



PRODUCT DATA SHEET

AGS-99

ASPHALTENE CLEANER

PRODUCT DESCRIPTION

ADS-99 is designed to be specifically used in the following application, crude oil pipelines and crude oil storage facility with heavy asphaltene build up. Due to the active ingredients in the AGS-99 it will liquefy asphaltene in pipelines without movement or circulation inside the pipeline. The AGS-99 also works great in crude oil storage tanks where unsellable and unpumpable crude oil is being stored. Once the pipeline or crude oil tank has been cleaned with AGS-99, it can be regularly treated with the PDS-991 to prevent future paraffin and asphaltene build up from effecting performance. Pipelines that are treated with the AGS-99 product, it will mitigate future pigging of the pipeline which minimizes waste disposal and will increase throughput and volumes of the pipeline. Currently, conventional manual removal of crude oil bottoms is costly, hazardous, and time consuming often creating environmental and safety challenges. This results in difficulties in inventory, operations, and even procurement staffing.

PRODUCT BENEFITS

- Liquefies asphaltenes (milk shake consistency)
- Liquefies asphaltenes (hard pan consistency)
- Minimizes pigging pipelines
- Greatly shortens the downtime to clean crude oil tanks
- Decreases costs to maintain pipelines

APPLICATIONS

AGS-990 is a chemical used in large crude oil pipelines to liquefy asphaltene bottoms that are considered to be milk shake consistency and hard pan consistency. Also helps to keep from regularly pigging inside these large pipelines to clean and remove these types of asphaltenes.

NOTE: AGS-99 is not recommended to be used on a continuous basis in pipelines. However, PDS-660, PDS-991, and PLO-59 can be used on a continuous basis.

HAZARDS

"Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressure, cut weld, braze, solder drill, grind or expose such containers to heat, flame, sparks, or other sources of ignition. "Empty;" drums should be completely drained, properly bunged, and promptly returned to a drum re-conditioner. Avoid prolonged contact with skin and frequently change soiled clothing. In case of contact, wash thoroughly with soap and water for 15 minutes or until the irritation subsides. The formation of mists should be avoided. Do not take internally. If swallowed, do not induce vomiting. Call physician or Poison Control Center immediately. Keep out of reach of children. Not recommended for "breathing air" or hydrocarbon oils.

Advance Research &
Development

Blended and packaged in a
registered facility.




**AGS Holding
International Inc**

TECHNICAL DATA

TEST PROCEDURE

RESULTS (TYPICAL)

Stock Code	AGS 99	
ISO VG	D2422	N/A
Viscosity 100°C, cSt	D445	N/A
Viscosity 40°C, cSt	D445	N/A
Viscosity 100°F, SUS	D445	85
Viscosity 210°F, SUS	D445	N/A
Auto-ignition temperature	D2270	>430°F
Specific Gravity (g/ml)	D1298	0.870
Density, (lb./gal)	D1298	7.25
Color	D1500	Amber
Flash Point, °C (°F) (COC)	D92	4 (39)
Fire Point, °C (°F) (COC)	D92	N/A
Pour Point °C (°F)	D97	N/A
Odor		Mild
Texture		N/A
Appearance		Liquid
Biodegradable (inherently) *		N/A



(A/16.6/90)

The values shown here are typical of current production. All of them may vary within modest ranges.

The information contained herein is accurate to the best of our knowledge at the time of printing. **It is supplied upon the express condition that the customer or user is responsible for determining the product's suitability for a particular purpose.** Products purchased from AGS Holding International Inc. are subject to the terms and conditions set out in the sales contract, quotation, warranty and/or order acknowledgment.

HEALTH AND SAFETY INFORMATION

For recommendations on safe handling and use of these products, please refer to the Safety Data Sheet (SDS), which is available upon request through the AGS Holding International Inc. sales office.

