



These specifications apply to the acceptance and loading of tank trailers at LyondellBasell (LYB) facilities, as well as at third-party facilities contracted by LYB

Product Handling Equipment Specification (PHES) - Tank Trailer	
Commodity [select from drop-down]:	Isopropyl Alcohol USP (IPA-USP)
SDS Number:	BE6799
Refer to SDS section 14 for this product's transport classification	
General Tank Truck Information:	
DOT Specification:	MC 307, DOT 407 (Stainless Steel Trailer); dedicated equipment preferred for LYB-arranged deliveries
Insulation:	Preferred, not required
Heating Capabilities:	Not Required
Gasket Material:	Teflon rope, virgin teflon, white buna, or EPDM; dome gasket must give a leak free seal upon completion of loading; dome lid and all openings must have a seal point
Connections/Fittings:	All must be stainless steel with dust caps containing seal points, on all outlets of the trailer, capable of being sealed with a 1/8" cable seal
Liquid Connection:	3" male camlock (quick connect) with sealable dust cap; bottom rear loader (center loader requires approval from LYB); must have seal points; consignee may have specific equipment requirements listed in LYB shipping document
Vapor Connection:	2" male camlock (quick connect) with sealable dust cap, piped to grade-level (GLV) with 2" stainless isolation valve upstream of fitting; inline pressure gauge at grade-level preferred; standard 3/4" top vapor connection may be acceptable with prior approval from LYB
Nitrogen Padding:	Trailer must have 5-7 psig nitrogen pad upon arrival to load, and provide a leak free seal pre-and post-loading
Tank Cleanliness:	Trailer must be clean, dry, and odor free; food grade or kosher cleaning certificate must be presented with the trailer upon arrival to load; trailer must be sealed after wash; if trailer is dedicated, a reload sheet or copy of the prior LYB shipping paper is required as proof that the last contained was LYB material; if trailer is not in dedicated IPA USP service, LYB technical services must review the prior 3 cargoes to approve compatibility; see appended list of acceptable and prohibited prior cargoes; customer pickup (CPU/collect) must be sealed after being cleaned and prior to loading arrival

Strapping Chart:	Required
Hoses:	Hoses are not required to load at LYB facilities; there may be consignee-specific hose requirements listed on the LYB shipping document
Additional Appurtenances:	It is recommended that trailer is equipped with dual inline airline filters (minimum 15 micron; stainless steel) when offloading is to be done by air or nitrogen pressure; if a carrier-arranged pump is required for offloading, pump must be stainless steel to maintain product quality; must have current LYB Shipping Notice document, Transwide call-off, or carrier manifest to be accepted for loading; driver must arrive at pickup point at the designated/pre-scheduled time; driver must always notify LYB of any requested light loading due to potential exceedence of gross legal load weight, or variance from consignee's ordered quantity; for LYB-arranged dedicated equipment, return seals must be sent with the driver, who must ensure they're applied (either by driver or consignee personnel) once offloaded; carrier must review appended list of acceptable and prohibited prior cargoes
Misc. Restrictions:	No additional personnel in tractor unless team driver(s); pets are strictly prohibited
Acceptable Prior Cargoes:	Food or USP grade products (examples: PGUSP, IPA-USP, Glycerine (synthetic only), Ethyl Alcohol (non-SDA or non-denatured only), Phosphoric Acid (food grade only), Sucrose, Fruit Juices or Juice Concentrates, Honey, Sorbitol, Molasses, Vinegar, Potable Water, Polypropylene Glycols (food grade only))
Prohibited Prior Cargoes:	Known contaminants of IPA-USP (examples: Products identified as Carcinogens, Tetratogens, Mutagens, or Reproductive Toxins on manufacturer's SDS, products identified as toxic or highly toxic per OSHA standard 29 CFR 1910.1200, Insecticides, Pesticides, Rodenticides, Herbicides, Biocides, Fungicides, Gasoline or Gasoline-Based Products, Oils or Oil-Based Products, or Amine or Amine-Based Products)
Disclaimer:	Acceptance by LYB of a particular prior cargo does not relieve the carrier of responsibility for any contamination of the product resulting from that prior cargo. The purpose of restrictions on prior cargoes is to prevent contamination of IPA-USP by any material that would be considered an objectionable impurity, even in trace amounts; LYB reserves the right to reject any trailer based on its actual condition or suitability as determined during on-site inspection and in accordance with US DOT regulations.