

**Refining & Chemicals**

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Certificate N° ARP/20L00266  
 Page 1 of 8

Letter: ARP/20L00266

Feluy, 11/03/2020

**PRODUCT STEWARDSHIP CERTIFICATE**
**ALL POLYPROPYLENE PPC, PPH, PPM, PPR, PPS, ACESO® AND LUMICENE® PRODUCTS (Manufactured in Europe)**
**A. ABSENCE OF SUBSTANCES**

We hereby confirm that we do not intentionally use the following substances as additive\* in the manufacturing of the above-mentioned Products:

1	<b>ALLERGEN SUBSTANCES</b> as listed in Annex II of Regulation (EU) 1169/2011	
2	<b>ANTHRAQUINONE</b>	CAS 84-65-1
3	<b>ANTIMONY TRIOXIDE</b>	CAS 1309-64-4
4	<b>AROMATIC AMINES</b> as listed in Regulation 1907/2006/EC Annex XVII Appendix 8	
5	<b>ASBESTOS</b> as listed in Regulation 1907/2006/EC Annex XVII	
6	<b>AZOCOLORANTS</b> as listed in Regulation 1907/2006 Annex XVII Appendixes 8 and 9	
7	<b>BENZENE</b>	CAS 71-43-2
8	<b>BENZOPHENONE DERIVATIVES</b>	We mean the following substances by benzophenone derivatives : Benzophenone (CAS 119-61-9), 2-hydroxybenzophenone (CAS 117-99-7), 3-hydroxybenzophenone (CAS 13020-57-0), 4-hydroxybenzophenone (CAS 1137-42-4), 4-methylbenzophenone (CAS 134-84-9),
9	<b>BIOCIDAL PRODUCTS</b> as defined in Article 3(1)(a) of the Regulation (EU) No 528/2012	
10	<b>BISPHENOL A, BISPHENOL B, BISPHENOL F and BISPHENOL S</b>	CAS 80-05-7, CAS 77-40-7, CAS 620-92-8 and CAS 80-09-1
11	<b>BHA (ter-Butyl-4-hydroxyanisole)</b>	CAS 25013-16-5
12	<b>BHT (2,6-di-ter-butyl-p-cresol)</b>	CAS 128-37-0

13	<b>CHLORINATED ALIPHATIC COMPOUNDS</b>	We mean the following substances by chlorinated aliphatic compounds: tetrachloromethane (CAS 56-23-5), 1,1,2-tetrachloroethane (CAS 79-34-5), 1,1,1,2-tetrachloroethane (CAS 630-20-6), pentachloroethane (CAS 76-01-7), trichloromethane (chloroform; CAS 67-66-3), 1,1,2-trichloroethane (CAS 79-00-5), 1,1-dichloroethylene (CAS 75-35-4), 1,1,1-trichloroethane (CAS 71-55-6).
14	<b>CHLOROFLUOROCARBONS (CFC), HYDROGENATED CHLOROFLUOROCARBONS (HCFC) AND HALONES</b>	
15	<b>CMR SUBSTANCES</b> as listed in Regulation 1272/2008/EC Annex VI	
16	<b>CONFLICT MINERALS</b> (Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Act)	We mean the following substances by conflict minerals: cassiterite, columbite-tantalite, wolframite, tin, tantalum, tungsten and gold
17	<b>COSMETIC prohibited ingredients as listed in Annex II and III of the REGULATION (EC) 1223/2009 on COSMETIC PRODUCTS</b>	
18	<b>DIMETHYLFUMARATE</b>	CAS 624-49-7
19	<b>DIOXINS AND DIFURANS</b>	
20	<b>ENDOCRINE DISRUPTORS category I and II mentioned in Annex 13 of the final report of BKH STUDY 2000</b>	Nevertheless, we inform you that traces of Dibutylphthalate (DBP) may be present in some of our products as catalyst modifier residues. The maximum residue would not exceed 1 ppm.
21	<b>EPOXIDIZED SOYA BEAN OIL (ESBO)</b>	CAS 8013-07-8
22	<b>EPOXY DERIVATIVES</b> Regulation 1895/2005/EC	2,2-bis (4-hydroxyphenyl) propane bis (2,3-epoxypropyl) ether ('BADGE'), bis(hydroxyphenyl) methane bis (2,3-epoxypropyl) ethers ('BFDGE') and novolac glycidyl ethers ('NOGE')
23	<b>ETHANOL</b>	CAS 64-17-5
24	<b>FLAME RETARDANTS</b>	This include Hexabromocyclododecane (HBCD)
25	<b>FORMALDEHYDE</b>	CAS 50-00-0
26	<b>HALOGENS</b>	We mean the following substances by Halogens: Fluorine (CAS 7782-41-4), Chlorine (CAS 7782-50-5), Bromine (CAS 7726-95-6), Iodine (CAS 7553-56-2)
27	<b>HEAVY METALS</b> Directive 94/62/EC and Directive 2004/12/EC	The overall concentration of cadmium, mercury, lead and chromium is lower than 100 ppm (w/w).
28	<b>ISOPROPYLTHIOXANTHONE (ITX)</b>	CAS 5495-84-1 and CAS 83846-86-0
29	<b>LATEX</b>	We mean the following by latex: "a white, tacky, aqueous suspension of a hydrocarbon polymer occurring naturally in some species of trees, shrubs, or plants, or made synthetically".
30	<b>MELAMINE and CYANURIC ACID</b>	CAS 108-78-1 / CAS 108-80-5

31	<b>METALS as listed beside</b>	Nickel, Barium, Cobalt, Arsenic
32	<b>MOSH (Mineral Oil Saturated Hydrocarbons), MOAH (Mineral Oil Aromatic Hydrocarbons), &amp; Mineral Oil</b>	However, we inform you that some trace amount of Mineral Oil can be present in some of here above mentioned products as a manufacturing process residue. This Mineral Oil is included in the Union List of the authorized substances for the manufacturing of plastic materials intended to come into contact with food
33	<b>N_METHYLPYRROLIDONE (NMP)</b>	CAS 872-50-4
34	<b>NONYLPHENOL AND NONYLPHENOLETHOXYLATES</b> as listed in Regulation 1907/2006/EC Annex XVII	
35	<b>ORGANOTIN COMPOUNDS</b>	We mean the following substances by organotin compounds: Monobutyltin compounds (MBT), Dibutyltin compounds (DBT), Dioctyl Tin compounds (DOT), Tributyltin compounds (TBT), Triphenyltin compounds (TPT) and Tributyltin Oxide (TBTO)
36	<b>OZONE-DEPLETING SUBSTANCES</b> - Regulation 1005/2009/EC - The Montreal Protocol on Substances that deplete the Ozone Layer, as last adjusted and/or amended in Montreal 19-2007 (UNEP-United Nation Environment Program) - The United States (Clean Air Act, as amended in 1990, title VI, section 602 (a), class I and II.	CFCs, Halons, Other fully halogenated CFCs, Carbon tetrachloride, 1,1,1-Trichloroethane (Methyl chloroform), Hydrochlorofluorocarbons (HCFC), Hydrobromofluorocarbons (HBFC), Methyl bromide, Bromochloromethane.
37	<b>PARABENS as listed in Annex II and V of the Cosmetic Regulation 1223/2009/EC</b>	
38	<b>PENTACHLOROPHENOL and its salts and esters</b> as listed in Regulation 1907/2006/EC Annex XVII	
39	<b>PERFLUOROCTANE SULFONATE (PFOS) AND PERFLUOROCTANOIC ACID (PFOA)</b>	
40	<b>PESTICIDES, HERBICIDES</b> as defined in Article 2 of the REGULATION (EC) No 1107/2009	
41	<b>PHTHALATES</b>	Nevertheless, we inform you that traces of Phthalates may be present in some of our products, as catalyst modifier residues. The maximum residue would not exceed 1ppm.
42	<b>POLYBROMOBIPHENYLS and POLYBROMODIPHENYLEETHERS</b> - Regulation 1907/2006/EC Annex XVII - Directive 2011/65/EU	This includes penta-, octa-, decabromobiphenylethers.
43	<b>POLYCHLORINATED BIPHENYLS (PCB)</b>	
44	<b>POLYCHLORINATED NAPHTHALENES (PCN)</b>	
45	<b>POLYCHLORINATED TERPHENYLS (PCT)</b> Regulation 1907/2006/EC Annex XVII	

46	<b>POLYCYCLIC AROMATIC HYDROCARBONS (PAH)</b> as listed in Regulation 1907/2006/EC Annex XVII (1272/2013/EC)	
47	<b>POLYVINYLCHLORIDE (PVC), VINYLCHLORIDE MONOMER, POLYVINYLIDENE CHLORIDE (PVDC) VINYLIDENE CHLORIDE MONOMER</b>	
48	<b>POP - Persistent Organic Pollutants</b> As listed in Regulation EU 2019/1021	
49	<b>PROPOSITION 65, January 3, 2020</b>	Chemicals listed in the Proposition 65, California Safe Drinking Water and Toxic Enforcement Act of 1986, dated January 3, 2020 (chemicals list that you can find at the following web address: <a href="http://www.oehha.org/prop65/prop65_list/Newlist.html">http://www.oehha.org/prop65/prop65_list/Newlist.html</a> ). We can hereby confirm that we do not use the chemicals mentioned in this list as additive*. However, some trace amount of Di-isobutyl phthalate (DIBP) and Dibutyl phthalate (DBP), may be present in some of our products, as catalyst modifier residues.
50	<b>RADIOACTIVE SUBSTANCES</b> as defined in Directive 2013/59/EURATOM	Laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation.
51	<b>RECYCLED MATERIALS</b> as defined in Commission Regulation 282/2008/EC	
52	<b>SEMICARBAZIDE and AZODICARBONAMIDE</b>	
53	<b>SHORT CHAINED CHLORINATED PARAFFINS</b>	Short-Chain Chlorinated Paraffins (SCCPs) include all individual chemicals or mixtures that contain: $C_xH_{(2x-y+2)Cl}_y$ . Where $x = 10-13$ ; $y = 3-12$ ; and the average chlorine content ranges from approximately 40 to 70 percent with the limiting molecular formulas set at $C_{10}H_{19}Cl_3$ and $C_{13}H_{16}Cl_{12}$
54	<b>SILICONE</b>	CAS 63148-53-8, 63394-02-5, 90337-93-2, 63148-62-9
55	<b>STYRENE</b>	CAS 100-42-5
56	<b>TITANIUM ACETYL ACETONATE (TAA)</b>	CAS 77927-72-9
57	<b>TRICLOSAN (2,4,4'-Trichloro-2'-hydroxydiphenyl Ether)</b> Decision 2010/169/EU	CAS 3380-34-5
58	<b>TRIS(NONYLPHENYL) PHOSPHITE (TNPP)</b>	CAS 26523-78-4

\* Additive as defined in Regulation (EU) 10/2011

However, since we do not systematically perform specific test to verify the potential presence of these substances in the above-mentioned Products, we cannot guarantee that there is no trace amount of these substances, as impurity or otherwise, in the above-mentioned Products. Moreover, it cannot be excluded that in specific conditions of processing or incineration certain of the above-mentioned substances might be generated as mentioned in the relevant safety data sheet.

**B. COMPLIANCE WITH REGULATIONS.****1. CONEG (Coalition of the North-eastern Governors (CONEG, USA))**

The above-mentioned Products meet the requirements of less than 100ppm overall concentration of cadmium, mercury, lead and chromium

**2. DECRET 2007-1467 (Article 4) and ENVIRONMENTAL CODE (book V-title IV-chapter III-section V)-dated on 10 November 2008.**

We inform you that the "Décret" 98-638 is repealed by article 4 of the French "Décret" 2007-1467 (dated 12 October 2007). We hereby certify that the above-mentioned Products meet the requirements of the article R543-44 item 2b and article R543-45 of Environmental Code (book V) imposing to take into account environmental requirements in the conception and in the manufacturing of packaging material as far as the following articles are concerned:

Article R 543-44 - item 2 (b):

- the above mentioned Products are intended for the manufacture of packaging materials;
- the above-mentioned Products are recyclable by melting and pelletizing;
- the above-mentioned Products have a heat of combustion sufficient to enable to optimize energy recovery (\*).

Article R 543-45:

The total of the concentrations of lead + cadmium + mercury + hexavalent chromium does not exceed 100 ppm.

We kindly remind you that the above-mentioned articles of the Code concern the packaging material as end product, for which we cannot provide any guarantee.

(\*). The control of the combustion conditions and the technical measures related thereto cannot be controlled by the manufacturer of the above-mentioned Products and thus do not fall within his responsibility."

**3. Directive 76/769/EC and Reach Annex XVII**

Directive 76/769/EC relating to restrictions on the marketing and use of certain dangerous substances and preparations, established in its Annex I restrictions for certain dangerous substances and preparations. Regulation 1907/2006/EC (Reach Regulation) repealed and replaced Directive 76/769/EC from 1 June 2009 onwards. Annex XVII, published as Regulation 552/2009/EC amending Regulation 1907/2006/EC, replaces Annex I to Directive 76/769/EC. We herewith confirm that the above-mentioned Products comply with Regulation 552/2009/EC.

**4. END OF LIFE VEHICLES Directive 2000/53/EC**

We hereby confirm that the above-mentioned Products comply with the Directive 2000/53/EC on end of life of vehicles with respect to the heavy metals content limit defined in the notes of the Decision 2002/525/EC because the overall concentration of lead, chromium and mercury is lower than 0.1% by weight, and the concentration of cadmium is lower than 0.01% by weight.

**5. GENETICALLY MODIFIED ORGANISMS**

For PPH 8025, PPH 9020, PPH 12020, PPR 7220, PPR 7227, PPR 9220, PPR 10231, PPR 10232, PPR 12232, PPR 19R01, Lumicene® MR30MC2, Lumicene® MR60MC2, Lumicene® MR30MX6:

We hereby confirm that we received below indications from our current additive\* suppliers :

- 1) The majority of additives\* used in the here above mentioned products are not GMO derived
- 2) Whilst the others could derive from Genetically Modified Organism (GMO)

For other Polypropylene products mentioned on page 1, we hereby confirm that we received confirmation of our suppliers of additives\* mentioning the absence of genetically modified organisms (GMO).

**6. HALAL/KOSHER**

We inform you that the above-mentioned products have not received Halal/Kosher certification. However, we can hereby confirm that we do not use, Ethanol (CAS No 64-17-5), as additive (as defined in Regulation (EU) 10/2011) in the here above mentioned products.

**7. PACKAGING AND PACKAGING WASTE Directive 94/62/EC:**

We hereby confirm that the above-mentioned Products comply with Directive 94/62/EC and Directive 2004/12/EC on Packaging Waste with respect to the heavy metals content limit because the overall concentration of cadmium, mercury, lead and chromium is lower than 100 ppm (w/w)(to be checked for other requirements). In addition, the above-mentioned Products have the potential to be recycled according to these requirements.

**8. RoHS II and III Directive 2011/65/EC and 2015/863/EU**

We hereby inform you that Directive 2011/65/EU (up to amendment (EU) 2020/366) on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) does not cover our Polymers as "raw materials" but it only applies to the "electrical and electronic equipment" as finished products defined in the Annex I of Directive 2011/65/EU.

Nevertheless, we hereby confirm that neither Polybromo biphenyls (PBB), Polybromo diphenylethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP) are intentionally used in the manufacturing of the above-mentioned Products at a threshold level higher than 0.1%. We confirm that the above-mentioned Products do not contain mercury, lead and hexavalent chromium at a threshold level higher than 0.1% (w/w) each, and of cadmium at a threshold level higher than 0.01% (w/w).

However, since we do not perform specific tests to verify the absence of these substances, we cannot guarantee that there is no trace amount of these substances, as impurity or otherwise, in the above-mentioned product.

**9. WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT Directive 2012/19/EU**

We hereby inform you that Directive 2012/19/EU (up to amendment (EU) 2018/849) on waste electrical and electronic equipment (WEEE) does not cover our Polymers as "raw materials" but it only applies to the "electrical and electronic equipment" as finished products defined in Article 3 and classified in categories set out in Annex III of Directive 2012/19/EU.

Nevertheless, we hereby confirm that neither Polychlorinated biphenyls (PCB), Polychlorinated terphenyls (PCT), chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), brominated flame retardants, asbestos are



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Page 7 of 8

intentionally used in the manufacturing of the above-mentioned product at a threshold level higher than 0.1%.

We hereby confirm that the above-mentioned product does not contain mercury, lead and hexavalent chromium at a threshold level higher than 0.1% (w/w) each, and of cadmium at a threshold level higher than 0.01% (w/w).

However, since we do not perform specific tests to verify the absence of these substances, we cannot guarantee that there is no trace amount of these substances, as impurity or otherwise, in the above-mentioned product.

**10. SAFETY DATA SHEETS (Regulation 1907/2006/EC)**

We recommend before using the above-mentioned Products to carefully read the Safety Data Sheets which can be downloaded from the website: <http://www.polymers.total.com>. Our customers receive automatically a Safety Data Sheet after their first order and when they make a new order after a period that is longer than 12 months. They will also receive automatically a Safety Data Sheet when modifications have been made.

**11. TRANSMISSIBLE SPONGIFORM ENCEPHALOPATHY (TSE)**

We hereby confirm that we received confirmation of our suppliers of additives\* used in the above mentioned products that when substances of animal origin are used, they comply with the requirements stipulated in the *Note for guidance on minimising the risk of transmitting animal spongiform encephalopathy agents via human and veterinary medicinal products* (EMA/410/01 rev.3).

**12. VOLATILE ORGANIC COMPOUNDS (VOC)**

We hereby inform you that a representative grade of the here above-mentioned product has been analyzed by "Automated Thermal Desorption Gas Chromatography – internal method" for VOC and our results were lower than the threshold concentration pointed out (3% w/w) in Swiss Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) of 12 November 1997 (Status as of March 1st, 2013).

\* Additive as defined in Regulation (EU) 10/2011

**C. NORMS AND STANDARDS**

We can hereby confirm that we do not use as additive\* any substances listed in these norms and standards above the limit values. The here above mentioned products are plastics and we therefore made reference to the respective parts of these norms and standards.

Furthermore, we inform you that we do not test each grade we sell to check the potential presence of trace amounts of each chemicals hereafter listed which could be present in the here above mentioned products as impurities or otherwise.

- 1. IKEA IOS-MAT-0010** (version AA-10911-15, dated 2019-12-20), **IKEA IOS-MAT-0054** (version AA-92520-11, dated 2018-11-14), **IKEA IOS-MAT-0195** (version AA-2208470-2, dated 2020-01-20), **IKEA IOS-PRG-0021** (version AA-31847-7, dated 2011-10-14).
- 2. GADSL - GLOBAL AUTOMOTIVE DECLARABLE SUBSTANCE List – 2019**

\* Additive as defined in Regulation (EU) 10/2011

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Certificate N° ARP/20L00266  
Page **8** of **8**

Our certificate does not cover:

- any modification of The Product by any addition of any other product to it,
- any prejudicial modification of The Product resulting from a processing of The Product,
- an inadequate use and/or storage of The Product and of the finished articles.

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The present certificate is based on the status of the legislation at the date written above and is valid until **end of August 2021**. This certificate cancels and supersedes any prior version thereof. It can be renewed upon request.

We are at your disposal for any further information you may need and remain,

Yours faithfully,  
Total Research & Technology Feluy

B. KLUYSKENS  
Regulatory Affairs

F. RADERMACHER  
Regulatory Affairs, Manager