

FlowSolve 112LN Asphaltene Inhibitor

Product Information

Applications

FlowSolve 112LN is a medium molecular weight polymeric dispersant formulated in a high flash point, low naphthalenes content aromatic solvent.

FlowSolve 112LN has been specifically developed to mitigate asphaltene flocculation and deposition in oil production operations e.g. in the reservoir, production wells and processing units, due to pressure drop or incompatible fluids.

FlowSolve 112LN can be used in topside and downhole treatment programmes by continuous injection or specialised batch deployment treatment methods. The product can also be utilised in combination with specialist solvents for asphaltene deposit removal.

Typical treat rates range from 10 to 500 ppm dependant on the crude oil type and the severity of asphaltene deposition tendency. Laboratory testing should be conducted for individual oils to establish an optimum treatment regime.

Features

- High performance asphaltene dispersant and inhibition characteristics
- Broad spectrum performance across a wide range of crude oil types
- Low viscosity, low pour point and non - shear sensitive liquid
- High temperature stability (>300 C) for downhole applications
- Low environmental impact for marine operations e.g. North Sea, Gulf of Mexico
- Suitable for additional formulation, blending or dilution to meet specific technical and operational requirements
- Long shelf life under recommended storage conditions
- Low naphthalenes content, non-hazardous
- Highly cost effective

Physical Properties

Appearance	Visual	Clear, brown liquid
Polymer Content	wt%	50
Density @ 15 C	g/cm ³	0.94
Viscosity @ 40 C	cSt	116
Viscosity @ 20 C	cSt	303
Pour Point	C	-33
Flash Point PMCC	C	62

These data are typical values and should not be considered as specifications.

Other Information

FlowSolve 112LN is a member of a product range of asphaltene deposition control additive technologies. It is recommended that FlowSolve 110, FlowSolve 112 and FlowSolve 113 should also be evaluated in asphaltene dispersant or asphaltene inhibitor testing programmes.

JD Horizons maintains Safety Data Sheets (SDS) for all FlowSolve® products. The SDS contains pertinent information required to protect employees and customers against any known health or safety hazards associated with FlowSolve® products. Always consult the relevant SDS before handling the product in the laboratory or in commercial scale operations.

For additional information not covered by this product bulletin contact JD Horizons directly or your local representative.

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Additional Physical Property Data

Temperature/Viscosity Profile –

Temperature (C)	Viscosity (cP)
40	125
20	255
15	286
10	392
5	543
0	697

These data are typical values and should not be considered as specifications.

Environmental Data

This is a preparation and information is estimated based on component data and that of similar products.

Toxicity	Marine Invertebrate / Acartia Tonsa	EC 50 (48 hours)	1,131 mg/l
	Marine Alga / Skeletonema Costatum	EC 50 (72 hours)	> 1,000 mg/l
	Juvenile Turbot / Scophthalmus maximus	LC 50 (96 hours)	> 1,000 mg/l
	Sediment Reworker / Corophium Volutator	LC 50 (10 days)	> 10,000 mg/kg
Biodegradation	OECD 306	Polymer	24.6 %
		Solvent	52.9 %
Bioaccumulation	OECD 117	Polymer	logPo/w 3.6 - 5.1
		Solvent	logPo/w 3.6 - 5.2
UK CEFAS Certification			Pending

Transport, Packaging and Storage

Transport	See Safety Data Sheet for detailed information.
Packaging	Bulk road tankers/ISO tanks (approx. 20 mt capacity) 1,000 litre Schutz type IBC and standard 205 litre steel drums
Storage	Store in a dry, well ventilated area, preferably a covered warehouse facility Ensure drum and bulk container seals remain intact until ready for use Nitrogen blanket recommended for bulk storage facilities Recommended storage temperature range from 10 to 30 C
Shelf Life	24 months

Additional information regarding transport, storage and handling is included in the FlowSolve 112LN SDS.

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JD Horizons Limited, Grove House, Warford Park,
Faulkners Lane, Mobberley, Cheshire, UK WA16 7PE

T: +44 1565 880 139
F: +44 1565 874 159

E: email@jdhorizons.com
www.jdhorizons.com

Registered Office: Silk House, Park Green, Macclesfield, Cheshire, UK SK11 7QW **Company Registration No:** 3672953 (England & Wales)