## Technical Note 1 <br> Compatibility of Francis Ward IBCs and drums with Liquid Fuels

The following table indicates the compatibility of Francis Ward's polyethylene (PE) drums and IBC liners with a range of liquid fuels.

| Liquid Fuel | PE Compatibility | Comments |
| :---: | :---: | :---: |
| Petrol <br> Gasoline | Not compatible | Permeation of the fuel into the polyethylene wall of the container results in softening, swelling and deformation of the container |
|  |  | Ongoing loss of product through the container wall and evaporation to atmosphere will occur. The rate of loss will be dependent on container wall thickness and PE density. |
| Diesel <br> Gas Oil / Light Fuel Oil / Distillate Fuel Oil | Compatible | Slight softening and deformation of thin walled IBCs (Light Duty). |
| Biodiesel | Compatible | Slight softening and deformation of thin walled IBCs (Light Duty). |
| Heavy Fuel Oil | Compatible | No effect on PE. |
| Kerosene <br> Aircraft Fuel / Domestic heating oil | Compatible | Slight softening and deformation of thin walled IBCs (Light Duty). |
| Methanol <br> Methyl Alcohol / Wood Alcohol / Methyl Hydrate | Compatible | No effect on PE. |
|  |  |  |
| Ethanol <br> Grain Alcohol / Ethyl Alcohol | Compatible | No effect on PE. |
|  |  |  |
| Butanol | Compatible | No effect on PE. |
| Liquid Hydrogen | Not compatible | Very low temperature liquid $\left(-252^{\circ} \mathrm{C}\right)$ causing severe embrittlement of PE . |

Whilst every attempt has been made to ensure that the information provided in this product information sheet is accurate and reliable Francis Ward cannot accept responsibility for the interpretation of the information provided. It is the responsibility of the user to determine the chemical compatibility of the container with its intended contents.

