



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

<b>Product Handling Equipment Specification (PHES) - ISO Container</b>	
<b>Commodity [select from drop-down]:</b>	<b>Isopropyl Alcohol USP (IPA-USP)</b>
SDS Number:	BE6799
<b>Refer to SDS section 14 for this product's transport classification</b>	
<b>General ISO Container Information:</b>	
DOT Specification:	IM 101, UN T-11 (stainless steel ISO container); maximum 24K liter capacity; ISO container must be approved and designated by LYB to transport IPA-USP; a dedicated ISO container is preferred but not required; service dedication will require LYB's written pre-approval prior to loading or transportation; data plate information must be legible and correctly stamped; inspection documentation must be with driver as additional proof of inspection/test date verification to prevent equipment rejection
Insulation:	Preferred, not required
Heating Capabilities:	Not required
Gasket Material:	White butyl rubber, white EDPM, virgin Teflon, Teflon rope, Teflon encapsulated, or Viton; dome gasket must give a leak tight seal upon completion of loading
Connections/Fittings:	All must be stainless steel, solid flange or plug must be attached to the ISO container, as applicable; must be capable of being sealed with a 1/8" wire cable seal; dome lid and valve cover must capable of being sealed with 1/8" wire cable seal
Liquid Connection:	Export shipments: Blind flange on bottom outlet if ISO container is to be loaded on rail or vessel; bottom outlet must have a solid closure; dust caps are not acceptable; Domestic Shipments: Flanged 3" male camlock (quick connect) with sealable dust cap; bottom rear loader; both shipment types must be capable of being sealed with a 1/8" wire cable seal
Vapor Connection:	1.5" ball valve with bull plug; bull plug must be attached with chain/cable and valve must be able to be sealed with a 1/8" cable seal; protective cover for manifold and vapor connection must have the capability to be sealed; this applies for export or domestic shipments
Nitrogen Padding:	Nitrogen purged for drying, moisture, and flammable atmosphere control; clean ISO container must have a 5-7 psig pad upon arrival at loading facility; re-load/reuse container may return with last off-loading pressure or minimum of 5-7 psig

Tank Cleanliness:	If container is cleaned, a kosher/food grade cleaning certificate is required showing the container is clean, dry, and odor free; if ISO container is a re-load, the prior LYB shipping documents are required as proof that last-contained was LYB material; if dedicated, ISO container must be on file with loading site as dedicated to LYB IPA-USP; for CPU/collect orders: must meet the specifications herein, and the last 3 prior cargoes must be presented to LYB Technical Services for their approval prior to loading
Strapping Chart:	Required; level gauge indicator also preferred
Hoses:	Hoses are not required to load at LYB facilities, and are not available for transport with ISO containers for export shipments
Additional Appurtenances:	Carrier should always note carrier's instructions field of the LYB shipping document for any additional equipment, driver's requirement, etc.; all opening to ISO container must be capable of being sealed with 1/8" wire cable seal; product labeling is required with container/driver upon arrival to loading facility; driver must ensure product name and all labeling is applied to both sides of ISO container prior to leaving loading facility; driver must have current and matching LYB shipping notice, Transwide call-off, or manifest document, and arrive at pickup point at the scheduled time to be accepted for loading; driver must always notify LYB of any requested light loading due to potential exceedence of gross legal weight; driver responsible for re-sealing ISO container for residue transport once offloaded
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,
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 ISO container based on its actual condition or suitability as determined during on-site inspection and in accordance with applicable transport regulations