SENSITIVE APPLICATIONS

Polymers Logistics
Code of Practice
Customer Commitment

In support of the increasing demand for polymers, INEOS Olefins and Polymers has developed a network of modern production facilities spread across Europe. The locations are determined by the proximity to feedstock supply and geographic spread. To aid efficiency and product quality, they tend to specialise in specific polymer types.

The polymers referred to in this document are Polyethylene (Linear Low Density, Low Density and High Density) and Polypropylene. INEOS Olefins and Polymers recognises the need for consistent availability of all polymer grades to meet both regular delivery lead times and support the development of planned inventory management systems.

In order to achieve the highest level of service, INEOS Olefins and Polymers use the most modern distribution techniques. These include the use of specialised vehicles and containers for road, road-rail or road-ship deliveries. Supply reliability is optimised by using strategically located material stocks across Europe.

Quality is one of the keywords in INEOS Olefins and Polymers strategy. All the Company’s European polymers production centres are registered to ISO 9001 standards. This demonstrates the commitment of the Company to manufacturing and supply chain performing to expectation – first time and every time. Simply stated this means our customers should expect goods to be delivered on-specification and on-time every time.

The herein contained expectations are designed to minimise disruption to our customers’ operations and maximise the overall efficiency of our service. Whilst the information provided is of a detailed nature, further details and technical support are available from INEOS Olefins and Polymers. Contact details are provided at the end of this document.
CONTENTS

Introduction

Objectives and Scope

1. Responsibilities
   1.1 Definitions
   1.2 Management Responsibilities
   1.3 Operational Requirements
      1.3.1 Procured Services
      1.3.2 Procured Materials

2. Assurance

Appendices

   A. SLA common text
   B. Bulk SLA addendum
   C. Pack SLA addendum
   D. Rail SLA addendum
   E. Short Sea Shipping SLA addendum
   F. Terminal SLA addendum
   G. Site Audit Protocol
   H. 3rd Party Audit Protocol
   I. Certificates of Conformity

Contacts

Reference Documents

Revisions
July 2012: Polyacrylic acids / salts added to “banned prior cargo” list.
September 2014: Clarifications made in Section B Bulk SLA Addendum.
October 2014: Definitions updated. Appendix F updated.
October 2017: reference made to new CEFIC/ECTA Guidelines for cleaning Dry bulk polymer transport tanks. 2 critical prior cargo groups added.
Introduction

INEOS Olefins and Polymers produce various grades of polymer and these are targeted at many different markets ranging from construction, car fuel tanks, high integrity pipelines to medical blister packs. INEOS Olefins and Polymers is committed to ensuring that these products are manufactured and distributed in conformity with all applicable rules and regulations.

This Polymers specific code of practice provides guidance on what INEOS expectations are with respect to cleanliness requirements within the supply chain environment. In doing so the document clarifies the roles and responsibilities of different parties involved in the distribution of these products.
Objectives and Scope

The objective of this Code of Practice is to provide assistance in the interpretation of guidelines and rules applicable to materials destined for Sensitive Applications.

The concept of Sensitive Applications includes but is not restricted to materials used in food contact applications including organoleptic products, hygiene applications, medical / pharma applications and Wire & Cable clean grades.

INEOS Olefins and Polymers will, as a minimum, apply Food Contact requirements to all products passing through its distribution network. Additional cleanliness requirements will be controlled at a market level with minimal customer specific deviations.

The main European regulations are EC 1935/2004 on materials and articles intended to come into contact with food and EC 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food. In addition, when appropriate, INEOS apply recognised best practices.

According Association of Plastics Manufacturers Europe (APME) interpretation of Regulation (EC) 2023/2006 the following definition for good manufacturing practice has been established for food contact materials and articles:

“good manufacturing practice (GMP) means those aspects of quality assurance which ensure that materials and articles are consistently produced and controlled to ensure conformity with the rules applicable to them and with the quality standards appropriate to their intended use by not endangering human health or causing an unacceptable change in the composition of the food or causing a deterioration in the organoleptic characteristics thereof”

The scope of the Code of Practice includes the storage, handling and transport of products whether on or off-site. This includes all packaging forms – octabins, big bags, Form Fill and Seal (FFS) bags, or bulk. Building on this the following scope can be drawn:

1. Quality assurance system and quality policy
2. Management leadership and personnel
3. Hygiene policy
4. Documentation, labelling, document retention and traceability
5. Management of change and contamination prevention
6. Quality control and specifications
7. Complaint handling, product recall and incident management
8. Regular internal and supplier audits

The guidance provided here is based on control and compliance with relevant European regulations. More onerous applicable national regulations must be complied with and take precedence over the guidance provided here.
1. Responsibilities

1.1 Definitions

INEOS
Shortform for INEOS Olefins and Polymers

Operator
The company carrying out storage and handling related activities whether at INEOS, own or independent 3rd Party premises. In the circumstance of subcontracted activities the company engaged in direct contract with INEOS remains the operator.

Carrier
The company selected by the Shipper to undertake transport of the goods between point of loading and point of unloading. In cases where the INEOS contracted carrier elects to subcontract all or a portion of the transport the carrier remains responsible for all aspects of the movement.

Shipper
In this case INEOS.

Supplier
The company contracted to provide materials.

LSP
Alternative for Operator, Carrier or Supplier.

Agreements
The collective set of documents that form a contract between INEOS and the Carrier/Supplier/LSP.

1.2 Management Responsibilities

It is incumbent on the management teams for all Operators, Carriers and Suppliers to ensure strict adherence by their organisations to the requirements and expectations set out in this Code of Practice.

As a minimum ALL INEOS supply chain activities must meet Food Contact cleanliness requirements. Any activities requiring additional cleanliness protocols will be separately communicated; acceptance to undertake an activity is agreement to conform to INEOS requirements.
A major risk in our Supply Chain activities is contamination of product by odour or foreign material. INEOS believes that the systematic application of Good Manufacturing Practice (GMP, EC 2023-2006) on the critical operations of loading, transportation, storage and delivery will reduce this risk to an acceptable level.

A HACCP-type activity review is strongly recommended to support sound GMP adherence. The three main expectations for GMP implementation are:

- Establish, implement and ensure adherence to an effective and documented Quality Assurance system (avoid the risk)
- Establish and maintain an effective Quality Control system
- Establish and maintain appropriate documentation (available for 5 years) about actions and measures taken.

It is expected that Management responsibilities for GMP implementation are defined, assigned and documented; this is integral to any Management control framework.

All operational, technical and administrative employees are expected to be aware of and competent in the execution of necessary GMP requirements. Hence, training and competency assessment of personnel must include GMP.

1.3 Operational Requirements

1.3.1 Procured Services

INEOS and its partners are involved in the loading, transportation, storage and delivery of products globally. The control expectations for these activities is formalised through the INEOS contract structure, see below.
Commercial terms are documented in the Purchase Agreement supported by INEOS Terms and Conditions.

Operational requirements are documented in the Service Level Agreements, extracts of which are contained in the attached Appendices. These extracts describe WHAT needs to be achieved however it is not the general intent of INEOS to be prescriptive in HOW these needs are met, that is the responsibility of the Supplier, Operator or Carrier.

1.3.2 Procured Materials
INEOS and its partners procure various materials used in the transport, storage or handling of product. The sourcing and supply of these materials must ensure INEOS GMP expectations are met. That is to say, items in direct contact with INEOS product must retain Food Contact status. Items not in direct contact must not compromise Food Contact status e.g. through migration.
2. Assurance

Quality Assurance shall include monitoring of implementation and respect of GMP and propose necessary corrective or improvement measures.

Regular internal or external audits should be in place to monitor the implementation and respect of good manufacturing practice. These should be supplemented where appropriate by interim self-assessments as part of a continuous improvement ethos.

Specifically INEOS have implemented the following audit regime.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose</th>
<th>Frequency</th>
<th>Audit Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Site Operations [Ineos Operator]</td>
<td>Internal audit of site based activities.</td>
<td>Every 3 years</td>
<td>Product Stewardship</td>
</tr>
<tr>
<td>2 Site Operations [Operator]</td>
<td>Local QA internal audit of site based activities.</td>
<td>Every 3 years</td>
<td>Local QA manager</td>
</tr>
<tr>
<td>3 Off-site Operations [Operator]</td>
<td>Detailed review of systems, processes and procedures.</td>
<td>Every 2 years</td>
<td>Contract Manager</td>
</tr>
<tr>
<td>4 SQAS Road [Carrier]</td>
<td>Independently benchmark performance against industry-wide criteria.</td>
<td>Every 3 years</td>
<td>Independent 3rd Party</td>
</tr>
<tr>
<td>5 SQAS Cleaning Station</td>
<td>Independently benchmark performance against industry-wide criteria.</td>
<td>Every 3 years</td>
<td>Independent 3rd Party</td>
</tr>
<tr>
<td>6 Contract Placement / Renewal</td>
<td>Ascertain base-line performance.</td>
<td>By the event</td>
<td>3rd Party self-declaration</td>
</tr>
<tr>
<td>7 Issue / crisis management</td>
<td>Investigate performance against specific criteria.</td>
<td>By the event</td>
<td>INEOS nominated.</td>
</tr>
</tbody>
</table>

Records of and results from all audits conducted must be maintained by the Audit Lead for a minimum of five years.

Role of Audit Lead: To ensure the audit takes place and relevant actions are progressed. It may be that the audit lead invites relevant specialists to participate in the audit.
Appendices

A. SLA common text
B. Bulk SLA addendum
C. Pack SLA addendum
D. Rail SLA addendum
E. Short Sea Shipping SLA addendum
F. Terminal SLA addendum
G. Site Audit Protocol
H. 3rd Party Audit Protocol
I. Certificates of Conformity
A. SLA common text

Ineos Olefins and Polymers products are already used in a wide range of demanding applications e.g. food contact. Ineos Olefins and Polymers has a stated aim of increasing market share in other differentiated applications, two key growth markets for Ineos are organoleptic and medical applications, both these segments have demanding cleanliness requirements.

Framework

As a minimum ALL Ineos Olefins and Polymers activities/services must meet Food Contact cleanliness requirements. Any activities/services requiring additional cleanliness protocols will be separately communicated; acceptance of an order is agreement to conform to Ineos Olefins and Polymers requirements.

A major risk in our Supply Chain activities is contamination of our product by odour or foreign material. Ineos Olefins and Polymers believe that the systematic application of Good Manufacturing Practice (GMP, EC 2023-2006) on the critical operations of loading, transportation, storage and delivery will reduce this risk to an acceptable level. A HACCP-type activity review is strongly recommended to support sound GMP adherence. The three main expectations for GMP implementation are:

- the LSP shall establish, implement and ensure adherence to an effective and documented Quality Assurance system (avoid the risk)
- the LSP shall establish and maintain an effective Quality Control system (check points)
- the LSP shall establish and maintain appropriate documentation (remaining available for 5 years) about actions and measures taken.

Assurance

To support robust GMP implementation the LSP will be able to provide on request:

- The full traceability of equipment and products that are transported by the LSP. This may or may not be specific to a particular activity/service. Documentation retention time - 5 years.
- Demonstration that Food-contact requirements such as defined by the Regulation (EC) are included in its Declaration of Quality Policy.
- Evidence that the LSP’s personnel are aware of requirements for the loading, transportation, storage and delivery of all Ineos Olefins and Polymers products. This includes relevant personnel for all sub-contractors utilised on Ineos Olefins and Polymers business.
• Evidence that adopted processes and practices prevent contamination by substances that could alter the food-contact status of stored / transported products, in particular:
  o Other products previously stored / transported by means of appropriate cleaning procedures
Non food-contact approved substances from the environment or contained in utilities (water, compressor oil, air,…) or tools (conveyor belts…) used during storage / transportation.
B. Bulk SLA addendum

Expectations

Accordingly, the LSP must comply with the following requirements for ALL movements undertaken on behalf of Ineos Olefins and Polymers.

- All silo-tank vehicles must be clean, odourless, dry and fit for purpose when presented for loading. The LSP must present the completed cleaning certificate to the reception area on Site. Without the cleaning certificate (EFTCO preferred), issued and filled in by the cleaning station, the transport vehicle will not be loaded.

- All containers and final delivery SDU trailers presented to site must be clean, odourless, dry and fit for purpose. The LSP must present a Loading Checklist for the container and SDU to the reception area on Site. Without the Loading Checklist, issued and filled in, the equipment will not be loaded. The Loading Checklist must confirm, as a minimum, the cleaning and checks undertaken prior to presentation. The Loading Checklist must be retained by the LSP.

- In addition to the above for container deliveries the LSP must complete an Unloading Checklist for the container and final delivery SDU. The Unloading Checklist must confirm, as a minimum the cleaning and checks undertaken prior to discharge. The Unloading Checklist must be retained by the LSP.

- Cleaning of equipment must take place in an SQAS assessed cleaning station. If such a cleaning station is not available within a reasonable distance of either the last unloading location or the intended loading location, cleaning in a non-SQAS assessed cleaning station may be permissible subject to Ineos Olefins and Polymers’ agreement (obtained from despatch site).

- All cleanliness requirements also apply to hoses, hose boxes, fittings, valves, pipes etc on a vehicle/trailer. All these ancillaries must be clean, odourless, dry and fit for purpose.

- All cleaning fluids/mediums must be food contact approved.

- All cleanliness requirements should appear on the European Cleaning Document by using the correct appropriate and following codes:

Cleaning, inspection and codes on cleaning document agent codes

- The cleaning and inspection requirements for silo tankers are described in the CEFIC/ECTA Guidelines for cleaning Dry bulk polymer transport tanks LSP’s are expected to fully meet these requirements. Drivers must be trained in the application of these guidelines.
Ineos Olefins and Polymers reserve the right to inspect a vehicle and associated equipment for dryness, odour, cleanliness and fit for purpose at any time.

Meeting these COP requirements remains the LSP’s responsibility irrespective of Ineos inspection findings.
Prior Cargos

Experience has demonstrated that it is very difficult to satisfactorily clean equipment after carrying certain cargos hence Ineos Olefins and Polymers has defined rules placing restrictions on previously transported products. The LSP accepts and commits to conform to these rules, detailed below, when transporting Ineos Olefins and Polymers products:

1. Banned Prior Cargos

In order to avoid any issue of contamination on the Ineos Olefins and Polymers’ delivered product, the following products are banned from the transportation equipment offered through LSP’s fleet of bulk tankers / containers i.e. if the LSP intends to carry any of these products there must be complete segregation of equipment including ancillaries. A clear and auditable process by which this segregation is achieved must be documented.

<table>
<thead>
<tr>
<th>Banned Prior Cargos</th>
<th>Other names or CAS n°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adipates</td>
<td>Various</td>
</tr>
<tr>
<td>Animal Flour</td>
<td>Various</td>
</tr>
<tr>
<td>Animal/Fish Feed</td>
<td>Various</td>
</tr>
<tr>
<td>Asbestos</td>
<td>CAS n° 1332-21-4</td>
</tr>
<tr>
<td>Azodicarbonamide</td>
<td>Diazenedicarboxamide</td>
</tr>
<tr>
<td></td>
<td>1,1'-Azobisformamide CAS n° 123-77-3</td>
</tr>
<tr>
<td>Coal Combustion ByProducts</td>
<td>CCB, boiler slag, fly ash, various</td>
</tr>
<tr>
<td>Methionines</td>
<td>CAS n° 59-51-8, 63-68-3, 348-67-</td>
</tr>
<tr>
<td></td>
<td>Pure: CAS n° 104-40-5</td>
</tr>
<tr>
<td></td>
<td>Industrial grade: CAS n° 84852-15-3</td>
</tr>
<tr>
<td></td>
<td>Ethoxylated nonylphenols: CAS n° 68412-53-3</td>
</tr>
<tr>
<td>Nonylphenols</td>
<td>Various</td>
</tr>
<tr>
<td>Phthalates</td>
<td>Superabsorber, CAS n° 9003-01-4</td>
</tr>
</tbody>
</table>

2. Critical Prior Cargos

These cargos are considered critical due to their potential to contaminate INEOS Olefins and Polymers products. The LSP is committed to
Avoid use of tankers / containers dealing with these products when running Ineos Olefins and Polymers business;

In case one of the products listed below was previously loaded (2 previous loads) in the tanker / container, the LSP must inform in advance of arrival the INEOS Olefins and Polymers despatch site.

<table>
<thead>
<tr>
<th>Product</th>
<th>Other names or CAS n°</th>
<th>INEOS loading site action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borate &amp; perborate</td>
<td>Mainly starch borate 68511-18-2, calcium per borate 54630-47-6</td>
<td>Double-check of unloading pipes at plant (risk of agglomeration / crusting)</td>
</tr>
<tr>
<td>Soda ash</td>
<td>Sodium carbonate</td>
<td>Double-check of unloading pipes at plant (risk of agglomeration / crusting)</td>
</tr>
<tr>
<td>Sulphates</td>
<td>Various</td>
<td>Double-check of unloading pipes at plant (risk of agglomeration / crusting)</td>
</tr>
<tr>
<td>Gypsum/Chalk/limestone/plaster</td>
<td></td>
<td>Double-check of unloading pipes at plant (risk of agglomeration / crusting)</td>
</tr>
<tr>
<td>Cements</td>
<td></td>
<td>Double-check of unloading pipes at plant (risk of agglomeration / crusting)</td>
</tr>
</tbody>
</table>

If tank sanitization has been carried out as part of the cleaning procedure the LSP must inform in advance of arrival the INEOS Olefins and Polymers despatch site.
C. Pack SLA addendum

Expectations

The LSP must comply with the following cleanliness requirements:

- All vehicles/equipment coming to site must be clean, odourless and fit for purpose.
- Ineos Olefins and Polymers reserve the right to inspect a delivery vehicle and associated equipment for product cleanliness. However, vehicle cleanliness remains the LSP’s responsibility.
D. Rail SLA addendum

None
E. Short / Deep Sea Shipping SLA addendum

None
F. Terminal SLA addendum

Many Ineos Terminals provide services for both Pack and Bulk activities and as such the expectations outlined in Appendices A, B and C are key to the successful execution of Agreements. Operation of a Terminal creates a number of specific concerns that INEOS would like to highlight.

The LSP / Supplier must with best endeavours comply with the following requirements:

- All activities that break containment must be conducted under controlled, proceduralised conditions that require and ensure no contamination occurs.

- Packaging Components need to be inspected on receipt and managed whilst in stock to ensure no deterioration or damage occurs. E.g. no mould on pallets

- Packaging hall areas will be managed to minimise the opportunity for insects to be trapped under the hoods of pallets/octabins.

- All outbound Pack goods will be inspected prior to despatch to ensure they are clean e.g. free of insect, bird droppings, dirt etc
### G. Site Audit Protocol

#### Silo-Trucks

<table>
<thead>
<tr>
<th>Question</th>
<th>Y/N</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do all trucks arrive with a cleaning certificate from an SGS/assessed cleaning certificate?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>(or a European cleaning document (EFTCO) from a station approved by the site logistics manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is every truck always cleaned before each loading? If not, what rules apply?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are the cleaning certificates always entered in the site maintenance log?</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Are all trucks, fittings and hoses inspected prior to loading?</td>
<td>Y/Y</td>
<td></td>
</tr>
<tr>
<td>Do you inspect other items, e.g. air filter, manometer etc?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Is the tank sealed with hoses tagged after loading?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are the fittings/hoses or hoses sealed with hose tag(s) after inspection?</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Do you include serial numbers on delivery paperwork?</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Do you have any prior cargo audits?</td>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>

#### Bulk Containers incl Export

<table>
<thead>
<tr>
<th>Question</th>
<th>Y/N</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do all trucks arrive with a cleaning certificate incl reference to the liner number?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are all containers inspected externally to verify Fit-for-Purpose?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are all reception staff and loaders aware of liquid requirements for transport to be clean, dry and odourless?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are the container, fittings and hoses inspected prior to loading?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Is this container inspected prior to loading?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are the fittings/hoses or hoses sealed with hose tag(s) after loading?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Do you include serial numbers on delivery paperwork?</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Do you have any prior cargo audits?</td>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>

#### Pack Trailers

<table>
<thead>
<tr>
<th>Question</th>
<th>Y/N</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all FTL trucks xxxx empty?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Do all LTL trucks xxxx empty?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are all reception staff and loaders aware of liquid requirements for transport to be clean, dry and odourless?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are all trailers inspected for cleanliness and odour?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are MSDS's checked for cargo already on truck to ensure there is no risk of contamination?</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

#### Pack Containers incl Export

<table>
<thead>
<tr>
<th>Question</th>
<th>Y/N</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do all trucks arrive with a cleaning certificate?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Are all reception staff and loaders aware of liquid requirements for transport to be clean, dry and odourless?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Is the container inspected prior to loading?</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>Are the container sealed with hose tag(s) after loading?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Do you include serial numbers on delivery paperwork?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Have you conducted any prior cargo audits?</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
# H. 3rd Party Audit Protocol

## i. General Questions

<table>
<thead>
<tr>
<th>Topic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 Quality system and policy</strong></td>
<td>1.1. There is an effective quality system involving the active participation of management and personnel.</td>
</tr>
</tbody>
</table>
| **2.0 Management leadership and personnel** | 2.1. Management responsibilities for "good manufacturing practice" implementation are assigned, defined and documented.  
2.2. Training of personnel shall include training on "good manufacturing practice". |
| **3.0 Hygiene policy** | 3.1. Depending on the position in the supply chain, adequate and appropriate hygiene measures are maintained for personnel, warehouses and transportation.  
3.2. Depending on the position in the supply chain, a pest control program should be maintained or the justification for lack of one should be documented. |
| **4.0 Storage/Transportation** | 4.1. Contamination prevention  
4.1.1. There is an adequate contamination prevention procedure based on risk assessment.  
4.1.2. The equipment and set up are adequate to preclude cross-contamination between materials for food contact and materials for non-food contact or their ingredients.  
4.1.3. There are effective transition procedures such as cleaning or changing to avoid cross contamination when transitioning from non-food contact to food contact products (pipes, silos, etc.)  
4.1.4. Procedures are in place to assure that transfer, packaging or loading operations are conducted in such a way as to avoid product contamination.  
4.1.5. Water that comes into contact with the FCSA equipment should be of suitable quality.  
4.2. Transportation  
4.2.1. Silos and bulk trucks can either be dedicated equipment and receive only food contact materials or alternatively there are effective measures or procedures (such as cleaning or transition procedures) to ensure the FCSA integrity of the containers. |
| **5.0 Quality Assurance** | 5.1. Quality Assurance shall include monitoring of implementation and respect of GMP and prepare necessary corrective / improvement measures. |
| **6.0 Sub-contracting** | 6.1. Any contract out operation linked thereto (such as e.g. haulage, warehousing) shall be subject to a written contract and should be performed according to good manufacturing practice comparable to the one assured by the own operation.  
6.2. There is a procedure in place to ensure regular external audits in order to monitor the implementation and respect of good manufacturing practice. |
| **7.0 Complaint handling and product recall** | 7.1. There is a system implemented for recording and investigating complaints including product recall support if needed. The complaint investigation shall result in recommendations for corrective actions.  
7.2. There is a contamination response procedure in place. |
| **8.0 Internal Audits** | 8.1. There is a procedure in place to ensure regular internal audits or self-assessments in order to monitor the implementation and respect of good manufacturing practice. |
ii. Haulage Specific Questions

<table>
<thead>
<tr>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 Design</strong></td>
</tr>
<tr>
<td>1.1 All equipment designed to prevent dust, spouts or material build up.</td>
</tr>
<tr>
<td>1.2 All equipment allowed to ensure cleaning and subsequent inspection for cleanliness.</td>
</tr>
<tr>
<td>1.3 Metal surfaces in contact with product to be non-rusting, abrasion resistant and free of coatings.</td>
</tr>
<tr>
<td>1.4 Transport air will be dry and filtered to 5 microns or better. Filtration required on inlet and outlet of blower.</td>
</tr>
<tr>
<td>1.5 The pneumatic supply will be fitted with suitable safety and non-return valves.</td>
</tr>
<tr>
<td>1.6 Compressors will be guaranteed OIL-FREE by design.</td>
</tr>
<tr>
<td>1.7 Compressor site and drainage will be food contact approved.</td>
</tr>
<tr>
<td>1.8 Lockable hose boxes will be provided on all units.</td>
</tr>
<tr>
<td>1.9 Hoses to be fitted with food contact approved neoprene or equivalent. (Colour to suit product to prevent contamination).</td>
</tr>
<tr>
<td>1.10 Hoses, gaskets and flexible air lines will be of heat resistant, food contact approved material.</td>
</tr>
<tr>
<td>1.11 All materials in contact with product subjected to ensure no contamination risk.</td>
</tr>
<tr>
<td>1.12 Air pressure indication will be provided to monitor air pressure during discharge.</td>
</tr>
</tbody>
</table>

| **2.0 Maintenance** |
| 2.1 All maintenance, including replacement materials, shall be carried out in line with the OEM recommendations (as a minimum) to ensure that all design and operating requirements are maintained. |
| 2.2 Maintenance records will be held for a minimum of 3 years and made available to clients on request, including records of transport air filter changes. |

| **3.0 Cleaning Activities** |
| 3.1 Product contact surfaces to be cleaned between every delivery and loading unless prior written (Face) approval has been received. |
| 3.2 All cleaning tasks must comply with food contact regulations. |
| 3.3 All equipment to be presented in a dry and washable state. |
| 3.4 All tank cleaning to include fittings and hose, including hose/ing. Cleaning must be carried out at an ISGAS assessed station and a European standard cleaning certificate showing cleaned equipment made available for the site prior to loading. Non-ISGAS cleaning stations cannot be used with prior written approval from ISGAS. |
| 3.5 All containers (SSU's) to be presented at site with a unique certificate confirming the equipment incl. hose/ing is clean, decontaminated, dry and fit for purpose. |

| **4.0 Materials** |
| 4.1 BEI Liners will be manufactured in accordance with and certified as Food Contact approved. Liner traceability is a key requirement. |
| 4.2 All materials e.g. bags, gaskets, liners will be stored in such a way as to maintain their food contact approved status. |

| **5.0 Routine Operations** |
| 5.1 Driver verifies cleanliness of equipment and verifies in the food contact prior to commencing offloading activity. |
| 5.2 Tarpaulins are sealed after loading with temper evident seals - hatches and tarpaulin. The series number is recorded on the CMR. |
| 5.3 BS5834 hatchings are sealed after loading with temper evident seals. The series number is recorded on the CMR. |
| 5.4 BEI Liners - each liner has a unique identifier allowing manufacturing cycle traceability. This identifier is noted on the cleanliness certificate. |
| 5.5 Hoses are sealed and tagged on the hose box is locked after loading. (No number requirement on the hose seals.) |
| 5.6 Planning teams / drivers are fully compliant with these critical risk cargo list. System and/or procedural checks are in place to ensure 100% compliance. Refer to COP for applicable cargos. |
| 5.7 Planning teams / drivers are fully compliant with these critical risk cargo list. System and/or procedural checks are in place to ensure 100% compliance. Refer to COP for applicable cargos. |
| 5.8 Carriage records are maintained for minimum 5 years. These will be made available to clients on request. |
| 5.9 Note: Dedicated or declared equipment specific to certain receivers is controlled separately but must as a minimum meet all GMP requirements. This document does not replace the requirements identified for said receivers. |

| **6.0 Non-Routine Operations** |
| 6.1 Drivers are aware that they must not undertake non-routine activities which may lead to potential contamination of the product without seeking prior approval from receivers. |
I. Certificates of Conformity

i. Container Deliveries

Certificate of Conformity

Cleanliness of Bulk Containers

We hereby certify that all INEOS Olefins & Polymers Europe bulk deliveries made by Bulk Container (B.I.B., 30’ container) conform to the following requirements.

- Prior to loading the Bulk Container must have been internally cleaned and a new single-use liner fitted.
- Presence of a new liner is confirmed in writing to the loading terminal by the driver. The truck will not be accepted for loading if the driver does not provide confirmation of cleaning and fitment of a new liner.
- All discharge trailers are fitted with a 5μ filter which is inspected / cleaned at least once every eight weeks. This is normally undertaken during routine trailer maintenance.
- Prior to discharge the driver must check cleanliness of all equipment to be used. The driver records this check – either on the CMR or on a separate checklist.
- Documents relating to the cleanliness checks (pre-loading and pre-discharge) will be archived for a minimum of 3 years and are available on request in case of external audit.

These requirements apply to all resins delivered by INEOS Olefins & Polymers Europe to your facilities.

FCA deliveries

INEOS Olefins & Polymers Europe inspect all Bulk Containers for cleanliness however responsibility for cleanliness remains with the customer for an FCA delivery.

Philippe Neirynck
Logistic Operations Manager O&P North
ii.  **Silo-tank Deliveries**

**Certificate of Conformity**

**Cleanliness of Bulk Silo-Tankers**

We hereby certify that all INEOS Olefins & Polymers Europe bulk deliveries made by Silo-Tank conform to the following requirements.

- The Silo-Tank must have been cleaned after the previous delivery. The only exception is when the previous load was the same product and grade.

- A valid cleaning certificate (European Cleaning Document (ECD)) for all Silo-Tankers is mandatory. The truck will not be accepted for loading if the driver does not present a valid cleaning certificate.

- INEOS Olefins & Polymers Europe audit Silo-Tanker internal cleanliness and dryness. This is completed by the loading terminal prior to loading. Accessories on the truck (e.g., flexible hoses, 5μ filter) are also checked.

- Cleaning certificates are archived for a minimum of 3 years and are available on request in case of external audit.

These requirements apply to all resins delivered by INEOS Olefins & Polymers Europe to your facilities.

**FCA deliveries**

INEOS Olefins & Polymers Europe inspect all Silo-Tanks for cleanliness however responsibility for cleanliness remains with the customer for an FCA delivery.


---

Philippe Neirynck
Logistic Operations Manager O&P North
Contacts

Philippe Neirynck
Logistic Operations Manager
Ineos Olefins & Polymers North
Scheldelaan 482
2040 Antwerpen
BELGIUM
Landline: +32 (0) 3 2103600
Mobile: +32 (0) 475 601293

Lynne Brown
Polymers Logistic Operations Manager
Ineos Olefins & Polymers UK
PO Box21, Bo’Ness Road
Grangemouth
FK3 9XH
United Kingdom
Landline: +44 (0) 1324 493043
Mobile: +44 (0) 7771 505807

Jean Marie Tur
Logistics Procurement Manager
Ineos Olefins & Polymers South
13117 Lavera ,
France
Landline: +33 4 42 35 8659

Luc Van De Velde
HSE Manager,
Ineos Olefins and Polymers
Amocolaan 2A
2440 Geel
Belgium
Landline: +32 (0) 3210 3647
Mobile: +32 (0) 475 272331
Reference Documents

Good Manufacturing Practices, EC 2023-2006

Materials and Articles intended to come into Contact with Food, EC 1935/2004

The Plastic Materials and Articles in Contact with Food Regulations 1992, UK Statutory Instrument 1992 No. 3145

EFTCO Guidelines for the use of European Cleaning Document.

ECTA Guidelines for the Safe Loading and Unloading of Road Freight Vehicles. (BBS)

ECTA Best Practices Guideline Rotary Valve and Associated Equipment, issue 1 November 2013

SQAS Road Assessment

SQAS Tank Cleaning Station Assessment

Guidelines for Good Manufacturing Practice for Plastic Materials and Articles Intended For Food Contact Applications, APME April 2007 update.
INEOS Olefins and Polymers Customer Support

For further information about INEOS Olefins and Polymers products or technical advice about product handling, please contact your local Regional Sales Representative or the INEOS Olefins and Polymers Customer Service Center in Köln.

This document and other Logistics HSE information of INEOS Olefins and Polymers can be found on the following web site: http://www.logisticsmatters.info/

Exclusion of Liability

Information contained in this publication is accurate to the best of the knowledge of INEOS and its subsidiary companies. Any information or advice obtained from INEOS Olefins and Polymers otherwise than by means of this publication and whether relating to INEOS Olefins and Polymers materials or other materials is also given in good faith. However, it remains at all times the responsibility of the 3rd Party / customer to ensure that such materials are suitable for the particular purpose intended. Insofar as materials not manufactured or supplied by INEOS Olefins and Polymers are used in conjunction with or instead of INEOS Olefins and Polymers, the customer should ensure that he has received from the manufacturer or supplier all technical data and other information relating to such materials. INEOS Olefins and Polymers accepts no liability whatsoever (except otherwise 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 Olefins and Polymers materials or the use of INEOS Olefins and Polymers materials in conjunction with such other materials.

Version: 1
Issue date: March 2011
Prepared by: Supply Chain, INEOS Olefins and Polymers

Version 5
Issue date: October 2014
Prepared by: Peter O'Reilly, Supply Chain, O&P UK