Norlip
AKTIESELSKAB

bsi. ISO 9001 Quality Management FM 599350

Emballage produceret for: ANTALIS CC&Co. A/S
BASTRUPGÅRDSVEJ 8-10
7500 HOLSTEBRO

Karlslunde d. 25-11-2015

OVERENSSTEMMELSESERKLÆRING

Identifikation af produkte

Produktnummer	Varenr.: 06-005468 Format : 500X800X0,10 MM
Produktnavn	Low Density PolyEthylen - LDPE
Anvendt råvare	INEOS® LDPE 22G564
Anvendelse	Fede, tørrede, ferske fødevarer samt fødevare i lage (alkohol, vand og eddike)
Fødevaretype	Alle typer
Kontakttid	10 dage
Kontakttemperatur	Max. 40° i 10 dage – eller max. 70° i 2 timer – eller stuetemperatur i hele produktets holdbarhedstid Kan også anvendes til frost ned til -35°, såfremt folien kvaliteten er min. 40 My.
Holdbarhed	Produktet har en holdbarhed på 2 år fra produktionsdato, så længe produktet opbevares i sin originalemballage og opbevares tørt og i temperatur fra 1° - 28°

Identifikation af producenten

Firmanavn	Norlip A/S
Adresse	Svejsegangen 12
	DK 2690 Karlslunde
Kontaktperson	Jesper Philipsen
e-mail adresse	jp@norlip.com
Website	www.norlip.dk - på website findes link til FVST's besøgsrapporter

Positivliste

Polymeren består udelukkende af monomerer og indgangsstoffer, der forekommer på positivlisten (Annex I) i EU-forordning 10/2011/EC og efterfølgende ændringer
Underskrift: 25/11/2015

SMG (Specifikke Migrations Grænser)

Alle indgangsstoffer er kontrolleret i Annex I i forordning 10/2011/EC og efterfølgende ændringer, og følgende stoffer har SMG-værdier- ingen oplyst						
I tilfælde af tilsætning af masterbatch (farver, slip, antiblok, ESD etc.) og en kendt SML (SMG) værdi beregnes den totale mængde i det færdige produkt forholdsmæssigt.						
Tilsætnings Code	Tilsætnings mængde i produktet	Kemisk navn	CAS nr.	REF. no.	SMG Værdi for tilsætning	Maksimal total SMG for produktet
						<2,00 mg/dm^2 ✶

✶ Denne værdi er beregnet på en 100 My folie. Se vedhæftede migrationstest

✶✶ Denne værdi er den Totale migration i mg./kg. for denne tilsætning – Se vedhæftede erklæring på denne tilsætning

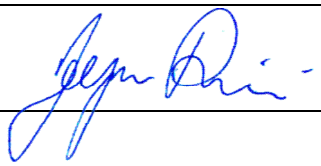
Dual use additiver

Forekommer der dual use additiver i produktet?	
Nej	☐
Ja	☑

Hvis ja – hvilke dual use additiver er tilsat produktet?

Kemisk navn	Cas. Nr.	Mængde i produktet (‰)
Erucamide	CAS nr. 112-84-5	0,45 ‰
Talc	CAS nr. 14807-96-6	0,85 ‰

Funktionel barriere

Indeholder produktet en funktionel barriere? Hvis ja, ønskes dokumentation for, at den er i overensstemmelse med EU-forordning 10/2011/EC	
Nej	☑
Ja	☐
Den funktionelle barriere er i overensstemmelse med EU-forordning 10/2011/EC	
Underskrift: 25/11/2015	

Global migrationstest

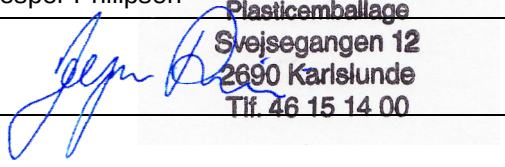
I overensstemmelse med den fremtidige brug af produktet, skal der udføres globale migrationstest i henhold til direktiv 82/711/EC og 85/572/EC. En kopi af migrationstesten er medsendt.

Specifik migrationstest

Hvis der er angivet SMG-værdier ovenfor skal produktet testes for specifik migration i henhold til EU-direktiv 82/711/EC og 85/572/EC. Der er ikke foretaget specifik migrationstest da INEOS 22H594 kun indeholder stoffer der er omfattet af positivlisten Annex I i forordning 10/2011/EC, og er fremstillet af stoffer, der ikke er pålagt restriktioner mht. specifik migration. Dette ses på vedhæftede dokument fra INEOS - **Regulatory Compliance Certificate** for råvare 22H594.

Overensstemmelse

Produktet er fremstillet i henhold til retningslinierne i EU-forordning 2023/2006 og forårsager ingen fare for menneskers sundhed eller miljøet i henhold til artikel 3 i rammedirektiv 1935/2004/EC. Produktet er i overensstemmelse med den gældende EU-lovgivning (EU-forordning 10/2011/EC og efterfølgende ændringer). Vi forpligter os hermed til at informere om ændringer i produktet.

Dato	25-11-2015
Navn	Jesper Philipsen
Underskrift	

Declaration of Compliance

Low Density Polyethylene grade

22G564

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Food-contact EU

This grade complies with the relevant requirements of:

- Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC
- Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food, 321/2011 (1/4/2011), 1282/2011 (28/11/2011), 1183/2012 (30/11/2012), 202/2014 (3/3/2014).
- 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 **(GMP)** as amended

Migration tests carried on this type of polymer, under the conditions 10 days at 40°C, in the food simulants A, B and D2 show that the Overall Migration Limit of 10 mg/dm² food is not exceeded.

No monomers subject to restriction (Specific Migration Limit or Quantitative Maximum) are used.

No additives subject to restriction (Specific Migration Limit or Quantitative Maximum) are used.

Alpha-tocopherol and talc are approved as direct food additives. They are present, as additives, in the above grade.

Whereas Ineos Olefins & Polymers Europe supplies to its customers the adequate information to allow them to fulfil their own responsibilities, the converters do have to check and confirm that the final article meets both the technical and regulatory requirements of the application.

Food contact US

This product is in compliance with Title 21 Code of Federal Regulations (CFR, 2013 Edition) Olefin polymers parts 177.1520, a(2) (c) Specifications 2.1. Type of food I to IX described in Table 1 of § 176.170(c) of this chapter under conditions of use C to H described in Table 2 of § 176.170(c) of this chapter promulgated under the Federal Food, Drug and Cosmetic Act.

Toys

The above grade meets the relevant requirements of Directive 2009/48/EC and referred Community legal acts, and of the European Standard EN-71 Part 3 (Edition:2013) and Part 9 +A1 (Edition:2007).

Phthalates

Phthalates are not used as additives or raw materials in the manufacture of the above grade.

Bovine Spongiform Encephalopathy (BSE)
Transmissible Spongiform Encephalopathy (TSE)

No products of animal origin are used as additives or raw materials in the manufacture of the above grade.

Genetically Modified Organisms (GMO)

Among the large variety of polymer additives that we are using, only a few of them may be genetically modified. We would like to comment on the relevance of gene modification techniques to plastic materials. The most significant fact is that the starting substances or additives possibly deriving from genetically modified organisms based materials are manufactured through multi-step conversion and/or purification processes, involving aggressive conditions like high temperature and pressure as well as action of chemically reactive substances. The final plastic materials themselves are produced under high temperature conditions and are further submitted during conversion processes (extrusion, moulding) to high temperature for a significant period of time.

On the basis of current scientific knowledge, it can be stated that no DNA and no proteins from a given organism (genetically modified or not) can resist to such a series of treatments. Therefore, their presence in our polymers and in plastic articles manufactured from them is unexpected.

In conclusion, we confirm that the above grade is safe to be manufactured, processed and used, even if it is manufactured from starting substances or contain additives which may be of genetically modified organism's origin.

RoHS, WEEE, Packaging Waste, EoL Vehicule, CONEG

This grade meets the relevant requirements of the following Directives or Regulations:

- 2003/11/EC as amended
- 2011/65/EU (RoHS) as amended
- 2002/96/EC (WEEE) as amended
- 2000/53/EC (EoL) as amended
- Regulation (EC) 1907/2006, annex XVII, as amended in Regulation (EC) 1272/2008 (CLP), repealing 76/769/EEC, as amended
- 94/62/EC (Packaging Waste Directive) as amended
- USA CONEG Regulation
- France: Décret n°2007-1467 du 12 octobre 2007 and Code de l'environnement, section 5-Emballages, sub-section 1, Articles R 543-42 to R 543-52

Swiss VOC legislation

This product is in compliance with "Ordonnance sur la taxe d'incitation sur les composés organiques volatils (OCOV) du 12 novembre 1997" as amended, about Volatile Organic Content (VOC).

Ozone layer-depleting agents

Chlorofluorocarbons (CFC's) and substances related to ozone depleting substances (as defined by the MONTREAL PROTOCOL and listed as class I & II substances by the US Clean Air Act) are not used as additives or raw materials in the manufacture of this grade.

None of the prohibited substances listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer (as amended), which repeals and replaces Regulation (EC) 2037/2000, is used as an additive or raw material in the manufacture of the above grade.

Nanomaterials and nanotechnology

Further to the publication of the EU Recommendation 2011/696/EU on the definition of nanomaterials, some substances used for decades as additives in the plastics industry suddenly became nanomaterials. The list includes among others, silica, carbon black and many organic pigments.
When these substances are used as additives in polyethylene or polypropylene, they end up encapsulated into a polymeric matrix and are not intended to be released under normal and foreseeable conditions.
Based on these arguments, the PP or PE products containing such additive(s) are exempt of notification under the French Decree 2012-232 (cfr Q&A n° 20bis on the website of the Ministère de l'Ecologie, du Développement Durable et de l'Energie).

REACH / SVHC

All Polyolefins materials are compliant with REACH Regulation No. 1907/2006.
For further details http://www.ineos.com/businesses/INEOS-Olefins-Polymers-Europe/SHE/ (under "REACH").

Absence of substances and chemicals

None of the following substances are used as additives or raw materials in the manufacture of this grade:
However, since we do not systematically perform specific tests to verify the absence of these substances, we cannot guarantee that there is no trace amount of these substances, as impurity or otherwise, in this grade.

- Acrylamide
- Allergens (as defined in Regulation (EU) No 1169/2011, as amended)
- Aromatic amines
- Asbestos
- Azodicarbonamide or semi-carbazide compounds
- Benzophenone, hydroxybenzophenone and 4-methyl benzophenone
- Biocides
- Bisphenol-A (BPA) and Bisphenol-F (BPF)
- Brominated flame retardants
- Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC)
- Chlorinated Paraffins
- Conflict minerals:
  - Columbite-tantalite (Coltan, Niobium, Tantalum)
  - Cassiterite (Tin)

  - Wolframite (Tungston)
  - Gold
- Decabromodiphenylether (decaBDE)
- 2-Ethylhexanoic Acid (2-EHA)
- Di(ethylhexyl) adipate (DEHA) and di(ethylhexyl) maleate (DEHM)
- Dimethyl Fumarate (DMF)
- Dioxins and furans
- Endocrine Disruptors listed in the Japanese authority list “Strategic Programs on Environmental Endocrine Disruptors '98 (SPEED '98) - Table-3: Chemicals Suspected of Having Endocrine Disrupting Effects”
- Epoxy derivatives:
  - BADGE [2,2-bis(4-hydroxyphenyl)propane bis(2,3-epoxypropyl) ether],
  - BFDGE [bis(hydroxyphenyl)methane bis(2,3-epoxypropyl) ether],
  - NOGE [novolac glycidyl ether]

  as defined in Directive 2002/16/EC amended by 2004/13/EC, repealed by the Regulation 1895/2005/EC
- Epoxidised Soya Bean Oil (ESBO)
- Formaldehyde (formol)
- Isopropyltinoxanthone (ITX)
- Latexes
- Melamine and cyanuric acid
- Mercapto mix
- N-ethyl-o,p-toluolsulfonamide (NETSA) (CAS nb 1077-66-1)
- N-ethyl-p-toluenesulphonamide (NE-PTSA) (CAS nb 80-39-7)
- Nonylphenol and its derivatives including Trinonylphenyl Phosphite (TNPP)
- Organo-tin compounds
- Pentabromodiphenyl ether, octabromodiphenyl ether
- Perfluorinated compounds (PFC), Perfluorinated tenside (PFT), Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS) listed in Directive 2006/122/EC
- Poly(aromatic hydrocarbons) according to US Environmental Protection Agency Method 610 (EPA 610)
- Polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs), polybrominated terphenyls (PBTs)
- Polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs), polychlorinated naphthalenes (PCNs)
- Polycyclic Aromatic Hydrocarbons (PAH)
- Recycled products as defined by Regulation (EC) 282/2008
- Short-chain chlorinated paraffins
- Silicone
- Tert-butyl-4-hydroxyanisole (BHA) and 2,6-di-tert-butyl-p-cresol (BHT)
- Thiuram mix
- Titanium Acetyl Acetone (TAA)
- Triclosan (2,4,4’-trichloro-2’-hydroxydiphenyl ether) (CAS nb 3380-34-5)
- Vinyl chloride monomer (VCM) and its polymers or copolymers (PVC, PVDC, …)
- Substances listed in:
  - California Proposition 65 State regulation as amended
  - GADSL, “Global Automotive Declarable Substance List”, as amended
  - IKEA Specification, IOS-MAT-0010, chapter 3 & 6, as amended
  - IKEA Specification, IOS-MAT-0054, as amended

This certificate will be updated when appropriate. Therefore, it is recommended to visit our website at least once a year.

It is the responsibility of the customer to check the suitability of the finished article for the intended application and its compliance with the relevant legislation and applicable requirements including their restrictions.

Notice

Eurofins Product Testing A/S
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DK-8464 Galten

Phone +45 70 22 42 76
Fax +45 70 22 42 75
Migration@eurofins.dk
www.eurofins.dk

Norlip A/S
Svejsegangen 12
DK-2690 Karlslunde

Att.: Jesper Philipsen

Date
February 26th, 2015
your ref.
Ineos 22G564
Our ref.
392-2015-00000403/BJ1

Test report – Migration

Sample material

Identification	One sample to be tested for overall migration
Sample receipt	January 5, 2015
Number / type	1 sample identified as: Lab no. 392-2015-00000403: Ineos 22G564
Analytical period	January 14 – February 26, 2015

Applied methods

Method nor.	Parameter	Principle	Limit of detection	U_m (%)(1)
EN 1186-4	Overall migration	Exposure to olive oil by cell. Gravimetric + GC/FID determination	2 mg/dm^2	30%
EN 1186-5	Overall migration	Exposure to 3% acetic acid and 10% ethanol by cell. Gravimetric determination	1 mg/dm^2	20%

The migration was performed in accordance with EN 1186 part 4: *Test methods for overall migration into olive oil by cell* and EN 1186 part 5: *Test methods for overall migration into aqueous food simulants by cell.*

Principle
Olive oil: The sample was exposed for 10 days at 40 °C. At the end of the test period, the food simulant was removed from the sample. The sample was weighed and extracted with pentane by means of Soxhlet extraction for 16 hours. The amount of extracted olive oil was determined by gaschromatography with flame ionisation detection (GC/FID). The loss of weight was adjusted the excessive oil extracted from the sample and the calculated loss equals the total migration.

3% acetic acid and 10% ethanol: The sample was exposed for 10 days at 40 °C. At the end of the test period, the food simulant was removed from the sample. The simulant was then evaporated and the dry matter determined by weighing.

The test was performed with triplicates.

(1)U_m (%): The expanded uncertainty U_m is equal to 2 x RSD%, see also www.eurofins.dk. Keyword: Uncertainty

Results

The sample **meets** the requirements in EU regulation No 10/2011/EC as amended by regulation No 321/2011/EC, No 1282/2011/EC, No 1183/2012/EC and No 202/2014/EC on plastic material and articles intended to come into contact with food for the above mentioned test conditions. Results are presented on the following page.

Eurofins Product Testing A/S

Brian Jensen
MSc. Chemistry

Analytical results

The determined overall migration from the sample to the simulant is given in the table below. The result is an average of the three determinations. As described in the standard EN 1186 all results are given in total mg/dm^2.

Table 1: Overall migration.

Unit: mg/dm^2 / Sample id: Simulant	Ineos 22G564				
	Single determinations			Average	OML value
3% acetic acid	< 1	< 1	< 1	< 1	**10**
10% ethanol	< 1	< 1	< 1	< 1	**10**
Olive oil	2.1	2.5	4.7	3.1	**10**

<: means less than

Conclusion:

The threshold value for overall migration is 10 mg/dm^2 and the results show that the product tested **complies** with the requirements in EU regulation No 10/2011/EC as amended by regulation No 321/2011/EC, No 1282/2011/EC, 1183/2012/EC and No 202/2014/EC on plastic material and articles intended to come into contact with food for the above mentioned test conditions.

22G564

Product Technical Information

LDPE for Blown film

22G564 is an autoclave, low density polyethylene grade developed to give strong film for medium duty applications.

Applications

22G564 is intended for applications such as

- Carrier-bag films
- Pouches refuse sacks
- General packaging film

Properties		Test Method	Value	Units
Physical				
Melt flow rate (190°C/2.16 kg)		ISO 1133	1.2	g/10 min
Density		ISO 1183	922	kg/m^3
Melting temperature		ISO 11357/03	110	°C
Vicat softening temperature		ISO 306	96	°C
Additive: antiblock (850 ppm, Talc)				
Additive: antioxidant				
Additive: slip (450 ppm, Erucamide)				
Film*				
Tensile strength	MD/TD	ISO 527-3	26/23	MPa
Strain @ break	MD/TD	ISO 527-3	300/500	%
Tensile modulus	MD/TD	ASTM D 882-A	180/180	MPa
Coefficient of friction	Dynamic	ISO 8295	0.15	-
Haze		ASTM D 1003	8	%
Gloss		ASTM D 2457	85	-
Dart drop		ISO 7785/1	140	g
Elmendorf				
Tear Strength	MD/TD	ISO 8483/2	4/2	N
Puncture resistance, force		ASTM D 5748	53	N
Puncture resistance, energy		ASTM D 5748	2	J

- Data should not used for specification work

* Film properties are measured on a 40µm film sample produced on a 60mm W&H extruder with IBC cooling at BUR=12,5. MD = macine direction, TD = transverse direction

November, 2007

Published by

INEOS Polyolefins

22G564

Storage and Handling

22G564 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation which results in odour generation and colour changes, and can have negative effects on the physical properties of the product.

Processing guidelines

22G564 is easily processed on conventional extruders.
Recommended melt temperature range is form 160°C to 190°C. Due to differences in screw an die head designs the optimum temperature adjustements are individual and should be sought for each production line.
With suitable equipment 22G564 can be drawn down to 20-30 micron.

Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, send an email to psnohreg@innovene.com. Unless specifically indicated, the products mentioned herein are not suitable for applications in the medical or pharmaceutical sector.

Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Material Safety Data Sheet (MSDS) that may be obtained from the website http//techservice.innovene.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

Exclusion of Liability

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November, 2007

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