SENSOPLAST Packmitteltechnik GmbH
Auf dem Höhchen 1-5,
56587 Oberhonnefeld, Germany

INDEX of CONTENTS
INHALTSVERZEICHNIS

Item/Artikel: S01705	**Pipette assembly T/E 1-piece DIN 168 GL-18,** Pipetten-Montur OV1 DIN 168 GL-18,

Dear Customer,

Herewith you receive the following information for the above mentioned item:

Sehr geehrter Kunde,

hiermit erhalten Sie folgende Informationen zu dem oben genannten Artikel:

→ ***CERTIFICATE OF QUALITY***
→ *PRÜFZERTIFIKAT*

SENSOPLAST Packmitteltechnik GmbH
Auf dem Höhchen 1-5,
56587 Oberhonnefeld, Germany

Certificate of Quality
Prüfzertifikat

Item/Artikel: S01705	**Pipette assembly T/E 1-piece DIN 168 GL-18,** Pipetten-Montur OV1 DIN 168 GL-18,

Single items: / Einzelkomponenten:

Assembly Drawing No.: / Zusammenbauzeichnung:	**22 000 083**

Ref. No.: / Art.Nr.:	**Description /** Bezeichnung		
A1015	Screw Cap T/E 1-piece DIN 168 GL-18 with hole / Lochschraubverschluss OV1 DIN 168 GL-18		
02 PE-HD	Raw material: / Rohmaterial:	HDPE Purell ACP 6541 A	(LYONDELLBASELL)
	Masterbatch: / Farbgranulat:	white / weiss: 600 PE	(LIFOCOLOR)
	Drawing No.: / Zeichnung Nr.:	11 000 6210-K	weight/gewicht: 1,47 g ± 10%
A137	Pipette teat TPE 0.7 ml DIN 168 GL-18 / Pipettensauger TPE 0,7 ml DIN 168 GL-18		
07 O	Raw material: / Rohmaterial:	TPE TM6 LFT	(KRAIBURG)
	Masterbatch: / Farbgranulat:	white / weiss: 600 PE	(LIFOCOLOR)
	Drawing No.: / Zeichnung Nr.:	011-1009	weight/gewicht: 1,04 g ± 10%
A067	Glass pipette 106 mm with bent ball tip / Glas Pipette 106 mm mit gebogener Kugelspitze		
70 GL	Raw material: / Rohmaterial:	AR®-clearglass type III	(SCHOTT)
	Masterbatch: / Farbgranulat:	transparent	---
	Drawing No.: / Zeichnung Nr.:	011-1024	weight/gewicht: 3,85 g ± 10%

Customer Order No. / Bestell-Nummer Kunde	2024/07
Customer Item No. / Artikel-Nummer Kunde	XXXX
Quantity Supplied / Liefermenge	4.000 pieces / Stück
Lot No. / Chargen-Nr.	564792/1-1
Production Date / Produktionsdatum	17.05.2024
Delivery Date / Lieferdatum	23.05.2024
Number of Delivery Note / Lieferschein-Nummer	202401597

Test Results / Prüfergebnisse

Geometrical Conformity / Geometrische Konformität	**in compliance with technical drawing /** gemäß technischer Zeichnung
Embossing, Colour, Surface / Prägung, Farbe, Oberfläche	**in compliance with technical drawing and delivery note /** gemäß technischer Zeichnung und Lieferschein
Functional Conformity / Funktionale Konformität	**warranted /** gewährleistet

Contamination / Kontamination

No foreign bodies / Keine Fremdkörper	**warranted /** gewährleistet
No wrong components / Keine falschen Komponenten	**warranted /** gewährleistet
No visual defects / Keine sichtbaren Fehler	**warranted /** gewährleistet
Completeness / Vollständigkeit	**warranted /** gewährleistet
No damages / Keine Beschädigungen	**warranted /** gewährleistet

SENSOPLAST Packmitteltechnik GmbH
Auf dem Höhchen 1-5,
56587 Oberhonnefeld, Germany

Sensoplast Packmitteltechnik GmbH hereby confirms that the finished product has been inspected accurately by our quality assurance department. This product fulfils the high quality requirements for primary packaging in the pharmaceutical and food industry.
Quality evaluation conform with the recommendations of the World Health Organisation (WHO) for the pharmaceutical industry and Good Manufacturing Practice (GMP). It has been inspected based upon the valid Defect Evaluation List for injection-moulded components made of plastics: closures, sealing discs and dosage aids (droppers etc.), as published by „ECV Editio Cantor Verlag für Medizin und Naturwissenschaften GmbH, Aulendorf, Germany".
Our inspection results have been documented and are available on request. This certificate of quality is no warranty for the performance of the delivered items. Furthermore, the consignee has the obligation to execute their own inspections. As far as there are divergent agreements between the customer and Sensoplast concerning the delivered items, these exceptional rules substitute the above mentioned.

Hiermit bestätigt die Sensoplast Packmitteltechnik GmbH, dass das gelieferte Endprodukt sorgfältig durch unsere Qualitätssicherung geprüft wurde.
Es entspricht den hohen Qualitätsanforderungen an pharmazeutische und Lebensmittel Primärpackmittel.
Sensoplast orientiert sich bei der Qualitätsbeurteilung an den Empfehlungen der World Health Organisation (WHO) an die Pharmaindustrie, der Good Manufacturing Practice (GMP) sowie an den jeweils gültigen Fehlerbewertungslisten für Spritzgussteile aus Kunststoff: Verschlüsse, Dichteinlagen, Dosierhilfen (Tropfer etc.), in Anlehnung an die Veröffentlichungen im ECV Editio Cantor Verlag für Medizin und Naturwissenschaften GmbH, Aulendorf.
Unsere Prüfergebnisse wurden dokumentiert und stehen auf Anfrage zur Verfügung. Dieses Dokument beinhaltet keine Zusicherung von Eigenschaften der gelieferten Produkte. Es entbindet den Empfänger nicht von der Obliegenheit, eigene Prüfungen durchzuführen. Soweit für die gelieferten Fertigprodukte und Komponenten abweichende Vereinbarungen zwischen Sensoplast und dem Auftraggeber vereinbart wurden, werden diese zugrunde gelegt.

Sensoplast Packmitteltechnik GmbH

Place, date / Ort, Datum: **Oberhonnefeld, 23.05.2024**

Jennifer Strehlow
Quality Management / Qualitätsmanagement

This certificate of quality was generated electronically and is valid without a signature.
Dieses Prüfzertifikat wurde elektronisch erstellt und ist ohne Unterschrift gültig.

Art. 160216161

pohli Partner für Packungen	***Material Specification***	Dokument:	FM 8.2.1-005
		Revision:	5
		Freigabe:	19.03.2021
		Gültig ab:	19.03.2021
		Seite	1 von 1

Our Article Nummer: 1155-KPL-000002 Tiegel-Deckel 38mm

Material Specification

PP Mosten MA350

Alternative resin:
PP Mosten NB425

Lubricant:

-

Masterbatch:

Black PE50/PE4462

Our Article Nummer: E78 Inlet

Material Specification

Corelen 2510

Lubricant:

-

Masterbatch:

-

Date: 05.01.2023

	declaration of conformity for plastic materials with Food come into contact	Dokument:	8.2.1-004
		Revision:	5
		Freigabe:	19.03.2021
		Gültig ab:	19.03.2021
		Seite	1 von 2

Explanation for our product and its color variants:

Our article number	
1155-KPL-000002	

We hereby declare that our Products comply with the statutory provisions of the Plastics Regulation (EU) No. 10/2011 and Regulation (EU) No. 1935/2004 in its current version. We also declare that we comply with the presepts of Commission Regulation (EC) No 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food.

The total migration and den specific migrations are below the legal value when used according to specifications.

The test is carried out in accordance with Regulation (EU) No. 10/2011 and the requirements of EN 1186-1 ff. series of standards.

The materials and raw materials used comply with Regulation (EU) No. 10/2011.

Tested application conditions

Simulants	**Contact time**	**Contact temperature**
3% acetic acid	10 days	40°C
50% Ethanol	10 days	40°C

Ratio of area in contact with foodstuffs to the volume by which the conformity of the material or article was established:
· 18,307 cm² / cm³

The following substances with limitation and / or specification are included in the products used:

Substance name	**restriction**
According to the enclosed specifications	as per attached datasheets

Note on "dual-use substances":
Substances that are also permitted as food additives do not migrate or are contained in such small quantities that they have no technological effect in the event of a migration.

Specification for the intended use or restrictions:

- type/types of food or processes for which the material is suitable / see specification of material suppliers or test report
- Any long term contact at room temperature or below, including heating to 70°C

for up to 2 hours or heating to 100 ° C for up to 15 minutes. The food contact conditions described for OP1 and OP3 are also covert by the OM2 test.

- Liquid acid media (pH <4.5)
- Aqueous foods (> 4.5)
- Oil-in-water emulsions

Our products comply with Directive 94/62 / EC.

No functional plastic barrier is used in our products.

The traceability according to Regulation (EC) No. 1935/2004 of our products is guaranteed by the Rollnumber in connection with the Production date.

This confirmation applies to the product supplied by us as described; the conformity assessment was carried out in accordance with the rules of Regulation (EU) No 10/2011; There after the product fulfils the requirements observing the stated food contact conditions. In case of deviations from the food contact conditions, the user has to convince himself of the suitability.
In particular, it is pointed out that no contact between printing ink and food may occur during printing.

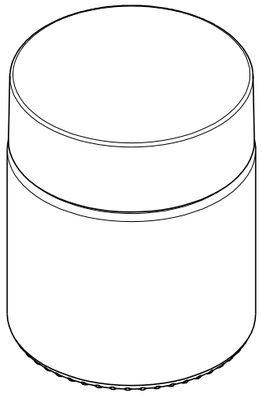
Supplier no. 710048 is neither producer nor distributor of raw materials, additives and color batches. As a downstream user, we refer exclusively to the above-mentioned confirmations of our suppliers

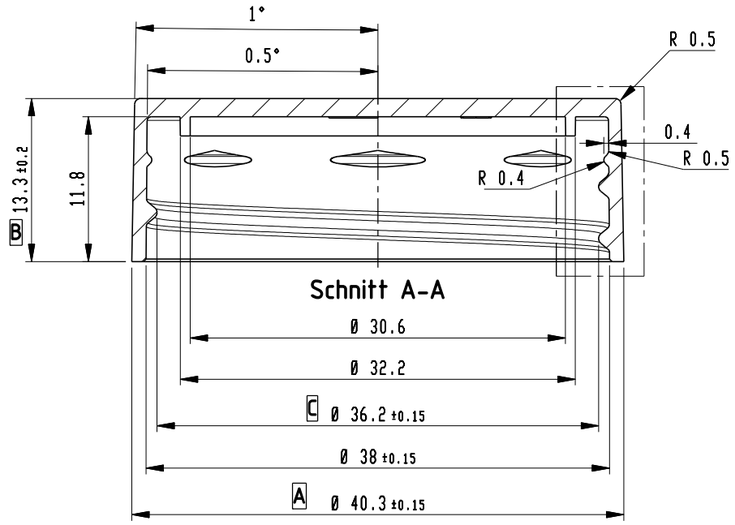
Date 21.11.2022

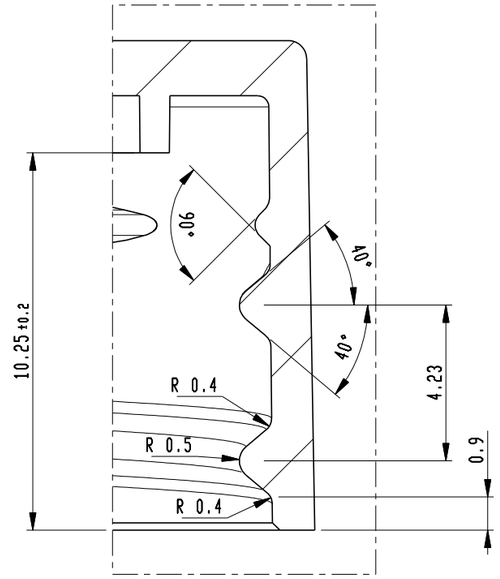
The document has been created by computer and is also valid without a signature.

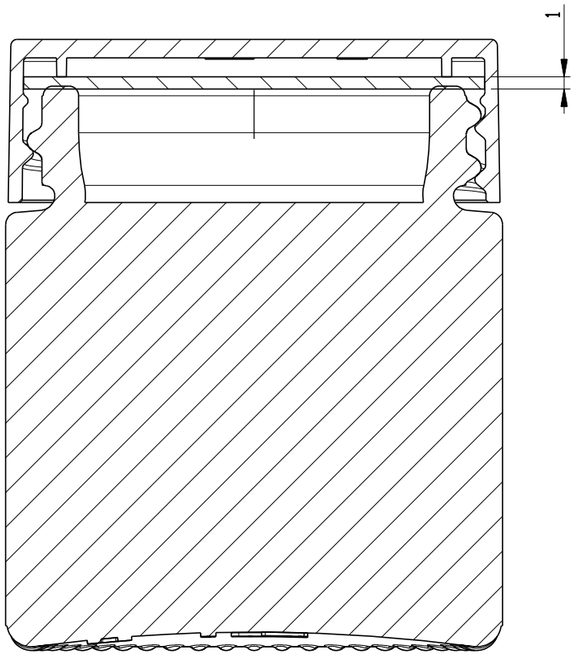
Validity until revocation by reissue

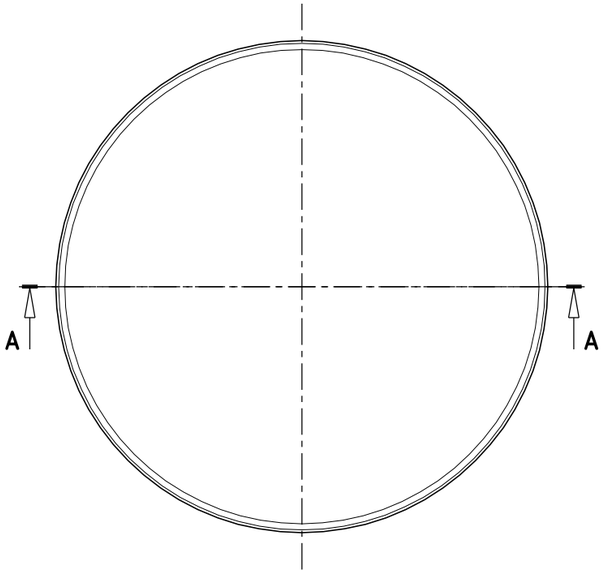
Freimaßtoleranzen nach DIN 20457 TG7

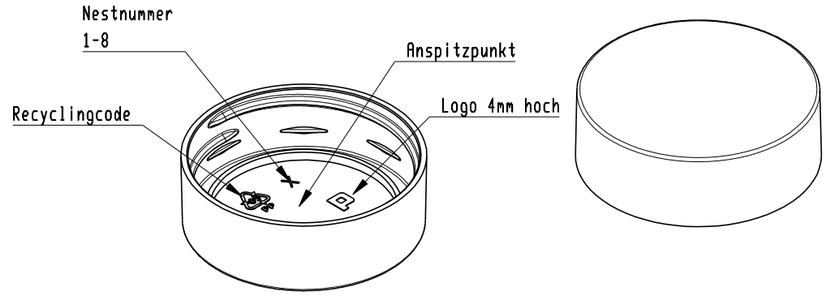












Steigung: 6Gang/1"
Umschlingung: 360°
1 Gewindeanfang

Unbemaßte Kontur nach 3D-Daten!

A - C = Prüfmaße

Oberfläche: Sichtflächen poliert
Innenfächen mikrogestrahlt,

	Datum	Name
3D-Konstr.	21.04.2022	Stammberger
Bearbeitet	24.11.2022	Stammberger
Geprüft	28.11.2022	R. Bethlehem

Material: PP

Gewicht: 3.4g ±0.3

Index	Änderung	Datum	Name
00a	Maße angepasst	24.11.2022	Stammberger
00	Zeichnung erstellt	08.07.2022	Stammberger

pohli
Partner für Packungen
Hölker Feld 10 - 12 42279 Wuppertal

Maßstab: 2:1 (6:1,1:1) | Format: A3 | European Projection

Zeich.-Nr. / Art.-Nr.
1155 / 160216160 / 160216161

Benennung
Schraubverschluss
Ø38mm

PP MOSTEN® MA 350
MATERIAL SPECIFICATION
PND 33-301 POLYPROPYLENE MOSTEN - PART 2

HOMOPOLYMER FOR INJECTION MOULDING

CHARACTERISTICS

MOSTEN MA 350 is a high-flowing homopolymer with narrow molecular weight distribution and antistatic stabilization. It shows good processability and the products high gloss. It is suitable for injection moulding into complicated multiple moulds and for manufacture of thin-walled products. Typical application is manufacture of packages for food industry, VHS and DVD boxes, etc.

HYGIENIC APPROVAL

MOSTEN MA 350 meets the hygienic requirements on materials and articles intended for contact with foodstuffs according to Regulation (EC) 1935/2004 of the European Parliament and of the Council, as well as according to Commission Regulation (EU) No 10/2011 including changes and additions.

Flammability according to EN 13501-1: class F

International designation ISO 19069-PP-H,,MZ, 16-02-400

GUARANTEED QUALITY PARAMETERS

PARAMETER	UNIT	VALUE	TEST METHOD
Melt flow rate (230 °C/2,16 kg)	g/10 min	45 - 55	ISO 1133-1
Volatile matter content	%	<0,1	ISO 1269
Yellowness index	–	standard A – B	ASTM D 1925
Granulometry	pc/g	20 - 55	Part 1: cl. 4.3.1.2
Yield stress	MPa	>33	ISO 527-1, 2
Flexural modulus of elasticity		>1350	ISO 178
Heat deflection temperature (HDT)	°C	>53	ISO 75-1,2

Issued by: Product Intelligence - Polyolefins
Replaced edition: 4/2016
Phone: +420 476 162 912
Issued: 11/2019

Unipetrol
ORLEN GROUP

PP MOSTEN® MA 350

TECHNICAL DATASHEET

HOMOPOLYMER FOR INJECTION MOULDING **MFR (230/2,16): 50 g/10 min**

MOSTEN MA 350 is a polypropylene produced by Unipetrol RPA using INNOVENE™ PP gas-phase technology.

CHARACTERISTICS

- antistatic agent
- phthalates free

INTERNATIONAL DESIGNATION

ISO 19069-PP-H,,MZ,16-02-400

APPLICATION

- thin-walled household products

MATERIAL PROPERTIES (typical values, do not represent a specification of given grade)

PARAMETER	TEST METHOD	UNIT	VALUE
RHEOLOGICAL PROPERTIES			
Melt Mass Flow Rate (230 °C/2,16 kg)	ISO 1133-1	g/10 min	50
Moulding Shrinkage Parallel	ISO 294-3,4	%	1,7
Moulding Shrinkage Normal			1,8
MECHANICAL PROPERTIES			
Flexural Modulus	ISO 178	MPa	1550
Tensile Modulus	ISO 527-1,2		1450
Yield Stress			35
Yield Strain		%	9
Elongation at Break			100
Charpy Notched Impact Strength at 23 °C	ISO 179-1	kJ/m^2	2
THERMAL PROPERTIES			
Melting Temperature (DSC)	ISO 11357-1,3	°C	168 - 172
Vicat Softening Temperature (VST)	ISO 306		154
HDT (1,8 MPa)	ISO 75-1,2		57
OTHER PROPERTIES			
Shore D Hardness	ISO 868	-	65

PROCESSING CONDITIONS

PARAMETER	RECOMMENDED VALUE	UNIT
Melt Temperature	200 - 280	°C
Mould Temperature	20 - 60	
Hold Pressure	(60 - 80) % of injection pressure	%
Screw Length	(15 - 25) d*	-

* Screw Diameter

Issued by: Product Intelligence - Polyolefins
Replaced edition: –
Phone: +420 476 162 912
Issued: 11/2019

Unipetrol
ORLEN GROUP

PP MOSTEN®

TECHNICAL DATASHEET

APPEARANCE PROPERTIES

PP MOSTEN is delivered in the form of natural stabilized pellets. Typical pellet length is (2 - 7) mm, typical bulk density of PP pellets is (450 - 600) kg/m^3.

THERMAL PROPERTIES

PP MOSTEN exhibits good thermal-isolation properties. With decreasing temperature, the toughness of the material decreases and below -20 °C, the materials becomes substantially brittle. In the area of low temperatures, it is more suitable to use copolymers, which have generally their glass transition temperature Tg shifted towards lower temperatures compared to homopolymers. In the area of high temperatures, PP MOSTEN can permanently be used up to 100 °C, grades with heat stabilization (LTHS) can be used up to 105 °C. The level of temperature stability of all PP Mosten grades is such that during common processing method, no material degradation occurs.

PHYSICAL-CHEMICAL PROPERTIES

PP MOSTEN exhibits high chemical resistance at both normal and raised temperatures, due to its non-polar character. Within a broad range of temperatures and concentrations it resists to majority of acids, bases and salt solutions. It dissolves only in some solvents at raised temperature (e.g. in aromatic and halogenated hydrocarbons); furthermore, it doesn't resist to strongly oxidizing agents (e.g. nitric acid, oleum, halogens). PP MOSTEN has practically no hygroscopicity, so it can be used in environments with variable relative humidity, without any risk of dimensional changes or changes of mechanical properties of the products. During processing, problems may be caused by moisture condensation during transfer of the material from a cooler to a warmer environment. At storage temperatures below 20 °C it is recommended to condition the material about 24 hours prior to processing in the production hall.

HYGIENIC APPROVAL

PP MOSTEN meets the requirements of the following regulations (as amended):

- Decree of the Ministry of health No. 38/2001 of the Journal of Laws;
- Regulation of the European Parliament and the Council No. 1935/2004;
- Commission Regulation (EU) No. 10/2011;
- Regulation of EP and the Council (ES) No. 1907/2006 (REACH) – for production of the PP Mosten grade, no phthalates have been used.

FIRE & SAFETY CHARACTERISTICS

PP MOSTEN is not classified as a dangerous substance in accordance with the Regulation (EC) 1272/2008 (CLP), nor does it satisfy any of the other conditions set out in Article 31 of the Regulation (EC) 1907/2006 (REACH). Therefore, the producer is not obliged to provide a Material Safety Datasheet. Necessary information according to Article 32 of the Regulation (EC) 1907/2006 (REACH) and further details are provided in "Announcement", available on www.unipetrolrpa.cz or upon request.

PACKAGING, STORAGE, TRANSPORTATION AND DELIVERY

PP MOSTEN is delivered in PE-LD (>PE-LD<) bags, mass 25 kg. 55 pieces of these bags are deposited on one pallet, fixed by a shrinkable PE-LD (>PE-LD<) film, protecting the product from damage and extending its lifetime. The pallets are intended for stocking into two, exceptionally into three layers. PP Mosten can be alternatively delivered bulk loaded in car tanks. Alternative packaging or transportation is possible based on agreement with the customer.

PP MOSTEN is stored in dry, ventilated, roofed storing facility, the premises of which are protected against direct sunlight. Recommended range of storage temperatures is -20 °C to +50 °C. The product distance from any source of heat shall be at least 1 m. The recommended storage time for PP MOSTEN in closed (sealed) bags at defined storage conditions is one year. At longer storage time, it is recommended to check the material properties prior to processing.

PACKAGES

The packages used by producer for packaging of PP MOSTEN grades are designed and manufactured in compliance with technical regulations for weight and volume of the product. Material of the packages does not contain any classified hazardous substances. The total amount of heavy metals (Pb, Cd, Hg and CrVI) does not exceed the limiting value of 100 ppm. Recommended methods of waste utilization are material utilization, energy utilization.

INSTRUCTIONS FOR WASTE DISPOSAL FROM PE PROCESSING

Products and non-contaminated waste during PP MOSTEN processing can be recycled and further processed into products. Material designation >PP< is used in compliance with ISO 11469. Material designation on products enables material identification during collecting, classification, utilization or disposal of consumer waste. PP MOSTEN does not contain any lead, cadmium, mercury or hexavalent chromium, i.e. total amount of these heavy metals does not exceed 100 ppm. The PP waste is classified by the waste producer in accordance with the valid legal regulations. Recommended methods of waste utilization are material utilization and energy utilization.

Issued by: Product Intelligence - Polyolefins
Phone: +420 476 162 912
Replaced edition: –
Issued: 11/2019

Unipetrol
ORLEN GROUP

UNIPETROL RPA, s.r.o.
Záluží 1
436 70 Litvínov
Czech Republic

CONFIDENTIAL!

DECLARATION OF COMPLIANCE

Product: PP MOSTEN MA 350

We certify that this product fulfils the requirements on plastic materials and articles intended to come into contact with foodstuffs, as described in:

EU:
Regulation (EC) No 1935/2004 of the European Parliament and of the Council,

Commission Regulations (EC) No 1895/2005, 2023/2006,

Commission Regulations (EU) No 10/2011 as amended by regulations (EU) 1282/2011, 1183/2012, 202/2014, 865/2014, 2015/174, 2016/1416, 2017/752, 2018/79, 2018/213, 2018/831, 2019/37, 2019/988, 2019/1338 and Commission Implementing Regulation (EU) No 321/2011.

The product meets the requirements on OML in food simulants A, B and D2 for test conditions OM5 (100 °C/2 hours) and SML of monomers, other starting substances, additives, polymer production aids, Ba, Co, Cu, Fe, Li, Mn, Zn, Al, Ni and primary aromatic amines in simulants A, B and D2 (60 °C/10 days).

Substances with restrictions/specifications:

Ref. No. 39815, CAS 0182121-12-6, SML = 0,05 mg/kg, (a substance 'aid to polymerisation' which initiates polymerisation and/or controls the formation of the macromolecular structure);

Aluminium, Al, SML = 1 mg/kg.

Food additives/flavourings: E 471 (Ref. No 56585, CAS No 31566-31-1) max. 0,275 %.

Regarding composition, chemical reactions and the closed manufacturing process, we are not aware of the presence of any non-intentionally added substances (NIAS) in our product, which might subsequently be transferred into foodstuff in an amount, which could cause concern for human health.

The traceability of the product is guaranteed under Article 17 of Regulation (EC) No 1935/2004 by issuing a Certificate of Inspection for each product according to EN 10204 art. 3.1, as well as by placing an individual code on each package in case of bagged product.

USA:
FDA, CFR, Title 21 (4/2019) 177.1520 (a)(1)(i), (b) and (c)1.1a Olefin polymers.

Eva Budska
UNIPETROL RPA, s.r.o., Unit EKO
CZ-43670 Litvínov
E-mail: eva.budska@unipetrol.cz
2020-01-20

This document was prepared automaticaly through computer and therefore is not signed.

Announcement

according to Art. 32 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

The supplied product meets neither the criteria for classification as a dangerous product according to the Regulation (EC) No 1272/2008 of the European Parliament and of the Council (CLP) nor any of the other conditions set in Art. 31 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), and therefore there is no obligation to provide MSDS to the customer.

However the supplier is, according to Art. 32 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), obliged to provide the information below.

1. SUPPLIER

UNIPETROL RPA, s.r.o., Záluží 1, 436 70 Litvínov, Czech Republic
☎: +420 476 161 111, fax: +420 476 619 553, unipetrolrpa@unipetrol.cz, www.unipetrolrpa.cz
Head of Customer Service: ☎: +420 476 162 006, lucie.markova@unipetrol.cz
Product Inteligence and TS: ☎: +420 476 166 247, martin.malicek@unipetrol.cz
☎: +420 476 162 912, olga.mertlova@unipetrol.cz

2. REGISTRATION

according to Title II of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

According to Art. 2(9) of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH) the product is not subject to registration according to Title II of this Regulation. The monomers are subject to registration according to Art. 6(3), if their content in the polymer is at least 2 % wt.

The product identifiers are as follows:

IDENTIFIER	IDENTIFICATION NAME		IDENTIFICATION NUMBER
Registration	Homopolymer *Monomer*	Polypropylene *Propylene*	Registration number: it is not subject to registration *01-2119447103-50-0027*
Harmonized classifications	not on the list		not on the list
List of ECHA classification	poly(propene) polypropylene		-
International chemical name	Polypropylene		CAS number: 9003-07-0
Types	EH 001, EH 100, FC 108, FC 110, FT 005, GB 002, GB 005, GB 107, GB 218, GH 001, GH 201, GH 300, NB 108, NB 112, NB 218, NB 220, NB 425, MA 230, MA 350, MT 230, TB 002, TB 003, TL 003, XB 105, XB 205, YY 000, YY 400, NB 480		

3. AUTHORISATION

according to Title VII of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

The product is not given on the authorization list in Annex XIV of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), and therefore there is no obligation to apply for authorization for its production and use.

4. RESTRICTION

according to Title VIII of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

The product is not subject to any restrictions stated in Annex XVII of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH) on production, placing on the market or use.

5. OTHER IMPORTANT INFORMATION FOR RISK MANAGEMENT

None.

6. OPTIONAL INFORMATION

The following information and recommendations are not obligatorily provided under Article 32 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH). This information is provided in good faith. We recommend to take this information into account and to follow the instructions.

- Available data on physical and chemical properties of the product.
  The product is capable of burning, but hardly ignitable. Dust is explosive. The product may be charged electrostatically.
  - Physical state at 20°C, colour, odour — solid colourless and odourless product
  - Density [kg.m^{-3}] — 900-910
  - Melting point [°C] — 160-168
  - Bulk density (granules) [kg.m^{-3}] — 450-600
  - Flash point (granules) [°C] — 350-360
  - Ignition temperature (granules) [°C] — 380-390
  - Ignition temperature (settled dust) [°C] — 350
  - Ignition temperature (turbid dust) [°C] — 440
  - Minimal initiatory ignition energy [J] — 0,08
  - Lower explosion limit (dust) [g.m^{-3}] — 32
  - Combustion heat [MJ.kg^{-1}] — 44-46
- Instructions for handling and storage
  For save handling and storage, all the fire-fighting measures and recommended personal protective means (safety goggles, protective gloves, working clothes, sealed footwear) shall be observed.
  Storing facilities shall meet the requirements for fire safety of constructions and electrical facilities and shall be in conformity with valid legal regulations. Avoid contact of the product with incompatible materials, with open flame and high temperatures. To maintain the product quality, do not expose it to moisture and direct sunlight. We recommend to store the product in dry, ventilated, roofed storing facility, the premises of which are protected against direct sunlight, or to secure the above-mentioned conditions by another suitable way (tightly closed containers or packaging). The recommended range of storage temperatures is from -20 °C to +50 °C. At below-zero temperatures, it is necessary to pay increased attention to handling of the product. The product distance from any source of heat shall be at least one meter. The recommended storage time for product in closed (sealed) bags at defined storage conditions is maximum one year. At longer storage time, it is recommended to check the material properties prior to processing.

***Statement**. The data contained are based on the present state of knowledge and current legislation and are in accordance with the legislation in force at the time of document developing. The user is responsible for complying with the requirements of relevant regional legislation.*

UNIPETROL RPA, s.r.o.
Záluží 1
436 70 Litvínov
Czech Republic

MATERIAL DECLARATION

Products of PP MOSTEN:

MA 712, MA 745, MA 230/350, MT 230, MT 950/825/935, MB 720, GB 503/506, EH 100, GH 201

We certify, that during manufacturing of the above products, we do not use or intentionally incorporate into it any animal derived materials.

Eva Budská
unit EKO
UNIPETROL RPA, s.r.o.
CZ-43670 Litvínov

2020-06-01

Disclaimer:

Ultimately customers must make their own determination that their use of our product is safe, lawful and technically suitable in their intended applications.

No liability can be accepted in respect of the use of UNIPETROL RPA' 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.

UNIPETROL RPA, s.r.o.
Záluží 1
436 70 Litvínov
Czech Republic

MATERIAL DECLARATION

Products: PP MOSTEN NB 425, NB 218, TB 002, GB 218

Unipetrol RPA declares that types above of PP MOSTEN fully comply with the Regulation (EC) No. 1907/2006 of the European Parliament and of the Council (REACH).
These products have not any certificate of vegan or halal.
Since July 2020, we have not used or intentionally incorporated into them any animal derived materials during manufacturing of these products.
We incorporate into them a small amount (max 0,022%) of calcium stearate derived from plant based additives.

Eva Budská
unit EKO
UNIPETROL RPA, s.r.o.
CZ-43670 Litvínov

2020-11-25

Disclaimer:

Ultimately customers must make their own determination that their use of our product is safe, lawful and technically suitable in their intended applications.

No liability can be accepted in respect of the use of UNIPETROL RPA' 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.

This document was prepared automaticaly through computer and therefore is not signed.

MATERIAL DECLARATION

Products: PP MOSTEN, HD-PE LITEN (all grades)

These products are not classified as a hazardous substance and they do not contain any hazardous substances. and any recycled materials.

The assortment of these products does not contain lead, cadmium, mercury and hexavalent chromium, i.e. the amount of these heavy metals does not exceed 100 ppm (Cd < 10 ppm, Hg < 10 ppm, Pb < 10 ppm and Cr < 10 ppm). Waste from the used product made from them is usable via recycling or production of energy. These products are not suitable for waste depot or composting.

In the manufacture of the above products any "Substances of Very High Concern" (Candidate list for authorisation of ECHA, 211 substances, last updated January 19, 2021) are not used as additives, ingredients or adjuvants in concentration more than 0,1 %.

During the manufacturing of the above products we do not use or intentionally incorporate into them any of the following substances or materials:
antimony, arsenic and its compounds, beryllium, bismuth, boron, brominated flame retardants, cellulose acetate butyrate (CAB), cobalt, gold, indium, nickel, palladium, selenium, silver, tellurium, thorium and their compounds, acetaldehyde, acrylamide, acrylonitrile, alkylphenols or alkylphenolethoxylates, aromatic amines, artificial musks, azbestos, azocolorants, azodicarbonamide, semicarbazide, 2-chloracetamide, benzophenones, butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), biocides (pesti-, herbi-, insecti-, fungi-, bactericides), bisphenols (A, S, F, etc.), triclosan [5-Chlor-2-(2,4-Dichlorphenoxy)phenol], colophony (rosin), DDT, 4,4'diaminodiphenylmethane (MDA), di-2-ethyl-hexyl maleate (DEHM), dimethylfumarate (DMF), dibutylfumarate, dioxins and furans, endocrine disruptors, epichlorohydrin, epoxy derivatives (BADGE, BFDGE, NOGE), 2-ethylhexanoic acid, ethoxyquin, fluorinated or chlorinated hydrocarbons, formaldehyde, formamide, fragrances, furfural, geneticaly modified materials (GMO), glycol ethers (EGME, EGMEA, EGEE, EGEEA), Hexabromcyclododecane (HBCDD), isothiazolinone compounds, natural or synthetic latex, melamine, cyanuric acid, synthetic nanoparticles, nitrosamines, nonylphenol or octylphenol ethoxylate, organotin compounds, parabens, pentachlorophenol (PCP), perfluorinated tensides (e.g. PFOA, PFOS, PFAS, PTFE), plasticisers (e.g. adipates, ESBO, phthalates /DMP, DEP, DEHP, DBP, DIBP, BBP, DINP, DIDP, DNOP/), polychlorinated or polybrominated biphenyls (PCB, PBB), terphenyls (PCT, PBT) or naphthalenes, polybrominated diphenyl ethers (PBDE, decaBDE), polycyclic aromatic hydrocarbons (PAH: BaP, BeP, BaA, CHR, BpFA, BjFA, BkFA, DBAhA), radioactive substances, silicone, thiurams, TNPP, toluene, trichlorbenzene, UV-hardeners (e.g. isopropylthioxanthone (ITX), titanyl-acetylacetone), vinylchloride, vinylidenechloride, PVC or PVDC.

The substances used in the manufacturing of the above product and - if applicable - the basic polymers are listed in the following chemical inventories: Australia/AICS, Canada/DSL, Europe/EINECS or ELINCS or NLP, Japan/ENCS, Korea/KECI, Philippines/PICCS, USA/TSCA, China /IECSC.

These products meet the requirements of the following regulations and their subsequent amendments:

- Annex XVII of the REACH Regulation (EC) 1907/2006 (superseeding Directive 76/769/EEC)
- CONEG „Toxics in packaging" Model Legislation, rev. 2012,

- Directive 94/62/EC (PPW),
- Directive 2000/53/EC on end-of life vehicles,
- Directive 2011/65/EU (RoHS), Directive 2015/863 (RoHS 3),
- Directive 2009/48/EU (on the safety of toys) – ANNEX II, III. Chemical Properties,
- Regulation (EC) No 1005/2009 (Substances that deplete the ozone layer),
- US Clean Air Act, Title VI, Classes I and II on substances that deplete the ozone layer,
- Regulation (EU) No 2019/1021 (on persistent organic pollutants),
- Regulation (EU) No 1169/2011 Annex II Substances or products causing allergies or intolerances,
- Global Automotive Declarable Substance List (GADSL) and VDA232-101,
- Swiss SR 814.018 Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) (Verordnung über die Lenkungsabgabe auf flüchtigen organischen Verbindungen - VOCV) (< 3 %wt Section 4 Art. 8 Exemption from tax in cases of negligible quantities),
- OSPAR List of Chemicals for Priority Action - hazardous substances defined as substances which are persistent, liable to bioaccumulate and toxic (PBT substances).

Eva Budská
ORLEN Unipetrol RPA s.r.o.,
Unit EKO
CZ-43670 Litvínov
E-mail: eva.budska@orlenunipetrol.cz
2021-04-30

PP MOSTEN® NB 425
MATERIAL SPECIFICATION
PND 33-301 POLYPROPYLENE MOSTEN - PART 2

HOMOPOLYMER FOR NONWOVEN TEXTILES

CHARACTERISTICS

MOSTEN NB 425 is a homopolymer with very narrow molecular weight distribution. It is intended for manufacture of non-woven textiles using spun-bond technology and for manufacture of staple fiber, especially for application in hygienic sector.

HYGIENIC APPROVAL

MOSTEN NB 425 meets the hygienic requirements on materials and articles intended for contact with foodstuffs according to Regulation (EC) 1935/2004 of the European Parliament and of the Council, as well as according to Commission Regulation (EU) No 10/2011 including changes and additions.

Flammability according to EN 13501-1: class F

International designation ISO 19069-PP-H,,Y, 16-02-200

GUARANTEED QUALITY PARAMETERS

PARAMETER	UNIT	VALUE	TEST METHOD
Melt flow rate (230 °C/2,16 kg)	g/10 min	23 - 28	ISO 1133-1
Volatile matter content	%	<0,1	ISO 1269
Yellowness index	–	standard A – B	ASTM D 1925
Granulometry	pc/g	20 - 55	Part 1: cl. 4.3.1.2
Yield stress	MPa	>30	ISO 527-1, 2
Flexural modulus of elasticity		>1200	ISO 178
Heat deflection temperature (HDT)	°C	>50	ISO 75-1,2

Issued by: Product Intelligence - Polyolefins
Replaced edition: 4/2016
Phone: +420 476 162 912
Issued: 11/2019

Unipetrol
ORLEN GROUP

PP MOSTEN® NB 425

TECHNICAL DATASHEET

HOMOPOLYMER FOR FIBRE **MFR (230/2,16): 25 g/10 min**

MOSTEN NB 425 is a polypropylene produced by Unipetrol RPA using INNOVENE™ PP gas-phase technology.

CHARACTERISTICS

- AGF
- phthalates free
- meets EN 71-3,9 Safety of toys
- meets European Pharmacopoeia 9 (Ph. Eur. 9, 3.1.3)

INTERNATIONAL DESIGNATION

ISO 19069-PP-H,,Y,16-02-200

APPLICATION

- staple fibre
- non-woven textiles by spun bond technology for hygiene, agriculture and construction industry
- mutlifilament

MATERIAL PROPERTIES (typical values, do not represent a specification of given grade)

PARAMETER	TEST METHOD	UNIT	VALUE
RHEOLOGICAL PROPERTIES			
Melt Mass Flow Rate (230 °C/2,16 kg)	ISO 1133-1	g/10 min	25
Moulding Shrinkage Parallel	ISO 294-3,4	%	1,8
Moulding Shrinkage Normal			1,9
MECHANICAL PROPERTIES			
Flexural Modulus	ISO 178	MPa	1350
Tensile Modulus	ISO 527-1,2		1300
Yield Stress			32
Yield Strain		%	10
Elongation at Break			>300
Charpy Notched Impact Strength at 23 °C	ISO 179-1	kJ/m^2	3
THERMAL PROPERTIES			
Melting Temperature (DSC)	ISO 11357-1,3	°C	168 - 172
Vicat Softening Temperature (VST)	ISO 306		152
HDT (1,8 MPa)	ISO 75-1,2		53
OTHER PROPERTIES			
Shore D Hardness	ISO 868	-	66

PROCESSING CONDITIONS

PARAMETER	RECOMMENDED VALUE	UNIT
Melt Temperature	200 - 260	°C
Stretch ratio	1:2 - 1:4	-
Screw Length	≥ 25 d*	-

* Screw Diameter

Issued by: Product Intelligence - Polyolefins
Replaced edition: –
Phone: +420 476 162 912
Issued: 11/2019

Unipetrol
ORLEN GROUP

PP MOSTEN®

TECHNICAL DATASHEET

APPEARANCE PROPERTIES

PP MOSTEN is delivered in the form of natural stabilized pellets. Typical pellet length is (2 - 7) mm, typical bulk density of PP pellets is (450 - 600) kg/m^3.

THERMAL PROPERTIES

PP MOSTEN exhibits good thermal-isolation properties. With decreasing temperature, the toughness of the material decreases and below -20 °C, the materials becomes substantially brittle. In the area of low temperatures, it is more suitable to use copolymers, which have generally their glass transition temperature Tg shifted towards lower temperatures compared to homopolymers. In the area of high temperatures, PP MOSTEN can permanently be used up to 100 °C, grades with heat stabilization (LTHS) can be used up to 105 °C. The level of temperature stability of all PP Mosten grades is such that during common processing method, no material degradation occurs.

PHYSICAL-CHEMICAL PROPERTIES

PP MOSTEN exhibits high chemical resistance at both normal and raised temperatures, due to its non-polar character. Within a broad range of temperatures and concentrations it resists to majority of acids, bases and salt solutions. It dissolves only in some solvents at raised temperature (e.g. in aromatic and halogenated hydrocarbons); furthermore, it doesn't resist to strongly oxidizing agents (e.g. nitric acid, oleum, halogens). PP MOSTEN has practically no hygroscopicity, so it can be used in environments with variable relative humidity, without any risk of dimensional changes or changes of mechanical properties of the products. During processing, problems may be caused by moisture condensation during transfer of the material from a cooler to a warmer environment. At storage temperatures below 20 °C it is recommended to condition the material about 24 hours prior to processing in the production hall.

HYGIENIC APPROVAL

PP MOSTEN meets the requirements of the following regulations (as amended):

- Decree of the Ministry of health No. 38/2001 of the Journal of Laws;
- Regulation of the European Parliament and the Council No. 1935/2004;
- Commission Regulation (EU) No. 10/2011;
- Regulation of EP and the Council (ES) No. 1907/2006 (REACH) – for production of the PP Mosten grade, no phthalates have been used.

FIRE & SAFETY CHARACTERISTICS

PP MOSTEN is not classified as a dangerous substance in accordance with the Regulation (EC) 1272/2008 (CLP), nor does it satisfy any of the other conditions set out in Article 31 of the Regulation (EC) 1907/2006 (REACH). Therefore, the producer is not obliged to provide a Material Safety Datasheet. Necessary information according to Article 32 of the Regulation (EC) 1907/2006 (REACH) and further details are provided in "Announcement", available on www.unipetrolrpa.cz or upon request.

PACKAGING, STORAGE, TRANSPORTATION AND DELIVERY

PP MOSTEN is delivered in PE-LD (>PE-LD<) bags, mass 25 kg. 55 pieces of these bags are deposited on one pallet, fixed by a shrinkable PE-LD (>PE-LD<) film, protecting the product from damage and extending its lifetime. The pallets are intended for stocking into two, exceptionally into three layers. PP Mosten can be alternatively delivered bulk loaded in car tanks. Alternative packaging or transportation is possible based on agreement with the customer.

PP MOSTEN is stored in dry, ventilated, roofed storing facility, the premises of which are protected against direct sunlight. Recommended range of storage temperatures is -20 °C to +50 °C. The product distance from any source of heat shall be at least 1 m. The recommended storage time for PP MOSTEN in closed (sealed) bags at defined storage conditions is one year. At longer storage time, it is recommended to check the material properties prior to processing.

PACKAGES

The packages used by producer for packaging of PP MOSTEN grades are designed and manufactured in compliance with technical regulations for weight and volume of the product. Material of the packages does not contain any classified hazardous substances. The total amount of heavy metals (Pb, Cd, Hg and CrVI) does not exceed the limiting value of 100 ppm. Recommended methods of waste utilization are material utilization, energy utilization.

INSTRUCTIONS FOR WASTE DISPOSAL FROM PE PROCESSING

Products and non-contaminated waste during PP MOSTEN processing can be recycled and further processed into products. Material designation >PP< is used in compliance with ISO 11469. Material designation on products enables material identification during collecting, classification, utilization or disposal of consumer waste. PP MOSTEN does not contain any lead, cadmium, mercury or hexavalent chromium, i.e. total amount of these heavy metals does not exceed 100 ppm. The PP waste is classified by the waste producer in accordance with the valid legal regulations. Recommended methods of waste utilization are material utilization and energy utilization.

Issued by: Product Intelligence - Polyolefins
Phone: +420 476 162 912
Replaced edition: –
Issued: 11/2019

Unipetrol
ORLEN GROUP

UNIPETROL RPA, s.r.o.
Záluží 1
436 70 Litvínov
Czech Republic

CONFIDENTIAL!

DECLARATION OF COMPLIANCE

Product: PP MOSTEN NB 425

We certify that this product fulfils the requirements on plastic materials and articles intended to come into contact with foodstuffs, as described in:

EU:
Regulation (EC) No 1935/2004 of the European Parliament and of the Council,
Commission Regulations (EC) No 1895/2005, 2023/2006,
Commission Regulations (EU) No 10/2011 as amended by Regulations (EU) 1282/2011, 1183/2012, 202/2014,865/2014, 2015/174, 2016/1416, 2017/752, 2018/79, 2018/213, 2018/831, 2019/37, 2019/988, 2019/1338 and Commission Implementing Regulation (EU) No 321/2011.

The product meets the requirements on OML in food simulants A, B and D2 for test conditions OM5 (100 °C/2 hours) and SML of monomers, other starting substances, additives, polymer production aids, Ba, Co, Cu, Fe, Li, Mn, Zn, Al, Ni and primary aromatic amines in simulants A, B and D2 (60 °C/10 days).
Substances with restrictions/specifications:
Ref. No 39815, CAS 0182121-12-6, SML = 0,05 mg/kg (a substance 'aid to polymerisation' which initiates polymerisation and/or controls the formation of the macromolecular structure).
Ref. No 95360, CAS 27676-62-6, SML = 5 mg/kg.
Dual use additives (Food additives/flavourings):
E 470 (a) CAS No 1592-23-0 (calcium salt, Reg. 10/2011 Ref. No 89040) max. 0,022 %.

Regarding composition, chemical reactions and the closed manufacturing process, we are not aware of the presence of any non-intentionally added substances (NIAS) in our product, which might subsequently be transferred into foodstuff in an amount, which could cause concern for human health.

The traceability of the product is guaranteed under Article 17 of Regulation (EC) No 1935/2004 by issuing a Certificate of Inspection for each product according to EN 10204 art. 3.1, as well as by placing an individual code on each package in case of bagged product.

USA:
FDA, CFR, Title 21 (4/2019) 177.1520 (a)(1)(i), (b) and (c)1.1a Olefin polymers.

Eva Budska
UNIPETROL RPA, s.r.o.,
Unit EKO CZ-43670 Litvínov
E-mail: eva.budska@unipetrol.cz
2020-01-20

Announcement

according to Art. 32 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

The supplied product meets neither the criteria for classification as a dangerous product according to the Regulation (EC) No 1272/2008 of the European Parliament and of the Council (CLP) nor any of the other conditions set in Art. 31 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), and therefore there is no obligation to provide MSDS to the customer.

However the supplier is, according to Art. 32 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), obliged to provide the information below.

1. SUPPLIER

UNIPETROL RPA, s.r.o., Záluží 1, 436 70 Litvínov, Czech Republic
☎: +420 476 161 111, fax: +420 476 619 553, unipetrolrpa@unipetrol.cz, www.unipetrolrpa.cz
Head of Customer Service: ☎: +420 476 162 006, lucie.markova@unipetrol.cz
Product Inteligence and TS: ☎: +420 476 166 247, martin.malicek@unipetrol.cz
☎: +420 476 162 912, olga.mertlova@unipetrol.cz

2. REGISTRATION

according to Title II of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

According to Art. 2(9) of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH) the product is not subject to registration according to Title II of this Regulation. The monomers are subject to registration according to Art. 6(3), if their content in the polymer is at least 2 % wt.

The product identifiers are as follows:

IDENTIFIER	IDENTIFICATION NAME		IDENTIFICATION NUMBER
Registration	Homopolymer *Monomer*	Polypropylene *Propylene*	Registration number: it is not subject to registration *01-2119447103-50-0027*
Harmonized classifications	not on the list		not on the list
List of ECHA classification	poly(propene) polypropylene		-
International chemical name	Polypropylene		CAS number: 9003-07-0
Types	EH 001, EH 100, FC 108, FC 110, FT 005, GB 002, GB 005, GB 107, GB 218, GH 001, GH 201, GH 300, NB 108, NB 112, NB 218, NB 220, NB 425, MA 230, MA 350, MT 230, TB 002, TB 003, TL 003, XB 105, XB 205, YY 000, YY 400, NB 480		

3. AUTHORISATION

according to Title VII of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

The product is not given on the authorization list in Annex XIV of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), and therefore there is no obligation to apply for authorization for its production and use.

4. RESTRICTION

according to Title VIII of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)

The product is not subject to any restrictions stated in Annex XVII of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH) on production, placing on the market or use.

5. OTHER IMPORTANT INFORMATION FOR RISK MANAGEMENT

None.

6. OPTIONAL INFORMATION

The following information and recommendations are not obligatorily provided under Article 32 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH). This information is provided in good faith. We recommend to take this information into account and to follow the instructions.

- Available data on physical and chemical properties of the product.
  The product is capable of burning, but hardly ignitable. Dust is explosive. The product may be charged electrostatically.
  - Physical state at 20°C, colour, odour — solid colourless and odourless product
  - Density [kg.m^{-3}] — 900-910
  - Melting point [°C] — 160-168
  - Bulk density (granules) [kg.m^{-3}] — 450-600
  - Flash point (granules) [°C] — 350-360
  - Ignition temperature (granules) [°C] — 380-390
  - Ignition temperature (settled dust) [°C] — 350
  - Ignition temperature (turbid dust) [°C] — 440
  - Minimal initiatory ignition energy [J] — 0,08
  - Lower explosion limit (dust) [g.m^{-3}] — 32
  - Combustion heat [MJ.kg^{-1}] — 44-46
- Instructions for handling and storage
  For save handling and storage, all the fire-fighting measures and recommended personal protective means (safety goggles, protective gloves, working clothes, sealed footwear) shall be observed.
  Storing facilities shall meet the requirements for fire safety of constructions and electrical facilities and shall be in conformity with valid legal regulations. Avoid contact of the product with incompatible materials, with open flame and high temperatures. To maintain the product quality, do not expose it to moisture and direct sunlight. We recommend to store the product in dry, ventilated, roofed storing facility, the premises of which are protected against direct sunlight, or to secure the above-mentioned conditions by another suitable way (tightly closed containers or packaging). The recommended range of storage temperatures is from -20 °C to +50 °C. At below-zero temperatures, it is necessary to pay increased attention to handling of the product. The product distance from any source of heat shall be at least one meter. The recommended storage time for product in closed (sealed) bags at defined storage conditions is maximum one year. At longer storage time, it is recommended to check the material properties prior to processing.

***Statement**. The data contained are based on the present state of knowledge and current legislation and are in accordance with the legislation in force at the time of document developing. The user is responsible for complying with the requirements of relevant regional legislation.*

UNIPETROL RPA, s.r.o.
Záluží 1
436 70 Litvínov
Czech Republic

MATERIAL DECLARATION

Products: PP MOSTEN NB 425, NB 218, TB 002

Unipetrol RPA declares that types above of PP MOSTEN fully comply with the Regulation (EC) No. 1907/2006 of the European Parliament and of the Council (REACH).
These products have not any certificate of vegan or halal.
Since July 2020, we have not used or intentionally incorporated into them any animal derived materials during manufacturing of these products.
We incorporate into them a small amount (max 0,22%) of calcium stearate derived from plant based additives.

Eva Budská
unit EKO
UNIPETROL RPA, s.r.o.
CZ-43670 Litvínov

2020-11-25

Disclaimer:

Ultimately customers must make their own determination that their use of our product is safe, lawful and technically suitable in their intended applications.

No liability can be accepted in respect of the use of UNIPETROL RPA' 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.

This document was prepared automaticaly through computer and therefore is not signed.

MATERIAL DECLARATION

Products: PP MOSTEN, HD-PE LITEN (all grades)

These products are not classified as a hazardous substance and they do not contain any hazardous substances. and any recycled materials.

The assortment of these products does not contain lead, cadmium, mercury and hexavalent chromium, i.e. the amount of these heavy metals does not exceed 100 ppm (Cd < 10 ppm, Hg < 10 ppm, Pb < 10 ppm and Cr < 10 ppm). Waste from the used product made from them is usable via recycling or production of energy. These products are not suitable for waste depot or composting.

In the manufacture of the above products any "Substances of Very High Concern" (Candidate list for authorisation of ECHA, 211 substances, last updated January 19, 2021) are not used as additives, ingredients or adjuvants in concentration more than 0,1 %.

During the manufacturing of the above products we do not use or intentionally incorporate into them any of the following substances or materials:
antimony, arsenic and its compounds, beryllium, bismuth, boron, brominated flame retardants, cellulose acetate butyrate (CAB), cobalt, gold, indium, nickel, palladium, selenium, silver, tellurium, thorium and their compounds, acetaldehyde, acrylamide, acrylonitrile, alkylphenols or alkylphenolethoxylates, aromatic amines, artificial musks, azbestos, azocolorants, azodicarbonamide, semicarbazide, 2-chloracetamide, benzophenones, butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), biocides (pesti-, herbi-, insecti-, fungi-, bactericides), bisphenols (A, S, F, etc.), triclosan [5-Chlor-2-(2,4-Dichlorphenoxy)phenol], colophony (rosin), DDT, 4,4'diaminodiphenylmethane (MDA), di-2-ethyl-hexyl maleate (DEHM), dimethylfumarate (DMF), dibutylfumarate, dioxins and furans, endocrine disruptors, epichlorohydrin, epoxy derivatives (BADGE, BFDGE, NOGE), 2-ethylhexanoic acid, ethoxyquin, fluorinated or chlorinated hydrocarbons, formaldehyde, formamide, fragrances, furfural, geneticaly modified materials (GMO), glycol ethers (EGME, EGMEA, EGEE, EGEEA), Hexabromcyclododecane (HBCDD), isothiazolinone compounds, natural or synthetic latex, melamine, cyanuric acid, synthetic nanoparticles, nitrosamines, nonylphenol or octylphenol ethoxylate, organotin compounds, parabens, pentachlorophenol (PCP), perfluorinated tensides (e.g. PFOA, PFOS, PFAS, PTFE), plasticisers (e.g. adipates, ESBO, phthalates /DMP, DEP, DEHP, DBP, DIBP, BBP, DINP, DIDP, DNOP/), polychlorinated or polybrominated biphenyls (PCB, PBB), terphenyls (PCT, PBT) or naphthalenes, polybrominated diphenyl ethers (PBDE, decaBDE), polycyclic aromatic hydrocarbons (PAH: BaP, BeP, BaA, CHR, BpFA, BjFA, BkFA, DBAhA), radioactive substances, silicone, thiurams, TNPP, toluene, trichlorbenzene, UV-hardeners (e.g. isopropylthioxanthone (ITX), titanyl-acetylacetone), vinylchloride, vinylidenechloride, PVC or PVDC.

The substances used in the manufacturing of the above product and - if applicable - the basic polymers are listed in the following chemical inventories: Australia/AICS, Canada/DSL, Europe/EINECS or ELINCS or NLP, Japan/ENCS, Korea/KECI, Philippines/PICCS, USA/TSCA, China /IECSC.

These products meet the requirements of the following regulations and their subsequent amendments:

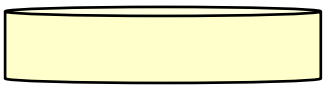
- Annex XVII of the REACH Regulation (EC) 1907/2006 (superseeding Directive 76/769/EEC)
- CONEG „Toxics in packaging" Model Legislation, rev. 2012,

- Directive 94/62/EC (PPW),
- Directive 2000/53/EC on end-of life vehicles,
- Directive 2011/65/EU (RoHS), Directive 2015/863 (RoHS 3),
- Directive 2009/48/EU (on the safety of toys) – ANNEX II, III. Chemical Properties,
- Regulation (EC) No 1005/2009 (Substances that deplete the ozone layer),
- US Clean Air Act, Title VI, Classes I and II on substances that deplete the ozone layer,
- Regulation (EU) No 2019/1021 (on persistent organic pollutants),
- Regulation (EU) No 1169/2011 Annex II Substances or products causing allergies or intolerances,
- Global Automotive Declarable Substance List (GADSL) and VDA232-101,
- Swiss SR 814.018 Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) (Verordnung über die Lenkungsabgabe auf flüchtigen organischen Verbindungen - VOCV) (< 3 %wt Section 4 Art. 8 Exemption from tax in cases of negligible quantities),
- OSPAR List of Chemicals for Priority Action - hazardous substances defined as substances which are persistent, liable to bioaccumulate and toxic (PBT substances).

Eva Budská
ORLEN Unipetrol RPA s.r.o.,
Unit EKO
CZ-43670 Litvínov
E-mail: eva.budska@orlenunipetrol.cz
2021-04-30

CORELEN® 25XX

COMPOSITION



Expanded polyethylene foam

Contact with product

CHARACTERISTICS

Density	Method N°17	0.25 +/- 10%
Hardness	Shore A	65
Compressibility*	Method N°11	67%
Elastic Recovery*	Method N°11	43%

*Compressibility and Elastic recovery were measured for 2 mm thickness

DIMENSIONS

Thickness	Method N°5	thickness ≤ 2 mm +/-0.2 mm thickness > 2 mm +/-10 %
Diameter	Method N° 6	Ø ≤ 50 +/- 0.15 mm - > 50 +/- 0.2 mm
Flatness	Method N° 7	Ø ≤ 60 mm th > 1.2 mm ≤ 2 % from Ø

STORAGE

Temperature	-5°C to 45°C	**Shelf life**	1 year before wadding - 1 year after wadding
Relative humidity	30 up to 80%	**Protected from UV**	

POSSIBLE PACKING

Loose PE tubes Tapes

AVAILABLE THICKNESSES

1 mm - 1.5 mm - 2 mm for other dimensions, please contact us.

PRODUCT INFORMATION

These technical information and the uses possibilities are based on our current knowledge and internal tests.
We can only favourably prejudge to the trial of material in the real condition of use.
We remind that the user has to verify the suitability between container and contents as well as the non-modification of the property specifically organoleptic characteristics.

FOOD APPROVAL

The material is produced with raw materials complying with the European legislation for food contact material.
More detailed information is available upon request.

DMF (Drug Master File): N° 18475

Last update 05/2018

Guarantee limitation: If this product is proved to be defective, MGJ's sole obligation shall be, at the customer's option, to either replace the quantity of product proved to be defective or to refund the purchase price.

Limitation of Liability: MGJ shall not be liable for any direct, indirect, special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability or any other legal theory. It is the Customers' responsibility to consider our general conditions of sales. CLI00552

MGJ • 37 rue clos Chapuis • 69380 Chazay d'Azergues • France
☎ +33 4 72 54 71 39 • fax +33 4 78 43 78 94 • www.mgj.com

PLASBLAK® PE4462 BLACK MASTERBATCH

Product highlights
PLASBLAK PE4462 black masterbatch is an economical polyethylene based black masterbatch offering excellent opacity and tint strength for use in a wide range of applications. It is designed to provide superior pigmentation in compounding, extrusion and non-critical film. It is particularly recommended in applications requiring the pigmentation of recycled material.

This product is suitable for use in a wide range of plastics that come into contact with food. For more details regarding the food contact compliance in various European countries, please refer to the relevant Food Contact Statement that you can obtain through your usual Cabot representative.

Method of addition
PLASBLAK PE4462 black masterbatch is designed for ease of dilution and homogeneous mixing and is therefore suitable for direct addition using automatic dosing units or by pre-blending.

Addition rate
The amount of masterbatch added depends on the performance requirements of the final application. Typical addition rates vary from 2% to 6% masterbatch.

TYPICAL PROPERTIES			
PROPERTY	**TYPICAL VALUE**	**UNITS**	**TEST METHOD**
Carrier	PE	-	-
Pigment	Carbon black	-	-
Compatibility	LDPE, LLDPE, HDPE, PP	-	-
Density @ 23°C	1620	kg/m^3	ISO 1183
MFI 10 kg/190°C	16	g/10 min	ISO 1133

The data in the table above are typical test values intended as guidance only and are not product specifications. Product specifications are available upon request from your Cabot representative.

PLASBLAK® PE4462 BLACK MASTERBATCH

Product form and logistics

- Product form: pellets
- Regional availability: global
- Packaging options: 25kg bags

For information on product-specific storage conditions, please refer to the applicable Safety Data Sheet (SDS) available from your Cabot representative or at cabotcorp.com.

NORTH AMERICA
Cabot Plastics Canada
707 Pierre Tremblay Boulevard
Saint-Jean-sur-Richelieu
QC, J2X 5G5
Canada
T +1 450 347 4371
F +1 450 347 9936

SOUTH AMERICA
Cabot Brasil Industria e
Comercio Ltda.
Rua do Paraíso 148 - 5° andar
04103-000 São Paulo
Brazil
T +55 11 2144 6400
F +55 11 3253 0051

EUROPE
SIA Cabot Latvia
74A Gustava Zemgala gatve
LV- 1039 Riga
Latvia
T +371 670 50 900
F +371 670 50 985

MIDDLE EAST/AFRICA
Cabot Specialty Chemicals
Jebel Ali Free Zone
LOB 15, Office 424, Dubai
United Arab Emirates
T +971 4 8871 800
F +971 4 8871 801

ASIA PACIFIC
Cabot China Ltd.
558 Shuangbai Road
Minghang District
Shanghai 201108
China
T +86 21 5175 8800
F +86 21 6434 5532

JAPAN
Cabot Specialty Chemicals, Inc.
Sumitomo Chiba-Daimon Bldg, 3F
2-5-5 Shiba Daimon,
Minato-ku, Tokyo 105-0012
Japan
T +81 6820 0255
F +81 3 5425 4500

Version 22 March 21, 2022

CABOT SPECIALTY COMPOUNDS – REGULATORY

Food Contact, Skin Contact, Toy and Cosmetic Packaging Statement

PLASBLAK® PE4462 Black Masterbatch

The information below is provided as of the date hereof. This statement is valid for one year unless superseded by an updated version.

Food Contact Statement

This Food Contact Statement provides information about Cabot PLASBLAK® PE4462 Black Masterbatch and its components. PLASBLAK® Black Masterbatch is a "Plastic Intermediate Material" as defined in the Union Guidance on Regulation (EU) No 10/2011, paragraph 3.1.b. Please note that Cabot does not make any statements about whether a final product containing this masterbatch will be compliant with applicable food contact regulations. The final producer of the food contact material/article is required by law to ensure the final material/article meets all the requirements of the below-mentioned regulations and does not exceed overall and specific migration limits (SML), if any.

To the best of our knowledge and based on the information provided by our suppliers, we believe the ingredients selected for the production of PLASBLAK® PE4462 black masterbatch comply with the purity requirements of the regulations applicable in the countries listed below. Please note that some restrictions apply.

European Union:

Cabot maintains traceability in accordance with the requirements of the European Regulation (EC) 1935/2004 of the European Parliament and Council on materials and articles intended to come into contact with food. Cabot also has a quality assurance program in place which is consistent with the requirements of the European Commission Regulation (EC) 2023/2006 on Good Manufacturing Practices for materials and articles intended to come into contact with food.
In addition, we confirm that this masterbatch does not incorporate recycled plastics that are subject to the Commission Regulation (EC) 282/2008.

PLASBLAK® PE4462 black masterbatch contains polymer produced from monomers and additives that are all permitted per positive listing in the Commission Regulation (EU) No 10/2011 on plastics materials and articles intended to come into contact with food published in the Official Journal of the European Union on 14 January 2011 and its amendments (lastly amended by Commission Regulation (EU) 2020/1245).

The carbon black (CAS 1333-86-4, FCM Substance No 411) used in this masterbatch meets the purity requirements and specific restrictions/specifications listed in Annex I of Commission Regulation (EU) No 10/2011. This carbon black also meets the purity requirements (section 2.4) laid out in Council of

Europe (CoE) Resolution AP (89) 1 "On the Use of Colorants in Plastic Materials Coming into Contact with Food". **However, to comply with the requirements of Commission Regulation (EU) No 10/2011, the plastic material in contact with food cannot contain more than 14.7 % masterbatch.**

Commission Regulation (EU) No 10/2011 also requires the overall and specific migration limits to be tested on final food contact article(s) containing this masterbatch.

A "group SML" expressed as Zinc is applicable to the final food contact item (Commission Regulation (EU) No 10/2011, Annex II). The Zinc SML is 5 mg/kg food or food simulant.
There is no declarable migrating additive which is subject to a restriction in food as referred to in Article 11 item 3 of Commission Regulation (EU) No 10/2011 (Dual Use Additives).

Cabot has not determined whether a compound produced from PLASBLAK® PE4462 masterbatch will be compliant with the limits prescribed in Commission Regulation (EU) No 10/2011. The producer of the final food contact article is responsible for verifying compliance with any migration tests prescribed by the different legislations on its own product.
Please note the status described above covers all the countries of the European Union.

Commission Regulation (EU) 2020/1245 of 2 September 2020 amending Regulation (EU) No 10/2011 lays out additional restrictions on plastic materials and articles relating to the possible presence of

- Primary aromatic amines and lanthanides: Please note that, we do not test our masterbatch for the possible presence of these substances. To the best of our current knowledge, primary aromatic amines and lanthanides are not intentionally added as ingredients in this masterbatch.
- Genotoxic impurities: Please note that, while we do not test for these substances and to the best of our current knowledge, the only genotoxic impurities we have identified are non-intentionally added PAHs impurities generated during the Carbon black production process. They have been risk-assessed in accordance with the relevant provisions of the Plastics Regulations and are not expected to migrate into food or body fluid (JRC 111476, 2018) as they are firmly bound to the carbon black surface that is fully embedded into the plastic matrix
- Degradation products and process impurities (NIAS) subject to Annex I restrictions: Not tested. None reported by our suppliers. As “plastic intermediate materials”, relevant migration testing of Non-intentionally Added Substances (NIAS) and organoleptic properties testing on a masterbatch are almost impossible to set up due to the high number of different conditions to simulate and, more importantly, this will legally not exempt the producers of final Food Contact (FC) articles to perform migration and organoleptic testing on their own products placed on the market. This approach is in line with EU MBC position that Cabot is a member of.
- Metal impurities: we do not test this masterbatch for the migration (or the content) of non-intentionally added metal impurities from raw materials. To the best of our knowledge, based on test data obtained from our suppliers, followed by mass calculation, the possible trace amount of metal impurities possibly coming from the masterbatch, when diluted in the final application, are not expected to contribute significantly (except for Zinc – max. 800ppm) to the possible migration of the final article.

Please note this masterbatch is governed under Article 2 of Commission Regulation 2020/1245 and the new measures on intermediate material are not applicable before September 23, 2022.

As part of our Product Safety continuous improvement plan, Cabot periodically undertakes a complete review our masterbatch formulations designed for the food contact market and their compliance scheme. Following this in-depth review, we issue updated documentation, therefore the content of this statement may be subject to change in the future.

Switzerland

"Ordonnance du DFI sur les matériaux et objets destinés à entrer en contact avec les denrées alimentaires", SR 817.023.21 of 16/12/2016 (lastly updated on December 2020).

This masterbatch contains polymer produced from monomers and additives that are all listed in the positive list of SR 817.023.21 (Annex 2 - Plastics). This Ordinance mentions purity criteria and restrictions on the carbon black content which are identical to the ones mentioned in the Commission Regulation (EU) No 10/2011 and CoE Resolution AP (89)1. This means that the carbon black (CAS 1333-86-4, Substance No 1194) used in this masterbatch complies with these purity requirements, but the plastic material in contact with food cannot contain more than 14.7 % masterbatch.

A "group SML" of 5 mg/kg expressed as Zinc is applicable to the final food contact article.
There is no declarable migrating additive which is subject to a restriction in food as referred to SR 817.023.21, Section 5, Article 13, § 2 (Dual Use Additives).

Japan

Cabot uses raw materials declared by our suppliers as meeting the applicable requirements as described below:

- The resin is listed in the latest version of Appendix 1, Table 1 (1) as part of the "Partial revision of the standards for foods, additives etc.. – Ministry of Health, Labor and Welfare (MHLW) Notification N°196", promulgated on April 28, 2020 by MHLW.
  - No food type restriction
  - Temperature max. – code III (>100°C)

- The pigment (Carbon Black) and additives intentionally added by Cabot in the above listed masterbatch are permitted by listing in and meets the purity requirements, if any.
  - Diluting this masterbatch at 10% in plastic material in contact with food will allow to comply with stricter requirements of the different resin groups.

United States of Americas (USA)

PLASBLAK® PE4462 black masterbatch does not meet the FDA requirements laid out for plastics packaging designed for food.

Food allergens

Although our PLASBLAK® product cited above is not tested for the presence of allergens (Annex II of Regulation (EU) No 1169/2011 on the provision of food information to consumers and amendments), and based on information made available to us by our raw material suppliers, the above mentioned product is not expected to contain allergenic proteins derived from crustacean shellfish (e.g., crab, crayfish, lobster, shrimp, etc.), fish, egg, milk, peanuts, soy, cereals containing gluten including wheat, tree nuts (e.g., almonds, Brazil nuts, cashews, hazelnuts/filberts, macadamia nuts, pecans, pine nuts, pistachios,

walnuts, etc.) and also celery, mustard, sesame seeds, intentionally added sulphites, lupin and products thereof.

GMO – Genetically modified organisms

Cabot does not analyze its masterbatches products for the presence of GMO. To the best of our knowledge and based on the information made available by our suppliers, Cabot does not intentionally add any GMO products or materials, in the manufacture of our PLASBLAK® PE4462 black masterbatch.

Animal origin (BSE – TSE risk) ingredients

Based on supplier information and to the best of our knowledge, we believe that the BSE/TSE risk is not relevant to Cabot proprietary PLASBLAK® PE4462 black masterbatch. Cabot PLASBLAK® black masterbatches either do not contain any ingredients from animal origin or when an ingredient from animal origin (from tallow) is used, the supplier has confirmed that the tallow derivatives have been submitted to a process which has deactivated any biological contaminant as prescribed in adaptation 98/16/EC and 2000/6/EC of the Cosmetic directive relating to BSE/TSE prevention.
In addition, we confirm that guidance such as EMA/410/01 on minimizing the risk of TSE are not applicable to PLASBLAK® PE4462 black masterbatch.

Toy Statement

Directive 2009/48/EC

The directive of the European Parliament and of the Council on the safety of toys mentions different requirements and refers to specific norms applicable to toy articles. This directive is therefore not applicable to a masterbatch as such, that is further diluted by Cabot customers producing toys.
To help our customers, we provide the following information:

PLASBLAK® PE4462 black masterbatches does not meet the classification criteria laid out in Regulation EC 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and is therefore not considered a hazardous mixture in Europe.

Directive 2009/48/EC (and amendments) restricts the use of

- Fragrances
- Heavy Metals
- Carcinogens, Mutagens and Reproductive toxicants (CMR) including nitrosamines or nitrosable derivatives.

Cabot does not intentionally* add any of these in the production of this masterbatch.

*Please note that most PAHs (polycyclic aromatic hydrocarbons) that may be present in Carbon Black as process impurities are also considered CMR substances. Consequently, our understanding is that a PLASBLAK® black masterbatch that is determined to be suitable for food contact applications is also considered suitable for use in toys applications. Cabot PLASBLAK® PE4462 black masterbatch has been determined suitable for use in toy contact applications.

Commission Regulation (EU) No 1272/2013

This regulation establishes some restriction on toys and childcare. Please refer to the skin contact paragraph for more information.

Toys Norms

The norm EN 71-3:2019 prescribes heavy metals maximum levels for extraction tests to be performed on the toy itself. The norm EN 71-9:2005 prescribes limits for organic compounds potentially released by toys. Cabot does not analyze any PLASBLAK® black masterbatches for heavy metals or organic compounds content. Please note that a masterbatch will be further diluted to produce the toys, the heavy metals traces possibly coming from the masterbatch in the toys (Category III – scraped off toy material) are expected to be low.

There is a legal obligation for the final producer of the toy article to ensure the final toy article meets all the requirements of the Toy safety directive 2009/48/EC and Annex XVII - entry 50 of EU REACH Regulation. Therefore, this is the responsibility of toy producer to conduct the necessary testing.

Skin Contact (consumer articles) Statement

The European Union (EU) Commission has promulgated Commission Regulation (EU) No 1272/2013 amending among others, Annex XVII – Entry 50 (5 and 6) to Regulation (EC) No 1907/2006 as regards polycyclic aromatic hydrocarbons (PAH) which limits the content of the following eight PAHs in the accessible plastic or rubber parts of certain articles placed on the EU market from 27 December 2015 onward:

- Benzo[a]pyrene
- Benzo[a]anthracene
- Benzo[b]fluoranthene
- Benzo[j]fluoranthene
- Benzo[e]pyrene
- Chrysene
- Benzo[k]fluoranthene
- Dibenzo[a,h]anthracene

The restrictions are as follows:

> [Category 1]: *Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 1 mg/kg (1 ppm) of any of the [8] listed PAHs*
>
> [Category 2]: *Toys, including activity toys, and childcare articles, shall not be placed on the market, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 0.5 mg/kg (0.5 ppm) of any of the listed [8] PAHs*

As part of our on-going commitment to customer service and product stewardship, we have instituted a rigorous testing program to ensure PLASBLAK® PE4462 black masterbatch, that we certify, meet stringent PAH limits and can be used in those regulated articles. PLASBLAK® black masterbatch that is determined to be suitable for food contact applications is also considered suitable for use in skin contact applications. Cabot PLASBLAK® PE4462 black masterbatch has been determined suitable for use in skin contact applications.

There is a legal obligation for the final producer of the article to ensure the final article meets all the requirements of the Annex XVII - entry 50 of EU REACH Regulation. Therefore, this is the responsibility of producer to conduct the necessary testing.

Cosmetic Packaging - Annexes II and III Statement

The Cosmetic Regulation (EC) No 1223/2009 of the European Parliament and of the Council on cosmetic products establishes restrictions/ ban for using the chemical of concern listed in annexes II and III.

Cabot does not analyze our PLASBLAK® PE4462 black masterbatch for presence of these chemicals. To the best of our knowledge, we confirm that we do not intentionally* add any of those chemicals in the production of PLASBLAK® PE4462 black masterbatch. PLASBLAK® PE4462 black masterbatch that is determined to be suitable for use in food contact applications is considered suitable for use in Cosmetic packaging applications and is therefore not expected to contain substances listed in annex II and III of the Cosmetic Regulation, at a level of concern.

*Please note that PAH – Polycyclic Aromatic Hydrocarbons, may be present as non-intentionally added impurities in this masterbatch. Cabot does not intentionally add any PAHs in its masterbatches. All carbon black grades contain traces of PAH's, therefore each black masterbatch contain some PAH's traces as well.
These PAHs are firmly absorbed at the surface of the carbon. They are only extracted under very severe solvent conditions which are not at all representative of normal industrial processing conditions. Some studies show that the PAH's absorbed on carbon black are not bioavailable and do not migrate in aqueous simulants of saliva, sweat or lung liquid.

Additional Regulatory Information

EU Regulation EC No 1907/2006 REACH: Annex XVII Statement

Although we do not analyze PLASBLAK® PE4462 black masterbatch for content of the substances mentioned in EU REACH annex XVII (Restricted Substance List as of Nov 2021), we confirm that we are not using any of these substances as ingredients in the formulation of the above-mentioned masterbatch. PLASBLAK® black masterbatch is not either expected to contain any of these substances as impurities at a level above the threshold of consideration of the REACH legislation (with the exception of Polycyclic Aromatic Hydrocarbon (PAH) impurities (Entry 50) for which dedicated statement is mentioned above).

GADSL Statement

Cabot does not test PLASBLAK® black masterbatches for the presence of substances listed on GADSL - Global Automotive Declarable Substance List, of February 1st, 2022.

The GADSL list sets limits not to exceed for chemical substances potentially present in automotive parts. To the best of our knowledge and based on the information made available by our suppliers, Cabot does not intentionally add the GADSL-listed substances in the formulation of PLASBLAK® PE4462 black masterbatch. Therefore, those substances not either expected to be present as impurities* in our PLASBLAK® PE4462 black masterbatches above the declarable threshold.

*Please note PLASBLAK® PE4462 black masterbatch contains carbon black as an ingredient. All carbon black grades contain traces of PAHs as process impurities. Some PAHs are listed in GADSL Declarable substances list. To the best of our knowledge, we believe those impurities are not present above the declarable threshold.

There is a legal obligation for the final producer of article to ensure the final article meets all the requirements of the relevant pieces of regulations cited above. Therefore, this is the responsibility of final producer to conduct the necessary testing, if any.

This document is prepared by Cabot Product Safety and Toxicology department. Should you have any question, do not hesitate to contact us at regulatory.inquiries@cabotcorp.com

Disclaimer:
This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any applicable law or regulation and with the recommendation given in Cabot's safety data sheet. The information contained herein is based on the current state of our knowledge and is intended to describe our products only in relation to applicable food contact regulation. It should not therefore be construed as guaranteeing specific properties. The validity of this document is one year from the issue date unless superseded by an updated food contact statement.

NORTH AMERICA
Business & Technology Center
157 Concord Road
Billerica, MA 01821-7001
USA
PHONE: +1 978 663 3455

Customer Service:
PHONE: +1 678 297 1300

SOUTH AMERICA
Cabot Brasil Industria e Comercio Ltda.
Rua do Paraíso 148 - 5° andar
04103-000 São Paulo
BRASIL

Customer Service:
PHONE: +55 11 2144 6429

EUROPE, MIDDLE EAST & AFRICA
SIA Cabot Latvia
74A Gustava Zemgala gatve
Riga LV-1039
LATVIA

Customer Service:
PHONE: +371 670 50 700

ASIA PACIFIC
Cabot China Ltd.
558 Shuangbai Road
Minghang District
Shanghai 201108
CHINA

Customer Service:
PHONE: +86 21 5175 8800


CABOT

March 2022

CABOT SPECIALTY COMPOUNDS PRODUCTS

CABELEC® conductive compounds and concentrates

Dear Valued Customer,

This statement aims to address your inquiry on the status of Cabot CABELEC® conductive compounds and concentrates produced in Cabot European manufacturing according to:

RoHS – European Directive 2011/65/EC and amending delegated directives

EU Directive 2011/65/EU (RoHS 2), repealing the previous EU Directive 2002/95/EC (ROHS 1), and its amending delegated directives (including 2015/863/EU[1], 2016/585/EU, 2016/1028 to 1029/EU, 2017/1009 to 1011/EU, 2018/736-to742/EU, 2019/169-to-1846/EU), prohibits the use of the following substances above the threshold level, in electrical and electronic equipment (EEE) placed on the EU market after January 3rd, 2013:

- 0.1% by weight in homogenous materials – lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs), and polybrominated diphenyl ethers (PDBEs); and, Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP)[2]

- 0.01% by weight in homogenous materials – cadmium

To the best of our knowledge and based on our supplier information, Cabot confirms that the substances listed above are not intentionally added in the formulation of CABELEC® conductive compounds and concentrates at concentrations greater than its threshold level. In addition, possible heavy metals impurities are expected to be below the above threshold.

Please note that this statement also applies to substances (except phthalates) covered by Chinese Ministry of Industry and Information Technology (MIIT) - Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products (known as China RoHS 2).

This information is not part of our sales specifications. The information is provided as of the date hereof. This statement is valid for one year unless superseded by an updated version

[1] Please note that, to the best of our knowledge, "new ROHS or ROHS 3" is not an official EU Commission acronym (unlike ROHS 1 and 2). "new ROHS" is known as "Commission Delegated Directive (EU) 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances" (See website, lastly update on 20-06/2017: http://ec.europa.eu/environment/waste/rohs_eee/legis_en.htm)

[2] Restriction on phthalates will apply from July 22, 2019 to cables and spare parts of EEE and from July 22, 2021 on medical devices.

CABELEC® black compounds is a registered trademark of Cabot Corporation.

NORTH AMERICA
Business & Technology Center
157 Concord Road
Billerica, MA 01821-7001
USA
PHONE: +1 978 663 3455

Customer Service:
PHONE: +1 678 297 1300

SOUTH AMERICA
Cabot Brasil Industria e Comercio Ltda.
Rua do Paraíso 148 - 5° andar
04103-000 São Paulo
BRASIL

Customer Service:
PHONE: +55 11 2144 6429

EUROPE, MIDDLE EAST & AFRICA
SIA Cabot Latvia
74A Gustava Zemgala gatve
LV-1039 Riga
LATVIA

Customer Service:
PHONE: +371 670 50 700

ASIA PACIFIC
Cabot China Ltd.
558 Shuangbai Road
Minghang District
Shanghai 201108
CHINA

Customer Service:
PHONE: +86 21 5175 8800

May 2021

CONFLICT MINERALS STATEMENT

As a public company, Cabot Corporation is subject to the conflict minerals rules adopted by the U.S. Securities and Exchange Commission (SEC). The conflict minerals rules require public companies to disclose certain information annually if they manufacture or contract to manufacture products for which the minerals specified in the rules are necessary to the functionality or production of those products. Under the conflict minerals rules, the "conflict minerals" are gold, columbite-tantalite (coltan), cassiterite, and wolframite (including their derivatives, tantalum, tin and tungsten), and the "covered countries" are the Democratic Republic of the Congo, the Republic of the Congo, the Central African Republic, South Sudan, Uganda, Rwanda, Burundi, Tanzania, Zambia and Angola. In addition, this statement also covers cobalt originating in the Democratic Republic of the Congo and adjoining regions.

Cabot's products include rubber and specialty carbon black, activated carbon, aerogel, fumed metal oxides, graphenes, carbon nanostructures, carbon nanotubes, inkjet colorants and inks, masterbatches and compounds. None of these products contain conflict minerals or cobalt.

Cabot's Purification Solutions segment also manufactures and sells equipment systems for dosing activated carbon that include ready-made electronic component parts purchased from third party vendors. Certain of these component parts contain conflict minerals which are necessary to the functionality of the parts and, in turn, the equipment systems. Cabot filed a Conflict Minerals Report on Form SD with the SEC for the reporting period January 1, 2020 to December 31, 2020 that describes the steps Cabot took to determine the origin of the conflict minerals in the component parts as well as its due diligence on their source and chain of custody. A copy of this Conflict Minerals Report may be obtained on Cabot's website at www.cabotcorp.com.

This information is being provided as of the date hereof. Please visit cabotcorp.com/certifications for any updates to this information.

NORTH AMERICA
Business & Technology Center
157 Concord Road
Billerica, MA 01821-7001
USA
T: +1 978 663 3455

Customer Service:
T: +1 678 297 1300

SOUTH AMERICA
Cabot Brasil Industria e Comercio Ltda.
Rua do Paraíso 148 - 5° andar
04103-000 São Paulo
BRASIL

Customer Service:
T: +55 11 2144 6429

EUROPE, MIDDLE EAST & AFRICA
Cabot Latvia SIA
74A, Gustava Zemgala gatve
Riga, LV-1039
Latvia

Customer Service:
T: +371 670 50 700

ASIA PACIFIC
Cabot China Ltd.
558 Shuangbai Road
Minghang District
Shanghai 201108
CHINA

Customer Service:
T: +86 21 5175 8800

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 05-Apr-2022 Revision Number 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) PE4462

Product Name PLASBLAK® PE4462 Black Masterbatch

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Plastics products: Coloration, Various.

Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Cabot Switzerland GmbH
Durachpark
Muhlentalstrasse 36
Schaffhausen
CH-8200
Switzerland
Tel: +41 0 52 630 3800
Fax: +41 0 52 630 3810

SIA Cabot Latvia
74A Gustava Zemgala gatve
Riga
LV-1039
Latvia
Tel: +371 6705 0700
Fax: +371 6780 6478

For further information, please contact

E-mail address SDS@cabotcorp.com

1.4. Emergency telephone number

Emergency Telephone International CHEMTREC: +1 703-741-5970 or +1-703-527-3887

Belgium	CHEMTREC: 32-28083237
France	CHEMTREC: 33-975181407
Germany	CHEMTREC: 0800-181-7059
Italy	CHEMTREC: 800-789-767
Netherlands	CHEMTREC: 31-858880596
Spain	CHEMTREC: 900-868538
United Kingdom	CHEMTREC: 44-870-8200418 and 44-2038073798

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

Signal word
None

Hazard statements
None

Precautionary Statements - EU (§28, 1272/2008)
None

2.3. Other hazards

Resin particles, like other inert materials, are mechanically irritating to eyes. Contact with molten product can result in thermal burns. Vapors possibly released during processing may be irritating to the eyes. Vapors possibly released during processing may be irritating to the respiratory tract.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

The product contains no substances known to be hazardous to health or to the environment in concentrations which need to be taken into account. Contains: Carbon black, Polyethylene (PE).

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	If cough, shortness of breath or other breathing problems occur, move to fresh air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.
Eye contact	In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
Skin contact	Wash thoroughly with soap and water. Cool skin rapidly with cold water after contact with molten polymer. Seek medical attention if redness, swelling, itching, or burning occurs.
Ingestion	Do NOT induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Product is not classified as hazardous. See Section 11 for additional Toxicological Information.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	Product is not classified as hazardous. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO2 or water spray.

Unsuitable extinguishing media	No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Burning produces irritant fumes. Product as shipped is not a combustible dust. However, a combustible concentration of dust may occur when fines are suspended in air.
Hazardous combustion products	Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx), Low molecular weight hydrocarbons, Oxidized hydrocarbons

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	In case of fire: Wear self-contained breathing apparatus. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid walking on pellets or powder which present a slipping hazard on hard surfaces. Remove all sources of ignition. Avoid generation of dust. Ensure adequate ventilation. Use personal protective equipment as required. See section 8.

6.2. Environmental precautions

Environmental precautions	No special environmental measures are necessary. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Vacuum or sweep material and place in a disposal container. Pick up and transfer to properly labeled containers. Avoid generation of dust.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Provide appropriate exhaust ventilation at machinery and at places where vapors from hot product or dust can be generated. Avoid generation of dust. Take precautionary measures against static discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep in properly labeled containers. Store in a dry warehouse at a temperature below 30°C.

7.3. Specific end use(s)

Risk Management Methods (RMM)	Per Article 14.4 of the REACH Regulation no exposure scenario has been developed as the mixture is not hazardous.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Materials in pellets are not expected to contain dust. Product dust could be generated by abrasion in conveying systems.

Chemical name	Carbon Black 1333-86-4
Belgium	TWA: 3 mg/m³
Czech Republic	TWA: 2.0 mg/m³ dust
Denmark	TWA: 3.5 mg/m³
Finland	TWA: 3.5 mg/m³ STEL: 7 mg/m³
France	TWA: 3.5 mg/m³
Greece	TWA: 3.5 mg/m³ STEL: 7 mg/m³
Hungary	TWA: 3 mg/m³ respirable
Ireland	TWA: 3 mg/m³ inhalable fraction STEL: 15 mg/m³ calculated, inhalable fraction
Italy REL	TWA: 3 mg/m³
Norway	TWA: 3.5 mg/m³ STEL: 7 mg/m³ calculated
Poland	TWA: 4 mg/m³ inhalable fraction
Portugal	TWA: 3 mg/m³
Slovakia	TWA: 2 mg/m³ respirable fraction TWA: 10 mg/m³ respirable fraction
Spain	TWA: 3.5 mg/m³
Sweden	NGV: 3 mg/m³ inhalable fraction
United Kingdom	TWA: 3.5 mg/m³ STEL: 7 mg/m³
ACGIH TLV	TWA: 3 mg/m³ inhalable particulate matter
Chemical name	Dust, or particulates not otherwise specified RR-00072-6
Belgium	TWA: 3 mg/m³ alveolar fraction; 10 mg/m³ inhalable fraction
France	TWA: 10 mg/m³ inhalable; 5 mg/m³ alveolar fraction
Ireland	TWA: 10 mg/m³ total inhalable; 4 mg/m³ respirable STEL: 30 mg/m³ total inhalable, calculated; 12 mg/m³ respirable, calculated
Italy REL	TWA: 10 mg/m³ inhalable particles, calculated; 3 mg/m³ respirable particles, calculated
Norway	TWA: 10 mg/m³ total dust; 5 mg/m³ respirable dust STEL: 20 mg/m³ total dust, calculated; 10 mg/m³ respirable dust, calculated
Portugal	TWA: 10 mg/m³ inhalable fraction; 3 mg/m³ respirable fraction
Slovakia	TWA: 10 mg/m³
Spain	TWA: 10 mg/m³ inhalable fraction; 3 mg/m³ respirable fraction
ACGIH TLV	TWA: 10 mg/m³ inhalable particles, recommended TWA: 3 mg/m³ respirable particles, recommended

8.2. Exposure controls

Engineering controls

Provide appropriate exhaust ventilation at machinery and at places where vapors from hot product or dust can be generated. Ensure adequate ventilation to maintain exposures below occupational limits. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Face shield recommended for working with molten materials.

Hand protection

Wear suitable gloves to protect from thermal and irritation hazards.

Skin and body protection

Protect skin against contact with molten materials.

Respiratory protection	Approved respirator may be necessary if local exhaust ventilation is not adequate.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No special environmental measures are necessary. Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Pellets
Color	black
Odor	None
Odor threshold	Not applicable

Property	Values	**Remarks • Method**
Melting point / freezing point		No data available
Boiling point / boiling range		Not applicable
Flammability (solid, gas)		No data available
Flammability Limit in Air		Not applicable
Flash point		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
pH		Not applicable
Kinematic viscosity		Not applicable
Dynamic viscosity		Not applicable
Water solubility	Insoluble in water	
Solubility(ies)		Not applicable
Partition coefficient		Not applicable
Vapor pressure		Not applicable
Relative density	1.67	Calculated
Bulk density		No data available
Relative vapor density		Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics

Explosive properties	Not applicable
Oxidizing properties	Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under normal conditions.

10.2. Chemical stability

Stability	Stable under normal conditions. Stable under recommended storage conditions.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Product as shipped is not a combustible dust. However, a combustible concentration of dust may occur when fines are suspended in air. Take precautionary measures against static discharges. All

	metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.

10.4. Conditions to avoid

Conditions to avoid	Strong oxidizing agents. Keep away from heat. Eliminate sources of ignition. Do not expose to temperatures above stability limit. Avoid generation of dust. Dust may form explosible mixture in air.

10.5. Incompatible materials

Incompatible materials	Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	No decomposition if stored normally. Hazardous decomposition products may be produced when the recommended processing temperatures or times are exceeded. Products possibly generated: Carbon dioxide, Carbon monoxide, Low molecular weight hydrocarbons, Oxidized hydrocarbons, Oxides of nitrogen

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Oral LD50	No data are available on the product itself. No effects expected.
Dermal LD50	No data are available on the product itself. No effects expected.
Inhalation LC50	No data are available on the product itself. No effects expected.
Skin corrosion/irritation	No data are available on the product itself. No effects expected.
Serious eye damage/eye irritation	No data are available on the product itself. No effects expected.
Respiratory or skin sensitization	No data are available on the product itself. No effects expected.
Germ cell mutagenicity	No data are available on the product itself. No effects expected.
Carcinogenicity	No data are available on the product itself. Does not contain any substance classified as a carcinogen by the European Union. Carbon Black is listed by IARC (International Agency for Research on Cancer) as a group 2B carcinogen. All ingredients are encapsulated in a polymeric matrix.
Reproductive toxicity	No data are available on the product itself. No effects expected.
STOT - single exposure	No data are available on the product itself. No effects expected.
STOT - repeated exposure	No data are available on the product itself. No effects expected.
Aspiration hazard	None reasonably foreseeable. No effects expected.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties	Please refer to the generic statement

11.2.2. Other information

Other adverse effects	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	No data are available on the product itself. No aquatic or environmental toxicity expected.

12.2. Persistence and degradability

Persistence and degradability	Product not soluble in water nor biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation	Does not bioaccumulate.

12.4. Mobility in soil

Mobility	Insoluble. Not expected to migrate.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment	This mixture does not fulfill the criteria for PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine disrupting properties	Please refer to the generic statement.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Can be landfilled or incinerated, when in compliance with local regulations. Material can be recycled using suitable technology.
Contaminated packaging	Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

SECTION 14: Transport information

IATA

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated

14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Germany

Water hazard class (WGK)	non-hazardous to water (nwg); 766 (Plastics insoluble in water)

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
TCSI	Complies
NZIoC	Complies

Note:
- K-REACH: Does not comply.
- US TSCA Inventory Active/Inactive Status: All non-exempt components in this product are designated as Active.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
TCSI - Taiwan Chemical Substance Inventory
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By Cabot Corporation - Safety, Health and Environmental Affairs

Revision date 05-Apr-2022

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
The information set forth is based on information that Cabot Corporation believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and Cabot assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede

End of Safety Data Sheet