Material specification

Our article:
0/547 Flip top cap

raw material:

MT-935 PP

supplier:

WKI Kunststoffe GmbH
Feldtmannstr. 147
13088 Berlin

masterbatch:

black PE50-mbsw0004 / 4462

supplier:

B.BIGLER AG
Bundesplatz 3
6301 Zug

03.07.2017

Attachment of conformity

article-no.	code	material	colour	additions	insert	Technical Datasheet
0/547	flip top cap	MT-935 PP	black PE50-mbsw0004 / 4462	none	none	attached

03.07.2017

GramßGmbH Kunststoffverarbeitung Spechtsbrunn Gewerbegebiet Fichtig 2 96515 Sonneberg	**Declaration of conformity** for materials in contact with food and groceries	QMU 0607 Stand: 06.2018/Rev.04 Erstellt: G. Wegner / QMB Seite 1-2

Acidic media (pH-value 7pH up to 4pH)

Sort/sorts of groceries or procedures for which the material is not suitable

See specifications of our material suppliers

Caustic media

Test requirements: simulant B (acetic acid 3 weight%)

Our products comply with ordinance 94/62/EC.

In our products no functional plastic barrier is used.

The tracability of our products according to ordinance (EG) no. 1935/2004 is ensured by roll number in connection with the production date.

This confirmation refers to the product as described. The conformity check goes along with the regulations of the ordinance (EU) no. 10/2011, if the conditions for food contact are considered, the product complies with the guidelines. Deviation from the conditions for food contact transfers responsibility to the user.
We particularly point out that in the case ofprinting the contact between the colour and the groceries have to be avoided.

This statement refers to the raw materials and colors (master-batch) from our suppliers. The data are based on the current knowledge and explanations of our suppliers.

Spechtsbrunn, den 15.06.2018

GRAMSS GmbH
Kunststoffverarbeitung
Spechtsbrunn - Gewerbegebiet Fichtig 2
Tel.: 036703/7005-0 Fax:7005-70
96515 Sonneberg

Unterschrift

valid until cance lation by up-dating

15.06.18

Gramß GmbH Kunststoffverarbeitung Spechtsbrunn Gewerbegebiet Fichtig 2 96515 Sonneberg	**Declaration of conformity** for materials in contact with food and groceries	QMU 0607 Stand:06.2018/Rev.04 Erstellt: G. Wegner / QMB Seite 1-2

GramßGmbH
Kunststoffverarbeitung
Spechtsbrunn
Gewerbegebiet Fichtig 2

D 96515 Sonneberg

We herewith declare that all our items comply with the legal regulations ofthe consumer goods ordinance (respectively equivalences in the European plastics directive) as weil as ordinance (EU) no. 1935/2004 in its current version.

The entire migration as weil as the specific migration are below the legal critical value.
The examination goes along with ordinance (EU) no. 10/2011, the guidelines refering to the series of standards EN 1186-1 ff as weil as ordinance 82/711/EWG, 85/572/EWG.

The raw materials used by us comply with ordinance (EU) no. 10/2011.

The following materials with limitation and/or specification are used for our products:

Material description	**limitation**
According to attached specificaton	according to attached data sheets

Reference to "Dual-Use-Materials" :
Substances that are allowed as food additives do not migrate or at such a low quantity that they have no technological effect in case of a migration.

Specifications for the designated use or limitations:

Sort/sorts of groceries or procedures suitable for the material See

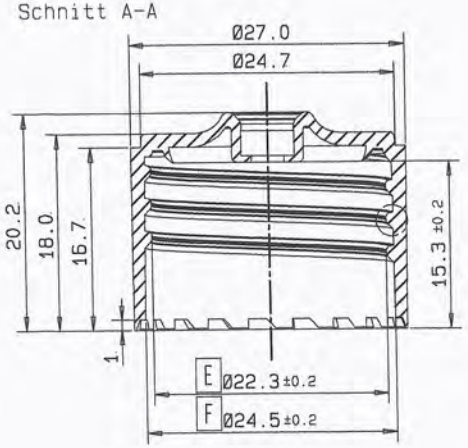
specification of our raw material suppliers

Each long-term contact at room temperature or below room temperature including calefaction up to 70 0 C up to 2 hours or calefaction up to 1000C up to 15 min.
The food contact conditions described in OM 1 and OM 3 also refer to examination OM2.

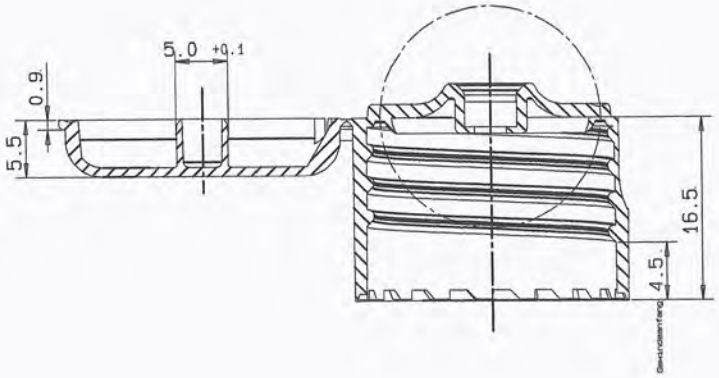
16.06.18

Freimaßtoleranzen nach DIN 16901 Toleranzgruppe 150

Schnitt A-A

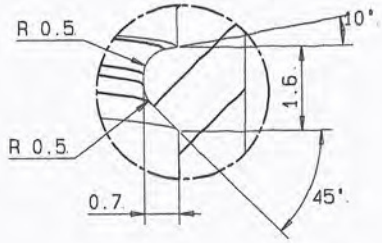


Schnitt B-B

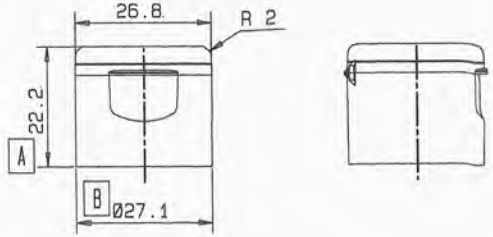


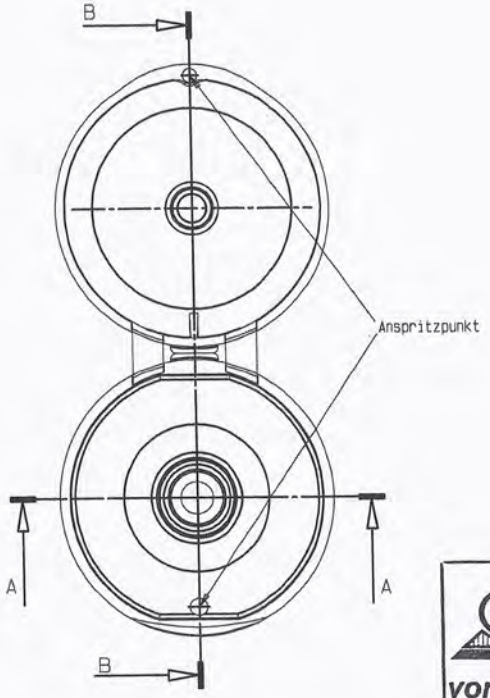
Gewindeprofil
M 10:1

Steigung: 8 Gang/"

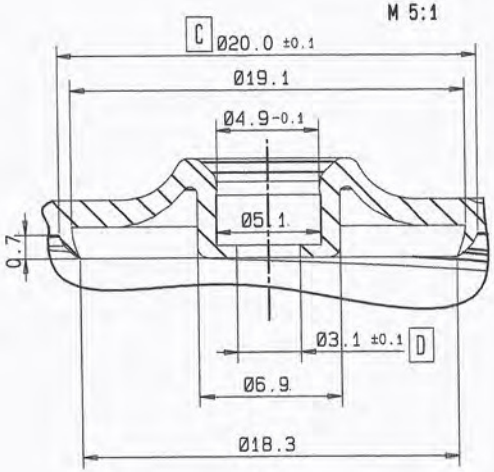


Gesamtansicht
M 1:1





M 5:1



A-F = Prüfmaße

allgemeine Entformung 0°30'

Geprüft
am: 21.03.13
von:

Klappscharnierverschluss 2K 24/410
Artikelnr. 0/547

Maßstab	2:1, 5:1, 10:1
Material	PP
Gewicht	3,5 gr. ±0,2
Zeichn. Nr.	0547
Sonstiges	Format: A3

Gramß GmbH
Fichtig 2
98743 Spechtsbrunn

	2013	Tag	Name
gez.		07.03.	T. Gramß
gepr.			
Ngepr.			

ISO 9001 zertifiziert

PP MOSTEN® MT 935

MATERIAL SPECIFICATION

PND 33-301 Polypropylene MOSTEN - Part 2

RANDOM COPOLYMER FOR INJECTION MOULDING

Characteristics

MOSTEN MT 935 is a high-flowing random copolymer containing antistatic and clarifying agents, intended for injection moulding of thin-walled articles. Combined stabilization system ensures high transparency and antistatic finish of the products. It is suitable for manufacture of food packages and household articles, moulded especially into both-side polished moulds.

Hygienic approval

MOSTEN MT 935 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-R,,MTZ,10-05-400

GUARANTEED QUALITY PARAMETERS

Parameter	Unit	Value	Test method
Melt flow rate (230 °C/2,16 kg)	g/10 min	32 - 42	ISO 1133-1
Volatile matter content	%	<0,1	ISO 1269
Yellowness index	-	standard A - B	ASTM D 1925
Granulometry	pc/g	25 - 60	Part 1: cl. 4.3.1.2
Yield stress	MPa	>25	ISO 527-1, 2
Flexural modulus of elasticity	MPa	>1000	ISO 178
Charpy notched impact strength at 23 °C at 0 °C	kJ/m^2	>4 >1	ISO 179-1
Heat deflection temperature (HDT)	°C	>46	ISO 75-1, 2

Issued by: Product Intelligence & TS Dept.

Phone: +420 476 162 912

Replaced edition: 04/2012

Issued: 04/2016

Unipetrol
ORLEN GROUP

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
Polyolefin's Unit Director: ☎: +420 476 165 608, lukasz.silski@unipetrol.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	Copolymer *Monomer* *Monomer*	Copolymer propylene/ethylene *Propylene* *Ethylene*	Registration number: it is not subject to registration *01-2119447103-50-0027* *01-2119462827-27-0036*
Harmonized classifications	not on the list		not on the list
List of ECHA classification	1-Propene, polymer with ethene ethylene-propylene copolymer		-
International chemical name	Propylene/Ethylene Copolymer		CAS number: 9010-79-1
Types	EB 501, EH 501, GB 503, GB 504, GB 506, MA 524, MA 612, MA 712, MA 745, MB 720, XB 515, XH 601, YY 000, YY 500, MB 812, MT 825, MT 935, MT 950, XB 800, XB 801, YY 800		

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]	125-168
- 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

Product: PP MOSTEN MT 935

We declare, that this product shows following values of the migration of certain elements:

Element	Unit	Value obtained	Limit value
Aluminium, Al	mg/kg	0,28 ± 0,07	70 000
Antimony, Sb	mg/kg	0,003 ± 0,00045	560
Arsenic, As	mg/kg	< 0,02	47
Barium, Ba	mg/kg	< 0,03	18 750
Boron, B	mg/kg	< 0,5	15 000
Cadmium, Cd	mg/kg	< 0,001	17
Chromium (III), Cr^{III}	mg/kg	< 0,02	460
Chromium (VI), Cr^{VI}	mg/kg	< 0,02	0,2
Cobalt, Co	mg/kg	< 0,01	130
Copper, Cu	mg/kg	< 0,03	7 700
Lead, Pb	mg/kg	< 0,01	160
Manganese, Mn	mg/kg	< 0,05	15 000
Mercury, Hg	mg/kg	< 0,01	94
Nickel, Ni	mg/kg	< 0,03	930
Selenium, Se	mg/kg	< 0,02	460
Strontium, Sr	mg/kg	< 0,01	56 000
Tin, Sn	mg/kg	< 0,05	180 000
Organic tin, Sn	mg/kg	< 0,05	12
Zinc, Zn	mg/kg	< 0,05	46 000

The product is not classified as a dangerous substance/mixture and it does not contain any dangerous substances/mixtures, any nitrosamines or nitrosable substances and any allergenic fragrances.

PP MOSTEN MT 935 meets the requirements of the Directive 2009/48/EC on the safety of toys, Annex II, part III *Chemical Properties* and its subsequent amendments and EN 71-3:2013 *Safety of toys – Part 3: Migration of certain elements.*

The product meets the requirements of the standard EN 71-9+A1 *Safety of toys – Part 9: Organic chemical compounds – Requirements.*

Certified for UNIPETROL RPA by:

Jiří Haifler
UNIPETROL SERVICES, s.r.o.
HSE&Q Dpt., CZ-43670 Litvínov
E-mail: jiri.haifler@unipetrol.cz
2014-03-20

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

CONFIDENTIAL!

DECLARATION OF COMPLIANCE

Product: PP MOSTEN MT 935

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 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 OM 2 (40 °C/10 days, test covers also OM 1 and OM 3) and SML of monomers, other starting substances, additives, polymer production aids, Ba, Co, Cu, Fe, Li, Mn, Zn and primary aromatic amines in food simulant D2 for conditions 60 °C/10 days.
Substances with restrictions/specifications:
Ref. No 34650 SML = 5 mg/kg;
organic compound of lithium (secret component) SML = 0,6 mg/kg (expressed as Li).
Dual use additives (Food additives/flavourings): E 471 (Ref. No 56585, CAS No 31566-31-1), max. 0,17 %.

USA:
FDA, CFR, Title 21 (4/2016) 177.1520 (a)(3)(i), (b) and (c)3.1a Olefin polymers.
The temperature for contact of finished articles with foodstuffs must not exceed 100 °C.

Eva Budska
UNIPETROL RPA, s.r.o., Unit EKO CZ-43670 Litvínov
E-mail: eva.budska@unipetrol.cz
2016-05-30

Disclaimer:
End users 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.

Edition: 05/2016
This document was prepared automaticaly through computer and therefore is not signed.

SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH), Article 31 **Revision date:** 17-Jul-2015

According to Article 31 of the Regulation (EC) No 1907/2006 (REACH), a Safety Data Sheet (SDS) must be provided for hazardous substances or preparations. This product does not meet the classification criteria of the Regulation (EC) No 1272/2008 (CLP) . Therefore such document is outside the scope of Article 31 of REACH and the requirements for content in each section do not apply

1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY/ UNDERTAKING

1.1. Product Identifier

Product code: PE4462

Product name: PLASBLAK® PE4462

Synonyms: Black Polyethylene 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

EMEA Regional Headquarters
Cabot Switzerland GmbH
Mühlentalstrasse 36/388200
Schaffhausen
Switzerland
Tel: +41 (0) 52 630 3838
FAX: +41 (0) 52 630 3810

Cabot EMEA Business Service Center
101 Mukusalas Street
LV-1004 Riga
Latvia
Tel: +371 67050700

Asia Pacific Regional Headquarters
Cabot China Ltd
558 Shuangbai Road
Minhang District
Shanghai 201108, China
Tel: +86 21 5175 8800
Fax: +86 216434 5532

E-mail address: SDS@cabotcorp.com

1.4. Emergency telephone number

Emergency Telephone Number: Belgium: (+32) 04-246 82 11
Dubai : (+971) 4886 3263
Tianjin : (+86) 22 59911200

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not a hazardous preparation/mixture according to Regulation (EC) No 1272/2008 (CLP), its various amendments and adaptations.

Hazard symbols
Not Applicable

2.2. Label Elements

Product Identifier No label required.

Signal Word:
Not Applicable

Hazard statements:
Not Applicable

EU Specific Hazard Statements
Not Applicable

Precautionary statements:
Not Applicable

2.3. Other Hazards

Principle Routes of Exposure: Eyes, Skin, Inhalation

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

Skin Contact: Contact with molten product can result in thermal burns.

Inhalation: Vapors possibly released during processing may be irritating to the respiratory tract.

Ingestion: According to experience not expected.

Carcinogenicity: Does not contain any substance classified as a carcinogen by the European Union. See also Section 11.

Target Organ Effects: Lungs, Skin, Eyes

Medical Conditions Aggravated by Exposure: Asthma, Respiratory disorder

Potential Environmental Effects: No special environmental precautions required. See also Section 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Does not contain any hazardous ingredients. A mixture of carbon black in a polyethylene polymer base.

Other Information:

4. FIRST AID MEASURES

4.1. Description of first aid measures

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.

Eye contact Flush eyes immediately with large amounts of water for 15 minutes. Seek medical attention if redness, swelling, itching, burning or visual disturbances occur.

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.

Ingestion Do not induce vomiting. If conscious, give several glasses of 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. The most important known symptoms and effects are described in Section 2 and/or in Section 11.

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

Note to physicians: Product is not classified as hazardous. Seek medical attention if symptoms develop.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use dry chemical, carbon dioxide 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.

Hazardous combustion products: Carbon dioxide (CO2). Carbon monoxide (CO). Low molecular weight hydrocarbons. Oxidized hydrocarbons. Oxides of nitrogen.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Wear suitable protective equipment. In the event of fire, wear self-contained breathing apparatus.

Risk of Dust Explosion: Product as shipped is not a combustible dust. However, a combustible concentration of dust may occur when fines are suspended in air.

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 dust formation. Ensure adequate ventilation. Use personal protective equipment. See also Section 8.

For emergency responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental Precautions: No special environmental precautions required. Prevent product from entering drains. Where possible recycling is preferred to disposal or incineration.

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: Clean up promptly by vacuum. Sweep up to prevent slipping hazard. Pick up and transfer to properly labelled containers. Avoid dust formation.

6.4. Reference to other sections

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

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 dust formation. Take measures to prevent the build up of electrostatic charge. 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.

Incompatible materials: Strong oxidizing agents.

7.3. Specific end use(s)

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

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1. Control parameters

Exposure guidelines:

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

Dust, or Particulates Not Otherwise Specified:	Austria MAK:	10 mg/m³, STEL 2x30 min, Inhalable dust 5 mg/m³, TWA, Inhalable dust
	Belgium:	10 mg/m³, TWA, Inhalable 3 mg/m³ TWA, Respirable
	Germany - TRGS 900:	10 mg/m³, TWA, Inhalable 3 mg/m³, Respirable fraction
	Ireland:	10 mg/m³, TWA, Total inhalable 4 mg/m³, TWA, Respirable
	Italy:	10 mg/m³, TWA, Inhalable 3 mg/m³, TWA, Respirable
	Spain:	10 mg/m³, VLA, Inhalable 3 mg/m³, VLA, Respirable
	United Kingdom - WEL:	10 mg/m³, TWA, Total Inhalable dust 4 mg/m³, TWA, Respirable dust
	USACGIH - PNOS:	10 mg/m³, TWA, Inhalable 3 mg/m³, TWA, Respirable

MAK: Maximale Arbeitsplatzkonzentration (Maximum Workplace Concentration)
PNOS: Particulate Not Otherwise Specified
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TRGS: Technische Regeln für Gefahrstoffe (Technical Rule for Hazardous Materials)
TWA: Time Weighted Average
VLA: Valore Límite Ambientales (Environmental Limit Value)
WEL: Workplace Exposure Limit
USACGIH: United States American Conference of Governmental Industrial Hygienists

8.2. Exposure controls

Engineering Controls: Provide appropriate exhaust ventilation at machinery and at places where vapors and dust can be generated. Ensure adequate ventilation to maintain exposures below occupational limits.

Personal protective equipment [PPE]

Respiratory Protection: Approved respirator may be necessary if local exhaust ventilation is not adequate.

Hand Protection: Wear suitable gloves to protect from thermal and irritation hazards.

Eye/face Protection: Wear eye/face protection. Wear safety glasses with side shields (or goggles). Face shield recommended for working with molten materials.

Skin and Body Protection: Protect skin against contact with molten materials.

Other: Handle in accordance with good industrial hygiene and safety practice. Emergency eyewash and safety shower should be located nearby.

Environmental exposure controls: No special environmental precautions required. Prevent product from entering drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid	**Odor:**	None.
Appearance:	Pellets	**Odor threshold:**	Not Applicable
Color:	Black		

Property	Values	Remarks • Method
pH:		Not Applicable
Melting point/ freezing point:	105 - 115 °C	DSC
Boiling point / boiling range:		Not Applicable
Evaporation Rate:		Not Applicable
Vapor pressure:		Not Applicable
Vapor Density:		Not Applicable
Density:	1670 kg/m^3	Calculated
Bulk Density:		Available on demand
Specific Gravity at 20°C:	1.670	Calculated
Water solubility:		Insoluble
Solubility(ies):		Not Applicable
Partition Coefficient (n-octanol/ water):		Not Applicable
Decomposition temperature:	> 300 °C	DSC/TGA
Viscosity:		Not Applicable
Kinematic viscosity:		Not Applicable
Dynamic viscosity:		Not Applicable
Oxidizing Properties:		Not Applicable
Softening point:		Not Applicable
VOC content (%):		Not Applicable
% Volatile (by Volume):		Not Applicable
% Volatile (by Weight):		Not Applicable
Surface Tension:		No information available
Explosive properties:		Not Applicable
Flash Point:	> 340 °C	No information available
Flammability (solid, gas):		No information available
Flammability Limit in Air:		Not Applicable
Explosion Limits in Air - Upper (g/m^3):		Not Applicable
Explosion Limits in Air - Lower (g/m^3):		Not Applicable
Autoignition Temperature:	> 300 °C	No information available
Minimum Ignition Temperature:		Not Applicable No information available
Minimum Ignition Energy:		Not Applicable
Ignition Energy:		Not Applicable
Maximum Absolute Explosion Pressure:		Not Applicable
Maximum Rate of Pressure Rise:		Not Applicable
Burn Velocity:		No information available
Kst Value:		Not Applicable
Dust Explosion Classification:		Not Applicable

10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Stable under recommended storage conditions.

10.2. Chemical stability

Stability: Stable up to 300° C.

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 measures to prevent the build up of electrostatic charge. 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 and sources of ignition. Do not expose to temperatures above stability limit. Avoid dust formation. Dust may form explosive 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

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Not classified.

Oral 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

Dermal LD50: No data are available on the product itself No effects expected

Skin corrosion/ irritation: No data is available on the product itself. No effects expected.

Serious eye damage/ eye irritation: No data is available on the product itself. No effects expected.

Sensitization:	Contains no known sensitizers.
Subchronic toxicity:	No data is available on the product itself. No effects expected.
Chronic Toxicity:	No data are available on the product itself. No effects expected.
Carcinogenicity:	Does not contain any substance classified as a carcinogen by the European Union.
Reproductive Toxicity:	No data are available on the product itself. No effects expected.
STOT - single exposure:	No data is available on the product itself. No effects expected.
STOT - repeated exposure:	No data is available on the product itself. No effects expected.
Aspiration Hazard:	None reasonably foreseeable. No effects expected.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic Toxicity:	No data are available on the product itself. No aquatic or environmental toxicity expected.

12.2. Persistence and degradability

Product not soluble in water nor biodegradable

12.3. Bioaccumulative potential

Does not bioaccumulate.

12.4. Mobility in soil

Mobility: Insoluble. Not expected to migrate.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disclaimer: Information in this section pertains to the product as shipped in its intended composition as described in Section 3 of this MSDS. Contamination or processing may change waste characteristics and requirements. Regulations may also apply to empty containers, liners or rinsate. State/provincial and local regulations may be different from federal regulations.

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.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

DOT

14.1 UN/ ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated

IMDG

14.1 UN/ ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated

RID

14.1 UN/ ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated

ADR

14.1 UN/ ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated

ICAO (air)

14.1 UN/ ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated

IATA

14.1 UN/ ID no	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated

15. REGULATORY INFORMATION

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

European Union

Not a hazardous preparation/mixture according to EC-directive 1999/45/EC and its various amendments and adaptations and EC-Regulation 1272/2008 (CLP) and amendments.

Germany Water hazard class (WGK): nwg (not water endangering) **WGK ID Nr.:** 766 (Plastics insoluble in water)
Swiss Poison class: **ID Nr.:** Not determined

International Inventories

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory	Complies
DSL/ NDSL - Canadian Domestic Substances List/ Non-Domestic Substances List	Complies
EINECS/ ELINCS - European Inventory of Existing Chemical Substances/ European List of Notified Chemical Substances	Complies
ENCS - Japan Existing and New Chemical Substances	Complies
IECSC - China Inventory of Existing Chemical Substances	Complies
KECL - Korean Existing and Evaluated Chemical Substances	Complies
PICCS - Philippines Inventory of Chemicals and Chemical Substances	Complies
AICS - Australian Inventory of Chemical Substances	Complies
NZIoC - New Zealand Inventory of Chemicals	Complies
TCSI - Taiwan Chemical Substance Inventory	Not determined

15.2. Chemical safety assessment

EU Chemical Safety Assessment: No Chemical Safety Assessment has been carried out.

Chemical Safety Report: No Chemical Safety Assessment has been carried out

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3
Not Applicable

Contacts:

See Section 1.

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.

Prepared by: Cabot Corporation - Safety, Health and Environmental Affairs
Revision date: 17-Jul-2015

End of Safety Data Sheet

PLASBLAK® PE4462

Black Polyethylene Masterbatch for Compounding, Extrusion and Non-Critical Film Applications

PLASBLAK PE4462 is an economical polyethylene based black masterbatch offering excellent opacity and tint strength for use in a 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 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.

Physical Properties

PROPERTY	VALUE	TEST METHOD (*)
Carrier	PE	-
Pigment	carbon black	-
Compatibility	LDPE, LLDPE, ethylene copolymers	-
Density @ 23°C	1620 kg/m^3	CTM E023
MFI 10 kg/190°C	16 g/10 min	CTM E005 (ISO 1133)

(*) Tests are performed according to Cabot Test Methods (CTM) based on international standards.

Quoted test results should not be used for specification purposes but are typical test values intended for guidance only.

PLASBLAK® PE4462

Packaging

PLASBLAK PE4462 is supplied in regular pellet form packed in 25 kg bags. It should be stored in a dry place.

Recommended storage life: up to 1 year provided it is stored as directed.

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CABOT - SPECIALTY COMPOUNDS

FOOD CONTACT STATEMENT

PLASBLAK® PE4462 Issue = 15 06/08/2015

The ingredients selected for use in PLASBLAK® PE4462 masterbatch conform to the purity requirements of the regulations that apply in the countries specified subject to restrictions and maximum additions where applicable. It is the responsibility of the producer of the final article in contact with food to verify compliance with any migration tests prescribed by the different legislations on his own product.

EUROPEAN UNION

First of all, in the production of masterbatches and compounds, Cabot has a traceability system in place in relation with the requirements of the European Regulation (EC) 1935/2004 and a Quality Assurance system in place which is compliant 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.This product does not incorporate recycled plastics concerned by the Commision Regulation (EC) 282/2008.

PLASBLAK® PE4462 masterbatch contains polymer produced from monomers and additives fully harmonised that are all detailed in the positive list of 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 (this Regulation replaces Directive 2002/72/EC and its 6 amendments) and its amendments Reg. (EU) No 321/2011, Reg. (EU) No 1282/2011, Reg. (EU) No 1183/2012, Reg. (EU) No 202/2014 and Reg (EU) No 2015/174.

The carbon black (CAS 1333-86-4, FCM Substance No 411) meets the purity requirements of CE Resolution AP (89) 1 "On the Use of Colourants in Plastic Materials Coming into Contact with Food".
It meets as well the carbon black purity requirements and specific restrictions/specifications mentioned in Annex I of the Commission Regulation (EU) No 10/2011.
In addition, to be conform with the requirements of Commission Regulation (EU) No 10/2011, the plastic material in contact with food cannot contain more than 14.7 % masterbatch.

Another aspect of Commission Regulation (EU) No 10/2011 relates to overall and specific migration to be tested on final food contact articles containing this masterbatch.

A "group SML" of 25 mg/kg expressed as Zinc is applicable to the final food contact item (Commission Regulation (EU) No 10/2011, Annex II).
There is no declarable migrating additive which is subject to a restriction in food as refered 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 in conformity with the limits as described in Commission Regulation (EU) No 10/2011.

This status covers consequently all the countries of the European Union.

SWITZERLAND

"Ordonnance du DFI sur les objets et matériaux en matière plastique " SR 817.023.21 of 23/11/2005 (Section 3, Annexe 1) updated version of April 2013.

This Ordinance mentions purity criteria and restrictions for carbon black content which are identicals to the ones mentioned in the Commission Directive 2007/19/EC (4th amendment of Dir. 2002/72/EC).
This means that the carbon black used in this masterbatch is thus conform to these purity requirements but the plastic material in contact with food cannot contain more than 14.7 % masterbatch.

A "group SML" of 25 mg/kg expressed as Zinc is applicable to the final food contact item.

USA (FDA)

PLASBLAK® PE4462 masterbatch does not meet FDA requirements in plastics packaging for food contact applications.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of food contact statements. It should not therefore be construed as guaranteeing specific properties. The validity of this document is one year from the issue date.

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