



Form 41 Affirmations for XLS-2Z

Vendor: Liberty Oilfield Services
Operator Number: 10655
Chemical Identifier: XLS-2Z

Liberty Oilfield Services claims the identity (CAS #) for the component “Inorganic Borates” is proprietary.

Affirmation 1:

Liberty Oilfield Services with the confidence from Innospec Oilfield Services discloses confidential info regarding XLS-2Z only when legally required or under a need to know basis including emergencies. Liberty Oilfield Services has an ongoing confidentiality agreement with Innospec Oilfield Services to maintain the trade secret status of their product. Disclosure of confidential and trade secret information is permitted only after careful consideration and after protective steps have been taken, including execution of confidentiality agreements or utilizing statutory trade secret and confidential business information protections. Such protection allows Innospec Oilfield Services from being compromised by its competitors and is in accordance with set security procedures.

Affirmation 2:

The CAS # is not required under any such state or federal laws to be disclosed in the public forum.

Affirmation 3:

XLS-2Z’s competitive edge is twofold. The quality of hydraulic fracturing operations performed by Liberty Oilfield Services is among the best within the industry. Quality of chemicals used for such operations is one facet that differentiates Liberty Oilfield Services from its competitors. Innospec Oilfield Services, the developer of XLS-2Z, developed the formulation at their expense. The public disclosure of information would not only publicize the identity of the chemical for the disclosed use, but also the processing of the chemical substance. Maintaining secrecy of the chemical component provides protection for the underlying research, development costs, as well as the innovation of the supplier. As such, the superior quality of service and protection for both parties is kept intact through the confidentiality of XLS-2Z.

Affirmation 4:

Liberty Oilfield Services and Innospec Oilfield Services believe that reverse engineering XLS-2Z with the specified component listed as Trade Secret cannot be done easily. Significant time as well as capital would need to be expended to determine the exact chemical composition. Due to the complex mixture, such analysis would likely result in a degree of uncertainty. Public disclosure of the composition would give competitors the knowledge to bypass the aforementioned analysis. As such, the additional protection protects both parties.



Redacted Product Composition

XLS-2Z		
Component	CAS #	Percentage
Paraffinic Naphthenic Solvent	64742-47-8	65.00%
Inorganic Borates	Proprietary	40.00%