Technical Data Sheet — ICC -HYDRALOCK (LDHI)

Low Dosage Hydrate Inhibitor (LDHI) are designed to control hydrates and reduce the risk of problems caused by hydrates in gas production systems, such as line blockages and plugs. They are effective at low dosages and provide a sound alternative to alcohol or glycol injection.

ICC expert provides innovative, highly effective LDHIs with the following modes of action:

Kinetic hydrate inhibitors (KHIs) that prevents hydrates from forming for a period of time or holds them static for a period of time. If the residence time of the fluids in a pipe is shorter than the hold time, no hydrates form.

Anti-agglomerant inhibitors (AAs) that prevents hydrates from adhering to each other by keeping hydrate crystals in a slurry that can be flushed out with remaining fluids.

Hybrid applications that combine use of AA and KHI chemistries in conjunction with thermodynamic inhibitors for application when needed under certain production conditions.

ICC-HYDRALOCK (LDHI) hydrate inhibitor is a low toxicity, water soluble, kinetic gas hydrate inhibitor proprietary formulation deigned to inhibit the formation of gas clathrate molecules (commonly called “hydrates”) in systems producing or handling natural gas and crude oil.

ICC-HYDRALOCK (LDHI) hydrate inhibitor can prevent the formation of gas hydrate crystals.

ICC-HYDRALOCK (LDHI) hydrate inhibitor also acts as an anti-agglomerate, preventing hydrate crystals from forming plugs

Typical Physical Properties

Physical appearance	**Pale Brown Liquid**
Specific gravity at 20ºC, gr/cm	**1±0.05**
pH (1% solution)	**7-8**
Solubility in water	**completely soluble**
Flash point, **ºC**	**> 80°C**

Application Information

ICC-HYDRALOCK (LDHI) is typically applied by injection upstream in the system, well ahead of the areas experiencing problems associated with hydrate deposition. This allows the product time to disperse into the aqueous phase and inhibit the formation of hydrates that occur due to pressure and temperature conditions.

www. Isfahancopolymer.com
No.3, City Clinic Building., East Shariati St., Tohid Av., Isfahan, IRAN
Tell: +98 31- 36258711-14, P. O. B: 8173995771
Email: info.isfahancopolymer@gmail.com

Technical Data Sheet ICC -HYDRALOCK (LDHI)

ICC-HYDRALOCK (LDHI) should be injected continuously into a system that has had the hydrate deposition removed immediately prior to usage. **ICC-HYDRALOCK (LDHI)** is a hydrate inhibitor designed for gas and gas condensate pipelines. It acts as kinetic hydrate inhibitor with excellent anti agglomerate property. It has low emulsification tendency with certain corrosion inhibition effects.
The dosage of product depends on pipeline operating condition, such as temperature and pressure. In normal condition, the continuous injection dosage varies 0.5 to 1.0 percent of water of the water content of the pipeline.
ICC-HYDRALOCK (LDHI) dosage of injection is determined based on the amount of water present and the extremes of pressure and temperature encountered in the system.

Benefits

- Extends well life better than thermodynamic inhibitors in systems with significant produced water.
- Advanced technologies allow continuous LDHI treatments while controlling topside fluid separation and water quality.
- Lower dosage rates reduce logistics costs like delivery, storage, and pump requirements.
- Special formulations eliminate methanol contamination of export crude and associated penalties.

Features

- Expert system survey determines the LDHI best suited for the offshore application.
- Lower dosage rates are required than traditional methanol or glycol based inhibitors.
- Innovative, field-proven solutions like Anti Agglomerate (AA) and Kinetic Hydrate Inhibitors (KHI).
- First-of-its-kind system of highly advanced rocking cells for testing and assessing LDHI.
- Detailed onsite customer training is available.

Packaging and Storage

ICC-HYDRALOCK (LDHI) hydrate inhibitor is packaged in 220 Lit drums.
Store in dry, well ventilated area. Keep container closed. Keep away from heat, sparks and flames.
Store away from incompatibles.

Shelf Life

ICC-HYDRALOCK (LDHI) has shelf life of at least two years from the data of manufacture when stored in the original sealed containers in a cool and dry place.

Toxicity and Handling

Bioassay information is available upon request.
Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the Material Safety Data Sheet (MSDS).
As with any individual chemical, avoid prolonged contact with skin. In case of skin or eye contact, flush exposed area with copious amounts of water.

www. Isfahancopolymer.com
No.3, City Clinic Building., East Shariati St., Tohid Av., Isfahan, IRAN
Tell: +98 31- 36258711-14, P. O. B: 8173995771
Email: info.isfahancopolymer@gmail.com