

ACM Green Clean Solutions

*Hydrocarbon Processing Equipment
Maintenance Solutions*



Hydrocarbon Processing
Equipment Decontaminants and
Cleaners

Readily biodegradable decontaminants and
degreasers made possible through nano
emulsion technology

Product Data Sheet

ACM GC HCFREE

Hydrocarbon Decontaminant

Product Descriptions

ACM GC HCFREE is a nano-emulsion of readily biodegradable solvent and dispersant in water based formulation developed for effective decontamination and cleaning of hydrocarbon processing equipment during shutdown and general maintenance. The product is suitable for the cleaning of crude oil tanks, columns, reboilers, heat exchanger bundles and other process vessels. ACM GC HCFREE will rapidly absorb vapor phase hydrocarbons for effective degassing and decontamination.

Product Features

- Contains strong but readily biodegradable solvent and dispersant
- Suppress ignition of hydrocarbons
- Effective on paraffinic and asphaltenic crudes
- Rapid emulsification of heavy hydrocarbon for effective cleaning
- Significantly reduce steam out and total cleaning time
- Superior hard surface cleaning ability
- Water based, non hazardous without special handling requirements
- Neutral pH, non corrosive, non caustic
- Readily bio degradable, will not upset effluent treatment system

Applications

- Spray method
- Tub soaking and circulation of > 380 LPM for a period of 6 – 24 hours at temperature of 65 – 95°C
- Steam injection during degassing for 6 – 24 hours
- Spent cleaning fluid should be sent to holding tank to allow hydrocarbon to separate

Dosages

- For soaking and circulation, 1.5 – 5% solution in water
- For degassing, 0.25 – 0.5% of product into steaming rate

Product Physical Properties

APPEARANCE	Straw Yellow Liquid
ODOR	Citrus
SG @ 25 °C	0.95 – 1.05
FLASH POINT (°C)	>65 °C
PH	4.0 – 6.0
FREEZING POINT	6 °C
SOLUBILITY IN WATER	Complete

Product Packaging

Products are available in 200 liters HDPE drums, 1000 liters IBC and 25 liters HDPE pails

Shipment

Non DG

Health, Safety and Environment

Please refer to the product SDS and safety labels for proper handling, storage and disposal of this product. Please read and understand both documents before handling the product. This product is classified and labelled according to Globally Harmonized System (GHS).

Product Data Sheet

ACM GC H₂SFREE

Hydrogen Sulfide Scavenger

Product Descriptions

ACM GC H₂SFREE is a stabilized solution of amine free aliphatic aldehyde based hydrogen sulfide scavenger, intended for removal of hydrogen sulfide in hydrocarbon processing system where it is a hazard. ACM GC H₂SFREE is non amine base, will not revert at high temperature and it is effective over a wide range of pH including acidic environment. The product also removes mercaptan effectively.

Product Features

- Suitable for high temperature refining products such as gas oil and heavy cuts where temperature is > 177°C
- Removes H₂S and mercaptan permanently, no reversion at low pH and high temperature
- Unlike triazine and amine, it does not cause increase in pH and scale precipitations
- Inherently biodegradable, cleaning effluent can be disposed to ETP without causing any upset

Applications

- ACM GC H₂SFREE can be applied using either automatic or manual spray
- Can be applied in cleaning circulation circuit and with steam injection during degassing

Dosages

- Dosage is about 0.9 – 1.2 liter per kg of H₂S

Product Physical Properties

APPEARANCE	Colorless to Pale Yellow Liquid
ODOR	Faint
SG @ 25 °C	1.20 – 1.30
FLASH POINT (°C)	>95 °C
PH	6.0 – 7.0
FREEZING POINT	<-3 °C
SOLUBILITY IN WATER	Complete

Product Packaging

Products are available in 200 liters HDPE drums, 1000 liters IBC and 25 liters HDPE pails

Shipment

Non DG

Health, Safety and Environment

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Product Data Sheet

ACM GC FeSFREE

Pyrophoric Iron Sulfide Dissolver

Product Descriptions

ACM GC FeSFREE is a proprietary formulation of complexing and chelating agents that effectively dissolves and removes iron sulfide scale deposits. It was proven to be effective over a wide range of iron sulfide deposits including pyrrhotite, mackinawite, pyrite, marcasite and other corrosion and scale deposits. ACM GC FeSFREE is non toxic, non corrosive and readily biodegradable product making its application easy and without any side adverse effects.

Product Features

- Effective dissolution and removal of iron sulfide and other scale deposits
- Effectively eliminate the hazards in areas where pyrophoric iron generation is a problem
- Non hazardous, non toxic does not require special handling
- Inherently biodegradable, cleaning effluent can be disposed to ETP without causing any upset

Applications

- Can be applied using automatic or manual spray
- Can be applied in cleaning circulation circuit and steam injection during tank and tower degassing

Dosages

- 1 - 5% concentration in water
- Can be applied in combination with other chemicals for cleaning circuit and steam degassing

Product Physical Properties

APPEARANCE	Clear Liquid
ODOR	Characteristic
SG @ 25 °C	1.10 – 1.20
FLASH POINT (°C)	>95 °C
PH	3.5 – 5.0
FREEZING POINT	<0 °C
SOLUBILITY IN WATER	Complete

Product Packaging

Products are available in 200 liters HDPE drums, 1000 liters IBC and 25 liters HDPE pails

Shipment

Non DG

Health, Safety and Environment

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Product Data Sheet

ACM GC GreaseFREE

Hard Surface Degreaser

Product Descriptions

ACM GC GreaseFREE is nano emulsion of readily biodegradable degreaser and hard surface cleaner formulated for the effective removal of hard to dissolve hydrocarbon wax and greases from metal and concrete surfaces. It is a blend of nonionic and anionic surfactant together with chelating agent in a water based formulation.

Product Features

- Non caustic, non phosphate water based degreasing agent
- Superior hydrocarbon deposit and soot removal
- Non hazardous, does not require special handling
- Inherently biodegradable, cleaning effluent can be disposed to effluent treatment plant without causing any upset

Applications

- Can be used for cleaning of machineries, tools, flooring and contaminated surfaces
- Can be used to clean workshop floors, concrete decks and pavements

Dosages

- 1:10 dilution in water for heavy duty cleaning
- 1:20 dilution in water for light duty cleaning
- Allow at least 5 minutes of contact before rinsing

Product Physical Properties

APPEARANCE	Clear Liquid
ODOR	Mild
SG @ 25 °C	0.95 – 1.05
FLASH POINT (°C)	>95 °C
PH	10.0 – 12.0
FREEZING POINT	<5 °C
SOLUBILITY IN WATER	Complete

Product Packaging

Products are available in 200 liters HDPE drums, 1000 liters IBC and 25 liters HDPE pails

Shipment

Non DG

Health, Safety and Environment

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Product Data Sheet

ACM Waxfree 100

Paraffin Dispersant and Desludging Agent

Product Descriptions

ACM Waxfree 100 is a benzene and toluene free dissolver for removal of hardened hydrocarbon deposits and sludge. The product also can be used for recovery of sludge oil from crude oil tank bottom, as part of regular maintenance. The product contains highly dispersing surfactants that accelerates solvent reaction in removal of deposits and liquefaction of sludge.

Product Features

- Superior performance hydrocarbon deposit and sludge dissolver
- Non corrosive to steels and alloys
- Recovered sludge oil can be reintroduced into refinery operation without any adverse effects
- Does not poison catalysts

Applications

- Suitable for the cleaning of vacuum tower bottoms, coker fractionator bottoms, oil storage tanks and any equipment with coke deposits
- Can be used to maintain crude oil storage tanks, with routine introduction followed by angle mixer operation to clear bottom sludge
- Can be used in sludge oil recovery operation to liquefy sludge and recover the sludge oil

Dosages

- ACM Waxfree 100 can be applied in concentrated form for cleaning of tough deposits
- 5 – 10% v/v dilution in hydrocarbon carrier such as diesel or can also be diluted in water
- For crude oil tank maintenance dosage of 0.1% v/v over crude oil volume
- For sludge oil recovery dosage of 5 – 10% of the sludge volume is recommended prior to addition of cutter stock

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Product Physical Properties

APPEARANCE	Amber Liquid
ODOR	Aromatic
SG @ 25 °C	0.80 – 0.95
FLASH POINT (°C)	18 °C
PH	N/A
FREEZING POINT	N/A
SOLUBILITY IN WATER	Immiscible

Product Packaging

Products are available in 200 liters metal drums, and 1000 liters IBC.

Shipment

Non DG

Health, Safety and Environment

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