

Polypropylene FR4852

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 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

Polypropylene

FR4852

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 materials:

Acrylamide	Melamine, Cyanuric acid
Aromatic Amines (restricted in Regulation 1907/2006/EC, Annex XVII)	Mica
Artificial Musks	Natural rubbers, Latex
Asbestos	Nitrosamines, Nitrates, Nitrites
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)	Phthalates
Di-2-ethyl-hexyl maleate (DEHM)	PFAS (acc. OECD definition)
Dimethylfumarate (DMF), Dibutylfumarate	PFOA, PFOS
1,4-Dioxane	Plasticisers (e.g. Adipates, ESBO, NETSA)
Elements: Arsenic, Beryllium, Bismuth, Cobalt, Gold, Indium, Palladium, Selenium, Silver, Tellurium, Thorium, Tin, Tantalum, Tungsten	Polychlorinated Bi-, Terphenyls and Naphthalenes
Heavy metals: Cadmium, Chromium (VI), Lead, Mercury	Polychlorinated dibenzodioxins and dibenzofurans
2-Ethylhexanoic acid, Ethoxyquin, ITX, Thiurams	Polycyclic aromatic hydrocarbons (PAH) as restricted in Regulation 1907/2006/EC, Annex XVII
Flame retardants (halogenated or phosphorus based)	Quaternary ammonium compounds
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	Thiuram mix
Mechanically recycled materials	Tri-tert-butylphenol
	UV-hardeners (e.g. ITX, Titanyl-acetylacetone)
	Vinylchloride, Vinylidenechloride, PVC, CPVC or PVDC

Polypropylene

FR4852

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

Disclaimer

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

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.

No liability can be accepted in respect of the use of Borealis' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.