

Paravan solvent systems

Stimulate oil production by removing organic damage

During crude oil production, temperature and pressure changes can result in paraffins and asphaltenes precipitating out of solution and depositing in the wellbore, on the formation face, or within the critical near-wellbore area. These deposits may severely hinder productivity and clog production equipment, but they are difficult to remove because of their slow solubility in most hydrocarbon solvents.

The Baker Hughes **Paravan™ solvent systems** are designed to help dissolve and disperse paraffin and asphaltene deposits. Several formulations are available with varying concentrations and types of acids, aromatic solvents, surfactants, and mutual solvents:

- The **Paravan D system**: An effective stimulation aid used to break crude oil emulsions and water blocks and to dissolve inorganic scale deposits or the calcareous portion of the formation.
- The **Paravan E system**: Similar to the Paravan D system, this system is preferred for high-temperature wells or when strong water-wetting is not required.

- The **Paravan F system**: Effective for treating stubborn asphaltic deposits and breaking crude oil emulsions or water blocks, it is preferred in acid-sensitive formations or where a reactive solution is not necessary.

The most appropriate Paravan system for any well should be determined by a pilot test with hydrocarbon from the well requiring treatment.

Safety Precautions

Refer to the material safety data sheet (MSDS) for handling, transport, environmental information, and first aid.

References

MSDS

Typical properties

Appearance	Clear to pale yellow liquid
Specific gravity	0.88 +/- 0.05
Pour point	-40°F (-40°C)
Flash point	80°F (26.7°C)

Applications

- Light, medium, and heavy crudes
- Conventional enhanced oil recovery (EOR) wells
- Unconventional wells
- Offshore wells

Benefits

- Reduces dosage rates
- Eliminates the requirements for separate water clarifier applications
- Improves oil removal from disposal water, allowing oil to be sold and water to be reused
- Decreases workover costs and associated filter changeouts on injection wells
- Reduces oil-in-water disposal by 50 to 98%