

Chemical Name(s): CARBON BLACK

October 2016

CAS#(s): 1333-86-4

Products

Orient Black- N110, N115, N121, N134, N219, N220, N231, N234, N299, N326, N330, N339, N347, N351, N375, N550, N550LG, N550ULG, N650, N660, N762, N772, N765, N774

Royale Black- P1202, P824, P824L, P8242, P842, P353, P435, P287, P537, PP1201, PI 101, PI 102, PI 137, PF401, PF402, PC501, PC502, PC503, PP801, PP802, PP803 & P901

REGULATORY INFORMATION

EU Food Contact Information

Carbon Blacks may be suitable for applications coming into contact with food, as follows:

- For plastics, the Regulation EU 10/2011 has harmonized the purity criteria applicable to carbon blacks used in plastics coming into contact with food, this means the same purity criteria and restrictions are applicable to carbon black in all the countries of the European Union.
- For other food contact applications like rubber, inks, coatings, there are currently no EU harmonized legislation and due to national regulation variations within the European Union, the applicable laws of each member state should thus be consulted. Please contact your PCBL sales representative for more information on specific carbon black grades.

US Food Contact Information

Carbon Black is permitted for use in rubber food contact applications as a filler for rubber articles intended for repeat use under 21 CFR (Code of Federal Regulations) 177.2600.

Limitations:

- 1) Total carbon black (channel process and furnace process) in the rubber may not exceed 50% by weight of the rubber product, PCBL carbon blacks are furnace process blacks.
- 2) Furnace process black content may not exceed 10% by weight of rubber product intended for use in contact with milk or edible oils.

Our **Royale Black PP802** grade meets the very restrictive purity requirements applicable to High Purity Furnace Blacks as mentioned in 21 CFR 178.3297 Colorants for Polymers.

Medical, Pharmaceutical & Edible Inks Use Status

Not approved for medical applications. PCBL Carbon Blacks are manufactured by the pyrolysis of heavy fuel oils and cannot be used in the manufacture of pharmaceuticals or edible inks.

Pharmaceutical Packaging

Carbon Black is not mentioned on any of the positive lists of the European Pharmacopoeia section 3.1, Materials Used for Manufacture of Containers. Therefore, carbon black may not be used. However, certain materials that are not on the positive lists can be used for the manufacture of pharmaceutical packaging but it is the responsibility of the manufacturer of the pharmaceutical packaging to perform the appropriate migration tests on that packaging. This testing must be performed for each type of pharmaceutical packaging and for each pharmaceutical contained in that packaging. Carbon Black is not either mentioned on the US Pharmacopoeia Class VI.

Cosmetics Applications

PCBL does not support the use of this product in any cosmetic application

California Proposition 65

“Carbon black (airborne, unbound particles of respirable size)” is a California Proposition 65 listed substance. Please note that all three listing qualifiers - airborne, unbound (not bound within a matrix), and respirable size (10 micrometers or less in diameter) - must be met for this substance to be considered a California Proposition 65 substance. Please contact your PCBL sales representative for additional information.

International Inventories

All components of this product are listed on or exempt from the following inventories:

- YES – Australian Inventory of Chemical Substances (AICS)
- YES – Canadian Domestic Substances List (DSL)
- YES – Chinese Inventory
- YES – European Inventory of Existing Commercial Chemical Substances (EINECS)
- YES – Japanese Existing and New Chemical Substances (ENCS) YES
- Korean Existing Chemicals List (KECL)
- YES - New Zealand Hazardous Substances and New Organisms Act (HSNO) YES
- Philippine Inventory of Chemicals and Chemical Substances (PICCS)
- Nominated – Taiwan National Existing Chemical Substances Inventory (NECSI)
- Nominated – Turkey
- YES – United States Toxic Substances Control Act (TSCA) Inventory

EU Regulation EC No 1907/2006 REACH and its amendment vide- Commission Regulation (EU) No 1272/2013

- We confirm that PCBL has registered carbon black under REACH.
- Carbon Black REACH Registration Number: 01-2119384822-32-0101
- PCBL confirms that our carbon black does not contain any of the SVHC at levels >0.1% as defined in REACH regulation and available in the ECHA website. None of the candidate list of SVHCs are used in the manufacture of our carbon black.
- It also includes the amendment made with respect to PAH in Annex XVII of (EU) No 1272/2013
- NOTE: Non-EU producers that import substances into the EU may need to use the service of our Only Representative to be covered under REACH. For further information, please contact your PCBL sales representative.

Classification of Carbon Black

We provide the following information regarding the hazard classification of carbon black. With reference to CMR (carcinogenic, mutagenic or toxic for reproduction) Category 1 and Category 2 chemicals, it is noted that the International Agency for Research on Cancer (IARC) has classified carbon black in Group

2B (*may cause cancer in humans*). The IARC classification is based on *sufficient* evidence in animals and *inadequate* evidence based on human health studies. However, it has been demonstrated, with reasonable scientific certainty, that the specific mechanism of tumor induction by carbon black in animals (specifically, rats) is not relevant to humans. Therefore, the International Carbon Black Association has not classified carbon black as carcinogenic. This conclusion is also based on technical guidance from the European Chemicals Agency (ECHA) that good quality human data should always take precedence over experimental animal data. We continue to believe that carbon black does not present a health hazard when handled in accordance with good housekeeping and safe workplace. See Section 11 of the carbon black Material/Safety Data Sheet for additional information.

Compliance of PCBL Carbon Blacks with various EU and U.S, Heavy Metal Legislation:

Packaging and Packaging Waste :EU Directive 94/62/EC and U.S, CONEG

The above legislations apply to packaging and packaging waste but not directly to their constituents. PCBL does not routinely test its carbon black products for the presence of heavy metals. However, to the best of our knowledge, the total content of Pb, Cd, Hg and Cr VI in PCBL Carbon Black Products is less than 100 ppm.

End of Life Vehicles (EU Directive 2000/53/EC) modified by Commission Decision 2002/52/EC

PCBL does not routinely test its carbon black products for the presence of heavy metals. However, to the best of our knowledge, Cd, Cr, VI, Hg, or Pb and their derivatives are not used during the production of PCBL Carbon Black products.

RoHS EU Directive 2011/65/EU repealing previous Directive 2002/95/EC and amendments

PCBL does not routinely test its carbon black products for the presence of RoHS substances. However, to the best of our knowledge, Cd, Cr VI, Hg, Pb, polybrominated biphenyls or polybrominated diphenylethers derivatives (including decabromodiphenyl ether) are not used during the production of PCBL Carbon Black Products.

US CPSIA (Consumer Product Safety Improvement Act, 2008)

This legislation applies to consumer products not directly to carbon black. PCBL does not routinely test its carbon black products for the presence of CPSIA substances, however to the best of our knowledge, Pb derivatives and phthalates are not used during the production of PCBL Carbon Black Products.

US Conflict Minerals – Dodd-Frank Consumer Protection Act

In August 2012, the Securities and Exchange Commission adopted a rule mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act to require companies to publicly disclose their use of conflict minerals that originated in the Democratic Republic of the Congo (DRC) or an adjoining country. Under the Act, those minerals include tantalum, tin, gold or tungsten. The rules require public companies that manufacture or contract to manufacture products that contain these minerals to make very detailed disclosure of their use of these minerals.

Tantalum, tin, gold or tungsten are not used in the manufacture of PCBL's carbon black grades. Therefore, PCBL's carbon black grades do not contain tantalum, tin, gold or tungsten that originated from the DRC or adjoining country.

Toys Norms

Toys Norms in relation with heavy metals:

US ASTM F963-03 and Mercosur NM 300-3: Both Norms prescribe heavy metals maxima for extraction tests to be performed on the toy itself, the different metals and maxima mentioned are identical in both Norms. PCBL does not routinely test its carbon black products for the presence of heavy metals. However, to the best of our knowledge, the content of heavy metals in PCBL's Carbon Black Products is below the maxima permitted by extraction, thus, PCBL Carbon Black Products are suitable for use in toys according to the criteria of both Norms.

Toys Norm EN 71-3: 2013. The updated version of this Norm prescribes the new heavy metals specific limit values for migration testing designed to ensure toy safety. Those limits apply to the finished toys. PCBL carbon blacks are not routinely analyzed for the presence of heavy metals or heavy metals compounds. To the best of our knowledge, these substances being not used in our production of carbon black are not expected to be present in PCBL carbon black products above trace concentrations (i.e., low ppm or less).

We can however confirm that no Cr 6+ and no Organic Tin derivatives are present even in traces due to the specific production process of carbon black.

We thus strongly recommend our customers to test their final toy product to ensure compliance with the limits of Toys Norm EN71-3:2013 applicable to their specific application.

Toys Norm EN 71-9 prescribes limits for organic compounds potentially released by toys. PCBL does not routinely test its carbon black products for the presence of organic compounds. However, to the best of our knowledge, the mentioned substances are not used intentionally in the production of PCBL Carbon Black Products, thus, are not expected to be released by a PCBL carbon black product.

Organic and Inorganic Impurities and Products from Animals and plants

PCBL Carbon Blacks are not routinely analyzed for the chemicals listed below. To the best of our knowledge, none of the chemicals listed below are used in our production and handling processes, thus they are not expected to be present as impurity in PCBL carbon black products above traces concentration (i.e. low ppm or less).

Organic Impurities

- Aliphatic and aromatic solvents
- azo compounds, aromatic amines and dyes, melamine
- Halogenated hydrocarbons including among others: brominated hydrocarbons, aliphatic chlorinated hydrocarbons, dioxins, flame retardants, fluorinated hydrocarbons, PCB's, PCT's, PFOS and PFOA (EU Commission Decision 2006/122/EC), PVC, Triclosan and ozone depleting substances (ODS) like CFC's and HCFC's
- Furans and dioxins
 - glycol ethers
 - phenols
 - Endocrine Disrupters, i.e., phthalates and bisphenol-A
 - Pesticides and biocides, including Dimethyl Fumarate (EU Comm. Decision. 2009/ 251/EC).
 - Organotin derivatives
 - Latex

- Formaldehyde
- BADGE, BFDGE and NOGE
- Acrylamide
- Isopropyl thioxanthone (ITX)
- Benzophenone derivatives

Products from Animal or Plant Origin

PCBL Carbon Blacks are not derived from any products of animal or plant origin or any animal or plant by-products. To the best of our knowledge, they do not:

- contain any bovine materials or any materials associated with the development of Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakobs Disease (CJD);
- contain any Genetically Modified (GMO) products or materials.

Allergens

PCBL does not test its carbon black for the presence of allergens. However, to the best of our knowledge, our carbon blacks are not expected to contain any of the allergens mentioned in:

- Annex IIIa of the European Directive 2000/13/EC and its 3 subsequent amendments
- US FDA Food Allergen Labeling & Consumer Protection Act 2004 (FALCPA)

If you need any further information or assistance, please feel free to contact the undersigned:

Please Note:

The information contained in this document reflects the actual knowledge of our company (Phillips Carbon Black Ltd) at the time of document preparation. Although we believe that information contained herein is accurate, it implies no liability or other legal responsibility on our part.

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