syngenta

Safety and Security Checks for Tank Containers

HSE CoP 613

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1. Purpose

The purpose of this Code of Practice is to define the safety and security checks that are necessary for the safe and secure transport of Syngenta products in tank containers. These checks will:

- Maintain integrity of tank containers and protect against the introduction of unauthorized material and/or persons
- Ensure that tank containers carrying Syngenta products are in the best technical condition throughout the complete journey
- Ensure compliance with the requirements of Dangerous Goods legislation, especially the IMDG code
- Enable intervention where the transport does not comply with the regulations or where it puts safety, security or the environment at risk

2. Definitions

Dangerous Goods	Goods that have certain hazards that are defined in the Dangerous Goods regulations applicable to the mode of transport e.g. IMDG code
Designated person	A responsible, designated representative of the loading/unloading site who maintains a position of trust (e.g. security personnel) and has received appropriate training in the application of high security seals.
High security seal	A seal, complying with the current edition of ISO 17712 that is intended to indicate if the load has been tampered with during its journey.
IMDG code	International Maritime Dangerous Goods code. An international agreement that covers the transport of dangerous goods by sea
Tank container	A portable tank container used to transport liquids. The Tank Container is fitted to a frame that complies with standardized dimensions, allowing multimodal use.Tank container is a generic term that is used to describe a number of specific size of tank container e.g. Isotank (20 ft frame), Swap body (30 ft frame)

3. Scope

The carriage of Syngenta products, raw materials[1] etc., in tank containers under a Syngenta contract or spot agreement.
All Syngenta sites, toll manufactures and suppliers who load or discharge materials into or from a tank container which will be transported under a Syngenta contract or spot agreement.
All Syngenta sites that discharge materials from a tank container transported under a contract or spot agreement arranged by a supplier.
All Syngenta personnel who establish or manage contracts with 3rd party logistics service providers that involve the carriage of bulk liquids in Tank Containers.

[1] This includes products, raw materials etc. that are not classified as Dangerous Goods and those that are classified as dangerous Goods.

4. Accountabilities and Responsibilities

Syngenta site, or toll manufacturer, or Logistics	Establish local work instructions and procedures that implement this Code of Practice
Logistics procurement	Communicate the requirements of this Code of Practice to tank container operators
Procurement	Communicate the requirements of this Code of Practice to suppliers who load tank containers that will be carried under a Syngenta contract or spot agreement.

5. Mandatory Principles or Standards

5.1 Legal

The requirements of the Dangerous Goods regulations, as they apply to the carriage of bulk liquids in tank containers, must be complied with at all times.

5.2 Process requirements

Loading of tank containers

- All personnel who are involved with the loading of tank containers must be suitably trained.
- Pre-trip inspection checks (see Appendix 1) must be carried out before and after the loading to ensure that the carriage complies with legal and environmental requirements. The completed checklist must be archived, in compliance with local legal requirements, but for a minimum of 12 months.
- A tank container must not be loaded when the next regulatory inspection is due to take place before the planned discharge date and return of the empty tank container.
- Personal Protective Equipment (PPE), as defined by the site, must be worn for all operations carried out on the tank container or their fittings
- A tank container must only be loaded with products whose carriage is approved and which do not weaken or react dangerously with the materials of the shell, equipment and protective linings.
- Appropriate measures must be taken during loading of a tank container to prevent the release of gases and vapours.
- The minimum and maximum legal filling limits must be complied with (non-baffled Tank Container) i.e. <20% or >80-95%. These limits apply to both Dangerous Goods and non-Dangerous Goods
- The gross weight must not exceed the lowest of
    - the maximum design gross weight marked on the tank container or indicated on the tank container certificate or
    - the maximum weight permitted by the transport operator or national authorities for carriage up to the final destination
- A tank container must be thoroughly checked by the loading site after filling to ensure that all openings are correctly closed (especially the dip tube)

  - Closed and leak proof means that all openings and outlets for loading and discharge (whether or not used during the last loading or discharge operation) are closed in such a way that they cannot be opened by hand

- The exterior of a tank container must be free from spillage or residue of previous cargos.
- Where a product is shipped under a nitrogen blanket, the tank must be labelled by the manlid and discharge valve to indicate that an inert atmosphere is present. If the tank is also pressurised, this must be indicated.
- Prior to dispatch, all openings of a tank container must be sealed with high security seals that comply with the current edition of ISO 17712
- Seals must only be attached by a designated person
- Access to seals must be strictly controlled and must be issued in random order.
- Seals must be stored in a secure location (locked cabinet, safe etc.) prior to use
- A log must be maintained in order to account for all seals under the control of the loading site. Periodic inventories of seals and the seal use log must be conducted to ensure that all seals are accounted for.
- All Bills of Lading, dangerous goods declarations or other transport documents (including electronic data transmissions) must be complete and include all seal numbers used for the Tank Container.

Discharging Tank Containers

- All personnel who are involved with the discharging of tank containers must be suitably trained.
- Before accepting a tank container, the discharging site must verify the seals numbers recorded on the documentation against the seals on the tank container. Any discrepancy must be rectified before the tank container is accepted. If the discrepancy cannot be rectified within a reasonable period of time, the tank container must be rejected.
- Before discharging a tank container into a bulk storage tank, the identity of the tank container's contents must be positively confirmed as being correct.
  - The tank container number quoted on the documentation must match exactly the number on the tank container
  - For dangerous goods, the dangerous goods information on the documentation must match the placards and marks on the tanks
- Personal Protective Equipment (PPE), as defined by the site, must be worn for all operations carried out on the tank container or their fittings
- Appropriate measures must be taken during the discharge of Tank Container to prevent the release of gases and vapours.
- Where tanks are pressurised or materials have been loaded under an inert atmosphere, appropriate measures must be taken during the discharge of the tank container to protect personnel.
- The exterior of the tank container must be free from spillage or residue before they leave the discharge site
- An empty, uncleaned tank container must be closed in the same manner and be leak proof to the same degree as though they were full.
- Prior to dispatch of the empty, uncleaned tank container, all openings must be sealed with high security seals that comply with the current edition of ISO 17712.
- Seals must only be attached by a designated person.

- Access to seals must be strictly controlled and must be issued in random order.
- Seals must be stored in a secure location (locked cabinet, safe etc.) prior to use
- A log must be maintained in order to account for all seals under the control of the loading site. Periodic inventories of seals and the seal use log must be conducted to ensure that all seals are accounted for.

Operator responsibilities

- Upon receipt of the tank container, operators must verify the accuracy of seal numbers contained on bills of lading, dangerous goods declarations or other documentation.
- Operators must establish, and ensure that their subcontractors establish, verifiable security systems for a tank container storage and handling facilities, depots and conveyances operated by the carriers in order to prevent improper manipulation and transportation of the tank container
- Operators must establish procedures for reporting any incidents affecting the tank container or discrepancies or anomalies relating to seal integrity to Syngenta immediately.

Incident reporting and follow-up

Rejection of an unsafe tank container and seal number discrepancies must be reported and investigated via the Distribution Safety reporting process (see HSE Guidance GL 901_7 Performance Reporting Distribution Safety).

6. Appendix

Pre-trip inspection checklist for tank containers

For the transport of chemicals including dangerous goods.

For goods not classified as dangerous goods according to national and/or international regulations, paragraphs 2.1, 2.2 and 3.9 are not relevant. In the event of language problems, this check-list should be made out as best as possible

1.	**Shipment Details**			
Shipment Order Number			Final Destination	
Name of product			Material / AGI-Code	
Quantity				
Vehicle Owner				
Vehicle Driver (First Name)			Vehicle Driver (Last Name)	
Driver's valid ID				
Vehicle Registration			Trailer Number	
Tank Container Number				
Rail-Car Number			Packing Group	
UN-Number			Marine Pollutant	Yes ☐ No ☐
Primary Hazard			Subsidiary Hazard	
Proper Shipping Name				

The Tank Container should not be filled if it does not comply with all of the following legal prescriptions. The Dangerous goods safety advisor should also be informed immediately.

2.	**Documentation**	
2.1	Has the carrier provided the appropriate emergency instructions as required by applicable legal requirements, national and international codes and?	YES ☐ NO ☐
	Languages provided:	
2.2	Are all the necessary transport documents available, - e.g. Dangerous Goods Declaration and Container Packing Certificate? **<u>Note:</u> The collection order does not qualify as a Transport Document**.	YES ☐ NO ☐

3.	**Tank Container Check – ☐ after filling / ☐ after discharge**	
3.1	Tank container test date and CSC approval are valid and data plate legible	YES ☐ NO ☐
3.2	No apparent damage to shell or frame affecting safety	YES ☐ NO ☐
3.3	No markings that indicate that the tank container is intended for carriage of foodstuffs.	YES ☐ NO ☐
3.4	Insulation / cladding is securely attached and is undamaged	YES ☐ NO ☐
3.5	Walkway inspected and confirmed in correct condition	YES ☐ NO ☐
3.6	Is the tank container filled between 80% and 95% volume, or less than 20% (non-baffled)	YES ☐ NO ☐
3.7	The outside of the tank container and chassis is clean and free from chemical contamination and all labels from previous load removed (unless dedicated tank)	YES ☐ NO ☐
3.8	The manlid is closed, sealed, and bolts intact	YES ☐ NO ☐
3.9	All flanges, valves, gauges, gaskets, and caps secure and bolts tightened including steam inlet and outlet	YES ☐ NO ☐
3.10	Have primary and subsidiary hazard class placards and 4-digit UN numbers been mounted on all four sides of the tank container (where required)? Has a marine pollutant mark been mounted on all four sides of the means of transport (where required)? Has the tank container been marked with the proper shipping name, incl. technical name where required, on both sides? **All above require to be placed a minimum of 5 feet (1.5m) from the bottom of the tank container**	YES ☐ NO ☐ YES ☐ NO ☐ YES ☐ NO ☐
3.11	If a nitrogen blanket has been applied, have labels been applied by the discharge valve and manlid	YES ☐ NO ☐
3.12	Are all openings to the tank container closed and secured with a high security seal? N.B. Check all openings, even those that have not been used during loading/discharge	YES ☐ NO ☐

3.13	Seal-Nos. **Tank ontainer Security** Tank container integrity must be maintained to protect against the introduction of unauthorized material and/or persons. At point of loading, procedures must be in place to properly seal and maintain the integrity of the tank container. High security wire seals must be affixed to all tank container, whether loaded or empty. All seals must meet or exceed the current ISO 17712 standards for high security seals.	
3.14	THE TANK CONTAINER IS SAFE FOR TRANSPORT	YES ☐ NO ☐

4.	**Drivers Declaration**	
4.1	**I confirm that by signing this, I have received the tank container as specified on page 1 of this checklist and also received the correct documentation for the load.**	
4.2	Drivers Name (Please print)	
4.3	Drivers signature	
4.4	Date	

5.	**Shipping Location Representative**	
5.1	Name (Please print)	
5.2	Signature	
5.3	Date	

Remarks:

This Checklist only covers the IMDG-Code requirements for tank containers.

Any other additional checks referring to

- Driver's training
- General vehicle checks
- Equipment checks
- Protection of public and the environment

have to be added according to regional and/or country specific requirements

Additional documents / dangerous goods declarations according to national legal requirements have to be handed over separately.

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