

## OVERENSSTEMMELSESERKLÆRING

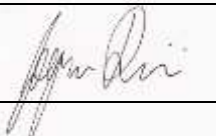
### Identifikation af produktet

|                   |   |
|-------------------|---|
| Produktnummer     | Varenr. 180-002420    Format 240X450/50X+40X0,035MM   |
| Produktnavn       | Low Density Polyethylen   |
| Anvendt råvare    | INEOS® LDPE 24F564  |
| Anvendelse        | Fede, tørrede, ferske fødevarer samt fødevare i lage (alkohol, vand og eddike)  |
| Fødevaretype      | Alle typer  |
| Kontaktid         | 10 dage   |
| Kontakttemperatur | Max. 40° i 10 dage – eller max. 70° i 2 timer – eller stuetemperatur i hele produktets holdbarhedstid<br>Kan også anvendes til frost ned til -35°, såfremt folien kvaliteten er min. 40 My. |
| Holdbarhed        | Produktet har en holdbarhed på 3 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 Karlsunde  |
| Kontaktperson  | Jesper Philipsen   |
| e-mail adresse | <a href="mailto:jp@norlip.com">jp@norlip.com</a>   |
| Website        | <a href="http://www.norlip.dk">www.norlip.dk</a> - 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: 20/06/2014   |  |


### 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 |
|  |                                |             |         |          |                          |                                  |
|  |                                |             |         |          |                          |                                  |

### Dual use additiver

|  |                                     |                        |
|--|-------------------------------------|------------------------|
| Forekommer der dual use additiver i produktet?           |                                     |                        |
| Ja:  | <input checked="" type="checkbox"/> |                        |
| Nej:   | <input type="checkbox"/>            |                        |
| Hvis ja – hvilke dual use additiver er tilsat produktet? |                                     |                        |
| Kemisk navn  | Cas. Nr.                            | Mængde i produktet (%) |
| Alpha-tocopherol   |                                     | 1,2 ‰                  |
| Talcum   |                                     | 0,45 ‰                 |

### Funktionel barriere

|   |   |
|---|---|
| Indeholder produktet en funktionel barriere? Hvis ja, ønskes dokumentation for, at den er i overensstemmelse med EU-forordning 10/2011/EC |   |
| Nej   | <input checked="" type="checkbox"/>   |
| Ja  | <input type="checkbox"/>  |
| Den funktionelle barriere er i overensstemmelse med EU-forordning 10/2011/EC  |   |
| Underskrift: 20/06/2014   |  |

### 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. Denne "gamle" testmetode gøres stadig gældende frem til udgangen af 2014, hvorefter nye migrationstest foretages efter de nye metoder. |
|---|

### 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 24F564 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 - <b>Regulatory Compliance Certificate</b> for råvare 24F564. |
|--|

### 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   | 20-06-2014   |
| Navn   | Jesper Philipsen   |
| Underskrift  | <br><b>NORLIP A/S</b><br>Plasticemballage<br>Svejsegangen 12<br>2690 Karlslunde<br>Tlf. 46 15 14 00 |

---

## ***Declaration of Compliance***

### ***Low Density Polyethylene grade***

24F564

---

## **Table of contents**

Food-contact EU

Food contact US

Toys

Phthalates

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

Genetically Modified Organisms (GMO)

RoHS, WEEE, Packaging Waste, EoL Vehicule, CONEG

Swiss VOC legislation

Ozone layer-depleting agents

Nanomaterials and nanotechnology

REACH / SVHC

Absence of substances and chemicals

Notice

---

### ***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)
- 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/dm<sup>2</sup> 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:1995) 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
- Organo-tin compounds
- Pentabromodiphenyl ether, octabromodiphenyl ether
- 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***

The letters INEOS and the INEOS-in-Shield logo are trade marks belonging to the INEOS group, are used with its permission, and are registered in a number of countries.

Information contained in this publication, while accurate to the best knowledge and belief of INEOS Europe AG and its affiliates and subsidiary companies ("INEOS"), is not intended and should not be construed as a warranty or representation for which INEOS assumes any legal responsibility.

Any information or advice obtained from INEOS otherwise than by means of this publication and whether relating to INEOS materials or other materials, is also given in good faith. However, it remains at all times the responsibility of the customer to ensure that INEOS materials are suitable for the particular purpose intended.

Insofar as materials not manufactured or supplied by INEOS are used in conjunction with or instead of INEOS materials, the customer should ensure that he has received from the manufacturer or supplier all technical data and other information relating to such materials.

INEOS accepts no liability whatsoever (except as otherwise expressly provided by law) arising out of the use of information supplied, the application, adaptation or processing of the products described herein, the use of other materials in lieu of INEOS materials or the use of INEOS materials in conjunction with such other materials.

All terms, conditions and warranties regarding the supply of products by INEOS shall be subject to INEOS' standard terms of sale, copies of which are available upon request.





Norlip  
Att.: Jesper Philipsen  
Svejsegangen 12  
2690 Karlslunde

Eurofins Product Testing  
Smedeskovvej 38  
DK-8464 Galten

Telefon 70 22 42 66  
Telefax 70 22 42 55  
eurofins@eurofins.dk  
www.eurofins.dk

Dato  
3. december 2009

Deres ref.

-

Vores ref.

764918Rev1/JH/MPH

## Analysereport - Materialetest

### Prøvemateriale

|                    |  |
|--------------------|--|
| Sagsidentifikation | Migrationstest plastfolie, LDPE  |
| Prøvemodtagelse    | 16. Maj 2008   |
| Antal / Prøvetype  | Plastfolie fremstillet af en råvare fra INEOS, varenummer 24F564:<br>764918-01: LDPE |
| Analyseperiode     | 23. Maj – 1. Juni 2008   |

### Anvendte metoder

| Metodenr.              | Princip                                | Parameter  | Detektionsgrænse     | Analyseusikkerhed ① |
|------------------------|--|--|----------------------|---------------------|
| EN 1186-3<br>EN 1186-9 | Gravimetri                             | Global migration til 3% eddikesyre og 10 % ethanol | 1 mg/dm <sup>2</sup> | 15% (RSD)           |
| EN 1186-2              | Gravimetri og Gaskromatografi (GC/FID) | Global migration til olivenolie                    | 2 mg/dm <sup>2</sup> | 15% (RSD)           |
| 72060                  | Gravimetrisk                           | Global migration til vand                          | 1 mg/dm <sup>2</sup> | 10-15%              |

Princip for migration: Den totale migration fra prøverne til 3% eddikesyre, 10% ethanol, olivenolie og vand bestemmes ved eksponering i 10 dage timer ved 40 °C. Testen gennemføres ved neddykning af prøveemner i fødevarsimulanten. Testen er foretaget i henhold til EN 1186-2, EN 1186-3 og EN 1186-9. Efter eksponering, hvor de opløselige komponenter migrerer fra materialet til simulanten, fjernes emnet fra simulanten.

Migration til 3% eddikesyre, 10% ethanol og vand: bestemmes ved inddampning af simulanten og inddampningsresten bestemmes ved vejning og angives som migrationen fra emnet til fødevarsimulanten.

Migration til olivenolie: Emnet der har været neddyppet i simulanten aftørres og vejes. Herefter fjernes adsorberet olie ved ekstraktion og bestemmes den ekstraherede olie ved GC/FID analyse. Emnets vægt korrigeres for den ekstraherede olie og migrationen bestemmes som vægttab af emnet

Analysen udføres som tredobbelbestemmelse.

① Dog mindst halvdelen af detektionsgrænsen absolut

Eurofins Product Testing A/S

John Hansen  
Civilingeniør, kemi

Marianne Hansen  
Civilingeniør, kemi

## Analyseresultater

| Enhed: <b>mg/dm<sup>2</sup></b> | <b>Migration til 3 % eddikesyre</b> |                |                |            |
|---------------------------------|-------------------------------------|----------------|----------------|------------|
| Prøve                           | 1. bestemmelse                      | 2. bestemmelse | 3. bestemmelse | Gennemsnit |
| <b>764918-01: LDPE</b>          | < 1                                 | < 1            | < 1            | < 1        |

< betyder mindre end

| Enhed: <b>mg/dm<sup>2</sup></b> | <b>Migration til 10% ethanol</b> |                |                |            |
|---------------------------------|----------------------------------|----------------|----------------|------------|
| Prøve                           | 1. bestemmelse                   | 2. bestemmelse | 3. bestemmelse | Gennemsnit |
| <b>764918-01: LDPE</b>          | < 1                              | < 1            | < 1            | < 1        |

< betyder mindre end

| Enhed: <b>mg/dm<sup>2</sup></b> | <b>Migration til olivenolie*</b> |                |                |            |
|---------------------------------|----------------------------------|----------------|----------------|------------|
| Prøve                           | 1. bestemmelse                   | 2. bestemmelse | 3. bestemmelse | Gennemsnit |
| <b>764918-01: LDPE</b>          | < 2                              | < 2            | < 2            | < 2        |

< betyder mindre end

\* Denne analyse er ikke omfattet af akrediteringen. Er dog udført under kvalitetsstyringssystemet ISO 17025 og er pr. 7. oktober 2009 også omfattet af akkrediteringen.

| Enhed: <b>mg/dm<sup>2</sup></b> | <b>Migration til vand</b> |                |                |            |
|---------------------------------|---------------------------|----------------|----------------|------------|
| Prøve                           | 1. bestemmelse            | 2. bestemmelse | 3. bestemmelse | Gennemsnit |
| <b>764918-01: LDPE</b>          | < 1                       | < 1            | < 1            | < 1        |

< betyder mindre end

### Kommentar

I henhold til BEK nr 1102 af 09/11/2006 overholder plastfolien, LDPE, kravet om en migration på maksimalt 10 mg/dm<sup>2</sup> for 3% eddikesyre 10% ethanol, olivenolie som simulanter.

# 24F564

## Product Technical Information

LDPE for Blown film

**24F564** is an autoclave LDPE grade developed for lamination film and general packaging film. 24F564 gives film with good optical properties and low gel level for medium duty film.

## Applications

24F564 is intended for applications such as

- Lamination films/ Food packaging
- Fine shrink films
- Carrier-bag films
- Pouches

| Properties                     |         | Test Method  | Value   | Units             |
|--------------------------------|---------|--------------|---------|-------------------|
| <b>Physical</b>                |         |              |         |                   |
| Melt flow rate (190°C/2.16 kg) |         | ISO 1133     | 0.75    | g/10 min          |
| Density                        |         | ISO 1183     | 924     | kg/m <sup>3</sup> |
| Antiblock (Talc)               |         | INEOS method | 1200    | ppm               |
| Slip (Erucamide)               |         | INEOS method | 450     | ppm               |
| Other additive: antioxidant    |         |              |         |                   |
| <b>Film*</b>                   |         |              |         |                   |
| Tensile strength               | MD/TD   | ISO 1184     | 27/24   | MPa               |
| Strain @ break                 | MD/TD   | ISO 1184     | 250/550 | %                 |
| Tensile modulus                | MD/TD   | ISO 1184     | 200/250 | MPa               |
| Coefficient of friction        | Dynamic | ISO 8295     | 0.15    | -                 |
| Haze                           |         | ASTM D 1003  | 7       | %                 |
| Gloss (45°)                    |         | ASTM D 2457  | 70      | % <sub>00</sub>   |
| Dart drop                      |         | ASTM D 1709  | 120     | g                 |

- 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=2.5. MD = machine direction, TD = transverse direction



# 24F564

## Storage and Handling

24F564 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

24F564 is easily processed on conventional extruders.

Recommended melt temperature range is from 160°C to 190°C. Due to differences in screw and die head designs the optimum temperature adjustments are individual and should be sought for each production line.

With suitable equipment 24F564 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](mailto: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 [www.ineospolyolefins.com](http://www.ineospolyolefins.com). Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

## Exclusion of Liability

Although INEOS POLYOLEFINS endeavours to ensure that all information and advice relating to our materials or other materials howsoever provided to you by INEOS POLYOLEFINS is accurate and up to date, no representation or warranty, express or implied is made by INEOS POLYOLEFINS as to its accuracy or completeness. All such information and advice is provided in good faith and INEOS POLYOLEFINS is not, to the maximum extent permitted by law, liable for any action you may take as a result of relying on such information or advice or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

In addition data and numerical results howsoever provided to you by INEOS POLYOLEFINS are given in good faith and are general in nature. Data and numerical results are not and shall not be regarded as specifications and as such INEOS POLYOLEFINS is not, to the maximum extent permitted by law, liable for any action that you take as a result of relying on such data and results or for any loss or damage, including any consequential loss, suffered by you as a result of taking such action.

It remains at all times your responsibility to ensure that INEOS POLYOLEFINS materials are suitable for the particular purpose intended and INEOS POLYOLEFINS shall not be responsible for any loss or damage caused by misuse of INEOS POLYOLEFINS products. To the maximum extent permitted by law, INEOS POLYOLEFINS accepts no liability whatsoever arising out of the application, adaptation or processing of the products described herein, the use of other materials in lieu of INEOS POLYOLEFINS materials or the use of INEOS POLYOLEFINS materials in conjunction with such other materials.

# SAFETY DATA SHEET

Date : 04/09/2007

Revision Date : / /

| <b>Low Density / Linear Low Density Polyethylene</b>                              |   | <b>SDSPE02</b> |                |
|---|---|----------------|----------------|
| <b>1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING</b> |   |                |                |
| <u>Product Information</u>  |   |                |                |
| Product name  | Low Density / Linear Low Density Polyethylene<br>24F564   |                |                |
| <u>Manufacturer, importer, supplier</u>   |   |                |                |
| Supplier  | INEOS Polyolefins   |                |                |
| <b>Emergency telephone number</b>   | <b>Carechem 24: +44 (0) 208 762 8322</b>  |                |                |
| Other regulatory information  | psnohreg@innovene.com   |                |                |
| <b>2. HAZARDS IDENTIFICATION</b>  |   |                |                |
| - <i>Physico-chemical properties</i>  | No hazards resulting from material as supplied.   |                |                |
| - <i>Properties affecting health</i>  | No hazards resulting from material as supplied.   |                |                |
| - <i>Environmental properties</i>   | No hazards resulting from material as supplied.   |                |                |
| <b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>                                  |   |                |                |
| <u>Components</u>   | <u>Weight %</u>   | <u>CAS.</u>    | <u>EINECS.</u> |
| Polyethylene  | 0 - 100 %   | 9002-88-4      | -              |
| Ethylene Butene 1 Copolymer   | 0 - 100 %   | 25087-34-7     | -              |
| Ethylene Hexene 1 Copolymer   | 0 - 100 %   | 25213-02-9     | -              |
| Ethylene Butyl Acrylate Copolymer   | 0 - 100 %   | 25750-84-9     | -              |
| Ionomer Copolymer   | 0 - 100 %   | 28516-43-0     | -              |
| Ethylene Metacrylic Acid Copolymer  | 0 - 100 %   | 25053-53-6     | -              |
| Hazardous components  | None  |                |                |
| <b>4. FIRST AID MEASURES</b>  |   |                |                |
| - <i>Inhalation</i>   | Move to fresh air. Consult a physician if necessary   |                |                |
| - <i>Eye contact</i>  | Cool skin rapidly with cold water after contact with hot polymer.<br>Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |                |                |
| - <i>Skin contact</i>   | Cool skin rapidly with cold water after contact with hot polymer.   |                |                |
| <b>5. FIRE-FIGHTING MEASURES</b>  |   |                |                |
| - <i>Suitable extinguishing media</i>   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.   |                |                |
| - <i>Extinguishing media which must not be used for safety reasons</i>            | High volume water jet   |                |                |
| <b>6. ACCIDENTAL RELEASE MEASURES</b>   |   |                |                |
| - <i>Personal precautions</i>   | Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation wear suitable respiratory equipment.                           |                |                |
| - <i>Environmental precautions</i>  | No special environmental precautions required   |                |                |

**INEOS Polyolefins**  
Clayhill House Beechen Lane  
Lyndhurst  
Hampshire S043 7DD  
United Kingdom

ineospofeu@innovene.com

Page : 1 / 4  
Version nr : 1.00

Pollux6®©

# SAFETY DATA SHEET

Date : 04/09/2007

Revision Date : / /

| Low Density / Linear Low Density Polyethylene  |  | SDSPE02 |
|--|--|---------|
| - <i>Methods for cleaning up</i>               | Take up mechanically and collect in suitable container for disposal.   |         |
| 7. HANDLING AND STORAGE                        |  |         |
| Handling                                       |  |         |
| - <i>Safe handling advice</i>                  | Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Avoid dust formation. In case of insufficient ventilation, wear suitable respiratory equipment. Provide for appropriate exhaust ventilation and dust collection at machinery. |         |
| Storage  |  |         |
| - <i>Technical measures/Storage conditions</i> | Keep in a dry, cool and well-ventilated place.   |         |
| 8. EXPOSURE CONTROLS / PERSONAL PROTECTION     |  |         |
| Personal protective equipment                  |  |         |
| - <i>Respiratory protection</i>                | (P2) effective dust mask   |         |
| - <i>Hand protection</i>                       | Latex gloves (ketone resistant)  |         |
| - <i>Eye protection</i>                        | Safety glasses with side-shields   |         |
| - <i>Skin and body protection</i>              | Wear suitable protective equipment   |         |
| - <i>Hygiene measures</i>                      | When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Ensure adequate ventilation, especially in confined areas.  |         |
| 9. PHYSICAL AND CHEMICAL PROPERTIES            |  |         |
| Physical state                                 | Granules   |         |
| Colour   | Off-white  |         |
| Odour  | None   |         |
| Density  | < 1  |         |
| Melting point/range                            | 105 - 130 °C   |         |
| Flash point                                    | > 300 °C   |         |
| Autoignition temperature                       | > 350 °C   |         |
| Water solubility                               | None   |         |
| Solubility in other solvents                   | None   |         |
| Thermal sensitivity                            | Fumes risk of decomposition  |         |
| 10. STABILITY AND REACTIVITY                   |  |         |
| - <i>Stability</i>                             | Upon prolonged heating above 300 °C hazardous decomposition products may be released. Inhalation of vapours in high concentration may cause irritation of respiratory system.  |         |
| - <i>Materials to avoid</i>                    | None   |         |
| - <i>Hazardous decomposition products</i>      | None   |         |
| 11. TOXICOLOGICAL INFORMATION                  |  |         |

**INEOS Polyolefins**  
Clayhill House Beechen Lane  
Lyndhurst  
Hampshire S043 7DD  
United Kingdom

ineospofeu@innovene.com

Page : 2 / 4  
Version nr : 1.00

Pollux6®©

# SAFETY DATA SHEET

Date : 04/09/2007

Revision Date : / /

| Low Density / Linear Low Density Polyethylene  |   | SDSPE02 |
|--|---|---------|
| <u>Acute toxicity</u>                          |   |         |
| <i>Eye contact</i>                             | Dust causes irritation to the eyes, skin and mucous membranes and may lead to toxic lung oedemas.                       |         |
| <i>Skin contact</i>                            | Dust causes irritation to the eyes, skin and mucous membranes and may lead to toxic lung oedemas.                       |         |
| <i>Inhalation</i>                              | Dust causes irritation to the eyes, skin and mucous membranes and may lead to toxic lung oedemas.                       |         |
| <u>Chronic toxicity</u>                        |   |         |
| <i>Carcinogenic effects</i>                    | No information available  |         |
| <i>Mutagenic effects</i>                       | No information available  |         |
| <i>Reproductive toxicity</i>                   | No information available  |         |
| <b>12. ECOLOGICAL INFORMATION</b>              |   |         |
| - <i>Ecotoxicity effects</i>                   | This product has no known eco-toxicological effects.  |         |
| <b>13. DISPOSAL CONSIDERATIONS</b>             |   |         |
| - <i>Waste from residues / unused products</i> | Can be landfilled or incinerated, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991. |         |
| - <i>Contaminated packaging</i>                | Dispose of in accordance with local regulations   |         |
| <b>14. TRANSPORT INFORMATION</b>               |   |         |
| <u>Land transport</u>                          |   |         |
| Class  | Not classified as dangerous in the meaning of transport regulations.  |         |
| <u>Sea transport</u>                           |   |         |
| Class  | Not classified as dangerous in the meaning of transport regulations.  |         |
| <u>Air transport</u>                           |   |         |
| Class  | Not classified as dangerous in the meaning of transport regulations.  |         |
| <b>15. REGULATORY INFORMATION</b>              |   |         |
| Symbol(s):                                     | not regulated   |         |
| R-phrases(s)                                   | not regulated   |         |
| S-phrases(s)                                   | not regulated   |         |
| <b>16. OTHER INFORMATION</b>                   |   |         |
| Signature                                      | Product Stewardship   |         |
| <a href="#">Language of Document</a>           | <a href="#">English</a>   |         |
|  |   |         |

**INEOS Polyolefins**  
Clayhill House Beechen Lane  
Lyndhurst  
Hampshire S043 7DD  
United Kingdom

ineospofeu@innovene.com

Page : 3 / 4  
Version nr : 1.00

Pollux6®©

# SAFETY DATA SHEET

Date : 04/09/2007

Revision Date : / /

## Low Density / Linear Low Density Polyethylene

**SDSPE02**

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfil his obligations regarding the use of hazardous products. This information is not exhaustive. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. This is solely his responsibility.

**INEOS Polyolefins**  
Clayhill House Beechen Lane  
Lyndhurst  
Hampshire S043 7DD  
United Kingdom

ineospofeu@innovene.com

Page : 4 / 4  
Version nr : 1.00

Pollux6®©