



SHELL CARGO HANDLING SHEET

Isopropyl Alcohol (IPA)

Cargo Handling Sheets are for the use of vessels chartered on behalf of Shell.

Document date 26 January 2026

Revision no. 12

Product Details

Trade Names:	Isopropyl Alcohol (IPA); IPA Sustainable; LC2 100 IPA
IMO Product Name:	Isopropyl Alcohol
Chemical Family:	Alcohols

[Link to Safety Data Sheet](#)

Physical Properties

Density:	785 - 786 kg/m ³ (20°C / 68°F)
Specific Gravity:	0.78 - 0.79 (20°C / 68°F)
Dynamic Viscosity:	2.43 mPa.s
Vapor Pressure:	4.1 kPa (20°C / 68°F)
Boiling Point:	82 - 83°C / 180 - 181°F
Melting Point:	- 88°C / - 126°F
Flash Point:	12°C / 54°F
Appearance:	Clear liquid with a characteristic odour

Note 1: Physical Properties are for reference only and valid as of date of this revision; see loading terminal for specific properties.

Note 2: Hazard Identification: Highly flammable, known to cause health hazards; See SDS for full list of hazards and precautions.

MARPOL Details

MARPOL Annex:	II
IMO Ship Type:	IBC Chapter 18 cargo
Inland Barge:	Double Hull
IMO Pollution Category:	Z
IBC 16.2.6:	No
IBC 16.2.7:	No
IBC 16.2.9:	No
Pre-Wash Required:	No.

Compatibility Group: USCG compatibility group 20,

Cargo Handling Requirements

N2 Purge Cargo Tanks Prior Loading:	No
N2 Blanket Required:	Not a Product Quality requirement; see notes below
Adjacent Space Purge:	No
Loading Temperature Range:	Ambient
Transit Temperature Range:	Ambient - 40°C / 104°F
Unloading Temperature Range:	Ambient - 40°C / 104°F
Maximum Heating Coil Temperature:	Blanked Off
Maximum Adjacent Temperature:	40°C / 104°F

Note 1: If vessel is required to inert tanks, then only N2 will be accepted as an inerting medium.

Note 2: If Nitrogen blanket is in place and Carrier chooses to transship, carrier must reapply nitrogen blanket, both on the discharging and receiving vessel, at their time, risk, and expense.

Transshipments

Prior to arranging transshipment Charterer must agree to Owner's proposed plan. When arranged by the Owner, Owner must ensure that all transshipment vessels comply with the requirements of this cargo handling sheet.

Tank Acceptance Requirement

Banned Prior Cargo:	Stainless Steel Tanks: None Coated Tanks: Yes; See Appendix Banned Prior Cargoes for IPA
Stainless Steel or Coated Tanks:	Either, carrier to verify suitability of coating for Product.

Note 1: Vessels offered for loading into coated tanks:

- Carrier to verify suitability of coating.
- For newly coated tanks, either partially or fully recoated, the tanks must have carried 3 or more cargoes for a total of >90days at >90% full.
- Tank Coating Condition Questionnaire submitted to Charterers for review prior to fixing a coated vessel.
- Coated tanks to be in very good condition with minimal blistering or breakdown, < 0.5% total tank area.
- All blisters to be scraped to hard coating.
- All defects to be noted in Survey Report
- Pipelines and fittings to be stainless steel

All nominated shipboard cargo handling systems are to be presented clean (residual free), dry, odour free, rust free, with good gaskets, fit to load this cargo.

Maintenance of heating coils is to be verified in the ship's log. If product is to be heated, heating coils are to be confirmed leak free. If product is not heated, heating coils are to be blown clear and dried with N2, and blanked off.

Wall Wash Test Requirement

Wall Wash Required:	Yes; all conducted with Methanol except PH test, which uses DI water.
Coated Tanks:	WWT conducted by cargo surveyor
Stainless Steel Tanks	Verification of shipboard WWT may be accepted if below specs are met. (Send WWT Verification to the responsible Shell charterer and present to cargo surveyor and loading master at loading terminal.) WWT Verification form is available in the supporting documents section on the CHS Website

Wall Wash Test	Specification	Standard
Appearance	Clear and free from suspended matter	ASTM D4176
Chlorides	≤ 1.0 ppm	ASTM E2469
Hydrocarbons	Pass	ASTM D1722

Additional WWT for Coated Tanks if Prior Cargo is:

Prior Cargo	Test	Required result	Method
Acrylate	PPT	>30 minutes	ASTM D1363
Oils, Waxes, Veg Oils, Fame	NVM	100 ppm	ASTM D1353
Acids, Alkalis	PH Test	6.9 - 7.1	ASTM E70

Safety Information and Incident Reporting

Safety Information: Refer the SDS (Safety Data Sheet) or e-SDS.

Incident Reporting: All incidents should be reported in accordance with regulations and charter party requirements. For additional marine cargo handling advice or information, contact the regional Chemical Marine Technical Advisor.



Shell Chemical LP
PO Box 4407
Houston
Texas 77210 - USA

Disclaimer

The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions that may be made are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

Shell

The expression "Shell" refers to the companies of the Shell Group of companies that are engaged in the chemical businesses. Each of the companies that make up the Shell Group of companies is an independent entity and has its own separate identity.

Banned Prior Cargoes for IPA in coated tanks

NOTE: Substances not on this list having hazardous potential will be checked by Shell's Chemical Marine Technical Advisor, Product Steward, or Quality Manager for further evaluation.

Substance	Reason to be on the List
Animal products including lard, tallow, etc.	Halal, Kosher, BSE/TSE Note: Animal products are allowed as last cargo only upon acceptance by receiver.
Aniline	Aromatic compound
Anisole	Aromatic compound
Benzene including benzene mixtures	Aromatic compound
Creosote (coal tar or wood)	Aromatic compound
Cresol (o,m,p and cresylates and cresylic acids)	Aromatic compound
Cumene	Aromatic compound
Diphenylmethane diisocyanate (MDI)	Aromatic compound
Divinylbenzene	Aromatic compound
Ethylbenzene	Aromatic compound
Gasoline	Petroleum product (may contain benzene)
Gas oil	Petroleum product (may contain benzene)
Kerosene	Petroleum product (may contain benzene)
Leaded petroleum or other leaded products	Petroleum product (may contain benzene) Note: Leaded products shall not be carried as the three previous cargoes
Methyl styrene monomer	Aromatic compound, Odour threshold
Naphthalene	Aromatic compound
Nitrobenzene	Aromatic compound
Nitropropane	Aromatic compound

Substance	Reason to be on the List
Phenol	Aromatic compound
Polymethylene polyphenyl isocyanate (PPI)	Aromatic compound
Pygas	Contains benzene
Styrene monomer	Aromatic compound, tainting, low odour threshold
Toluene	Aromatic compound
Toluene diisocyanate (TDI)	Aromatic compound
Toluidine	Aromatic compound
Tricresyl phosphate	Aromatic compound
Vinyl acetate monomer	Tainting, odour
Xylene (mixed isomer and o-, m-, p-)	Aromatic compound