

Polyethylene FR4847

We confirm that during manufacturing of this product we do not use or intentionally add any of the chemicals restricted by the following regulations and standards and their subsequent amendments in amounts which exceed the applicable limits.

- **Annex XVII** of the REACH Regulation **1907/2006/EC** - Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles
- **Annex XIV** of the REACH Regulation **1907/2006/EC** - List of substances subject to authorisation
- Directive **2000/53/EC** (End of life vehicles - ELV) - Cr(VI), Hg and Pb < 0.1 wt%, Cd < 0.01 wt%
- Directive **2011/65/EU** (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment - RoHS) and all other RoHS legislations worldwide that restrict some or all of the following substances - Pb, Hg, Cr(VI), PBB, PBDE, DEHP, BBP, DBP, DIBP < 0.1 wt%, Cd < 0.01 wt%
- Directive **2012/19/EU** (Waste Electrical & Electronic Equipment - WEEE) - Annex VII - No ingredients used which require selective waste treatment
- **Proposition 65** list of chemicals known to the State of California to cause cancer or reproductive toxicity - no warning labels are required for this product
- Regulation (EU) **2024/590** on Substances that deplete the ozone layer, repealing 1005/2009/EC
- **US Clean Air Act**, Title VI, Classes I and II (EPA Final Rule; Federal Register 8136, 11.2.1993) on substances that deplete the ozone layer
- Regulation (EU) **2019/1021** on persistent organic pollutants (POPs)
- Global Automotive Declarable Substance List (**GADSL**)
- No use of prohibited substances. Declarable substances above the reporting limit can be found via the IMDS entry for products intended for automotive applications.
- Swiss **SR 814.018** (Verordnung über die Lenkungsabgabe auf flüchtigen organischen Verbindungen - VOCV) - VOC's according to Annexes 1 & 2 < 3 wt%
- Japanese CSCL; Class I or II Specified Chemical Substances

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Regarding classification of the above product according to REGULATION (EC) No 1272/2008 and its subsequent amendments, reference is made in the SDS/PSIS for the above product.

We also confirm that during the manufacturing of the above product we do not use or intentionally incorporate into it any of the following substances. These substances are not expected to be present in this product, however, the product has not been specifically analysed for the presence of these substances:

Acrylamide	Melamine, Cyanuric acid
Aromatic Amines (restricted in Regulation 1907/2006/EC, Annex XVII)	Mica
Artificial Musk	Natural rubbers, Latex
Asbestos	Nitrosamines, Nitrates
Azocolorants (restricted in Regulation 1907/2006/EC, Annex XVII)	Octyl- and Nonylphenols and Octyl- or Nonylphenoethoxylates; TNPP
Azodicarbonamide, semicarbazide	Organotin compounds
Benzophenones (e.g. 4-MBP, 4-HBP, 2,2'-Dimethoxy-2-phenylacetophenone)	Oxo-degradable additives
Biocides (Pesti-, Herbi-, Insecti-, Fungi-, Bactericides)	Parabens
CFC, HCFC	PBT and vPvB substances according to EC Regulation No.1907/2006 (REACH)
Colophony (rosin)	PBT substances under TSCA section 6(h)
4,4'- Diaminodiphenylmethane (MDA)	PFAS (acc. OECD definition)
Di-2-ethyl-hexyl maleate (DEHM)	PFOA, PFOS
Dimethylfumarate (DMF), Dibutylfumarate	Photoinitiators
1,4-Dioxane	Phthalates
Elements: Arsenic, Beryllium, Bismuth, Cobalt, Gold, Indium, Palladium, Selenium, Silver, Tellurium, Thorium, Tin, Tantalum, Tungsten	Plasticisers (e.g. Adipates, ESBO, NETSA)
Heavy metals: Cadmium, Chromium (VI), Lead, Mercury	Polychlorinated Bi-, Terphenyls and Naphthalenes
2-Ethylhexanoic acid, Ethoxyquin, ITX, Thiurams	Polychlorinated dibenzodioxins and dibenzofurans
Flame retardants (halogenated or phosphorus based)	Polycyclic aromatic hydrocarbons (PAH) as restricted in Regulation 1907/2006/EC, Annex XVII
Formaldehyde or formaldehyde releasers	Radioactive substances
Fragrances	Resorcinol
Furfural	Styrene, Polystyrene
Glyoxal	SVHC on "Candidate List of Substances of Very High Concern for Authorisation"
Isocyanates, polyurethanes	Thiazolinones
Mechanically recycled materials	Thiuram mix
	Tri-tert-butylphenol
	UV-hardeners (e.g. ITX, Titanyl-acetylacetone)
	Vinylchloride, Vinylidenechloride, PVC, CPVC or PVDC

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The ingredients of the above product, and if applicable the basic polymer(s), are either listed or exempted in the following chemical inventories:

Australia/AICS
Canada/DSL
China/IECSC
Europe/EINECS or ELINCS or NLP
Japan/ENCS and ISHL
Korea/KECL
New Zealand/NZIoC
Philippines/PICCS
Taiwan/TCSI
USA/TSCA (all relevant ingredients designated as active)

Prepared by Borealis, Group Product Stewardship

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It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

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