deca BDE), or phthalates are intentionally added to this product. This product therefore meets the relevant requirements of the following Directives or Regulations:

- 2015/863/EU, 2011/65/EU and 2002/95/EC (RoHS)
- 2002/96/EC and 2012/19/EU (WEEE)
- 2000/53/EC (ELV)
- USA CONEG Regulation
- California Toxics in Packaging Prevention Act

**Toys**
This product complies with the requirements of ASTM F963, ISO 8124-3: 2012, EN71-3 and EN71-9, and Directive 2009/48/EC.
Trace levels of styrene monomer may be present in this product. They are unlikely to be released at a level that would approach the limits given in EN 71-9.

**Genetically-Modified Organisms (GMO)**
This product does not intentionally contain GMOs. However, one substance used in the manufacturing process may be derived from GMOs. It is expected to be completely consumed during the manufacturing process.

**Residual Monomer**
Typical values for styrene residuals in K-Resin® SBC products are below 10 ppm.

**Phthalates**
No phthalates, including di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), and di-n-octyl phthalate (DnOP), are intentionally added to this product. This product therefore meets the requirements of the Consumer Product Safety Improvement Act of 2008 and EU Directive 2005/84/EC.

**European Chemicals Agency (ECHA) Substances of Concern**
Substances of Very High Concern (SVHC), as listed on the candidate list published by ECHA as of 17 December 2015, are not intentionally added as part of the manufacturing process for K-Resin® SBC products. SVHC are not present above the 0.1% (1000 ppm) reporting threshold defined in Article 33 of Regulation 1907/2006, and any presence of SVHC at any level is purely incidental and unintentional. This product also does not contain any substances on the REACH Annex XVII Restriction Substance list.

**Canadian Environmental Protection Act (CEPA) “Challenge” Substances**
This product does not contain any high priority chemical substances listed on the “Challenge” Substance Batches as issued by CEPA.

**Nanomaterial**
This product is not a nanomaterial.
Conflict Minerals
Neither tantalum, tin, gold, and tungsten, nor the minerals associated with these metals (Columbite-Tantalite, Cassiterite, Gold, or Wolframite) are intentionally added to this product. These substances are not necessary to the production of this product.

Absence of Substances and Chemicals
None of the following substances are used as additives or raw materials in the manufacture of this product:

- Acrylamide
- Alkylphenol Ethoxylates, including nonylphenol ethoxylate and octylphenol ethoxylate
- Allergens, including but not limited to those listed in EU Regulation 1169/2011, Directives 2000/13/EC and 2003/89/EC, such as: peanuts, tree nuts, milk, eggs, wheat gluten, soybeans, fish and shellfish
- Aromatic amines
- Asbestos
- Azo compounds
- Biocides
- Bisphenol compounds, including but not limited to: BPA, BPB, BPC, BPE, BPF, BPS, and BPZ
- Brominated or halogenated flame retardants
- Butylated Hydroxyanisole (BHA)
- Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC)
- Chlorinated paraffins
- Colorants or pigments
- Cyanuric acid
- Di(ethylhexyl) adipate (DEHA), diethyl hydroxyl amine (DEHA), or di(ethylhexyl)maleate (DEHM)
- Dimethylfumarate (DMF)
- Dioxins or furans
- Endocrine disruptors
- Epoxy derivatives listed in EU Directives 2002/16/EC and 1895/2005
- Formaldehyde
- Fungicides, preservatives or fumigants
- Melamine
- Methyl bromide
- Natural rubber latex and dry natural rubber
- Nonyl phenol
- Organotin compounds
- Ozone-depleting chemicals
- Perfluorooctanoic acid (PFOA) or perfluorooctane sulfonate (PFOS)
- Pesticides and fungicides
- Photoinitiators, including: benzophenone, hydroxybenzophenone, and 4-methylbenzophenone, and Isopropylthioxanthone (ITX)
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- Plasticizers
- Polyaromatic Hydrocarbons (PAHs)
- Polybrominated Diphenyl Ethers (PBDEs) included: decaBDE, octaBDE, and pentaBDE
- Polycarbonates
- Polychlorinated and Polybrominated Biphenyls (PCBs and PBBs)
- Polychlorinated and Polybrominated Terphenyls (PCTs and PBTs)
- Radioactive Substances
- Recycled materials
- Silicone
- Sulfonamides
- Triclosan (2,4,4’-trichloro-2’-hydroxydiphenylether)
- Tris-Nonylphenol Phosphite
- Vinyl Chloride Monomer (VCM) and Polyvinyl Chloride (PVC) or copolymers

It is the responsibility of the customer to check compliance of the final articles with the relevant legislative and applicable regulatory requirements including their restrictions.

Disclaimer: Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user’s specific application. Chevron Phillips Chemical Company LP and K R Copolymer Company Ltd. (KRCC) do not make, and expressly disclaim, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.

Additional information on the health and safety aspects of our product is listed in the MSDS of the product.

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