

Polypropylene FR4852

We certify 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 **1005/2009/EC** (Substances that deplete the ozone layer)
- **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), repealing 850/2004/EC
- Global Automotive Declarable Substance List (**GADSL**)
- No use of prohibited or declarable substances above threshold limits
- 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
- Japanese PRTR law; Class I or Class II Designated 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 certify that during the manufacturing of the above product we do not use or intentionally incorporate into it any of the following materials:

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

*) DEP, DEHP or DIBP may be used in the catalyst system, which may result in traces of these phthalates in the product, typically in concentrations below 1 ppm.

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The substances used in the manufacturing of the above product, and if applicable the basic polymer(s), are listed in the following chemical inventories:

Australia/AIICS
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 / Esa Arola

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