

Roma Intl Fuel Additives



Products and technologies to help petroleum refiners and distributors increase production and improve fuel quality.

CATALOG

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COMPANY PROFILE

Roma International, Inc started in the United States in the early 90s as a distributor of specialty chemicals serving essentially the western part of the country. At the end of that decade the company diversified and started to manufacture processing chemicals for the petroleum industry.

Our business philosophy has been to establishing extensive networks of distributors and reseller around the world and today about 80% of our manufacturing plants produce products that are sold under private labels and whereas the remaining is marketed directly to the oil and gas industry worldwide.

Our products are designed to improve productivity helping crude oil producers and petroleum refiners adapt rapidly to an ever increasing number of challenges due to extraction of heavier oils and stricter environmental regulations.

Our company and its network of distributors who are close to your company are at your disposal to collaborate with you and help your company improving its bottom line.

Roma International, Inc.

ANTIOXIDANTS

PDA (Antioxidant)

PDA can reduce gum formation and improve storage stability of a wide range of finished gasoline or their blending components. It is particularly effective as a stabilizer of olefinic FCC gasoline. It promotes inhibitor-sweetening reactions in sour gasoline.

PDAP (Antioxidant)

PDAP gasoline antioxidant is a blend of 50% amine and 50% phenolic antioxidants. This is an extremely effective antioxidant for use in all types of gasoline to control gum formation, extend induction period and is frequently used to stabilize cracked blending components.

PDA6 (Antioxidant)

PDA6 antioxidant is specifically produced for the stabilization of gasoline stocks in cold weather. It is a 50% solution of PDA in a suitable solvent.

ANTISTATIC

Package designed for distillate fuel. Antistatic is a non metallic ashless formula that increases the electrical conductivity and helps reduce hazards associated with mixing, transfer and shipment of distillate fuels. The benefits are superior low temperature conductivity retention consistent performance, stable during storage, good handling at low temperature, compatible with other additives and pipeline use accepted.

MD METAL DEACTIVATOR

MD metal deactivator can be used to inhibit the gum and sediment formation by the catalytic effect of dissolved metal ions, particularly Cu^{++} ions present at very low (parts per billion) levels in some gasoline. In such cases, a small amount of MD Deactivator will greatly enhance the performance of the antioxidants used.

JET CORROSION INHIBITOR AND LUBRICITY ENHANCEMENT

PCI provides both corrosion inhibition and lubricity enhancement to jet kerosene and other finished fuel blends. JET can be used to provide critical lubricity enhancement in low sulphur diesel and kerosene fuels. It is included in the qualified product list, QPL-25017, for use in JP-4, and other fuels designated by Military Specification MIL-I-25017. It is approved by NATO and IATA as an aviation turbine lubricity enhancement additive.

DA6 – Antioxidant for gasoline**Applications**

DA6 is specifically produced for the stabilization of gasoline stocks in cold weather situations. It is a 50% dilution of DA5 in a suitable solvent. can reduce gum formation and improve storage stability of a wide range of finished gasoline

Benefits

- DA6 inhibits gum formation and extends induction periods for FCC gasoline.
- DA6 catalyses inhibitor-sweetening reactions in sour gasoline.
- DA6 stabilizes lead alkyl additives.
- DA6 has excellent cold weather properties.

DA6 antioxidant is a super-saturated solution at the Pour Point. If crystallization does occur, the additive should be heated above 20 C to ensure complete dispersal of any solid particles.

Typical Properties

Appearance:	Amber to Brown Liquid
Sp. Gr. @ 15.6 C:	0.90-0.94
Pour Point:, C	Below -12
Flash Point PMCC, C:	63 min.
Vis. @ 38 C, cSt:	1 – 18

Dosage rates

FFC gasoline:	80 wt. ppm
Pyrolysis gasoline:	300 wt. ppm
Inhibitor – sweetening:	25 – 250 wt. ppm

Product Availability

DA6 is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 180 kg drum non-returnable steel drums.

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DA5 – Antioxidant for gasoline**Typical Properties**

Appearance:	Dark Red Liquid
Sp. Gr. @ 15.6 C:	0.93-0.95
Pour Point:, C	Below -18
Flash Point PMCC, C:	120
Vis. @ 38 C, cSt:	7 – 12

Dosage rates

FFC gasoline:	15 - 40 wt. ppm
Pyrolysis gasoline:	40 - 160 wt. ppm
Inhibitor – sweetening:	12 – 120 wt. ppm
TEL stability:	8 wt. ppm

Product Availability

PT-PDA5 is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 180 kg drum non-returnable steel drums.

Applications

DA5 can reduce gum formation and improve storage stability of a wide range of finished gasoline or their blending components. It is particularly effective as a stabilizer of olefinic FCC gasoline. It promotes inhibitor-sweetening reactions in sour gasoline and stabilizes lead alkyl additives.

Benefits

- DA5 inhibits gum formation and extends induction periods for FCC gasoline.
- DA5 catalyses inhibitor-sweetening reactions in sour gasoline.
- DA5 antioxidant is approved for both civilian and military gasoline.
- DA5 stabilizes lead alkyl additives.

PT-PDA5 antioxidant remains as a super cooled liquid well below its true melting point of 16 C. If crystallization does occur, the additive should be heated above 20 C to ensure complete dispersal of any solid particles.

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PDAP – Antioxidant for gasoline**Typical Properties**

Appearance:	Dark Brown to Red Liquid
Sp. Gr. @ 15.6 C:	0.92-0.96
Pour Point:, C	Below -15
Vis. @ 38 C, cSt:	6 – 24

Dosage rates

PDAP can be used at a dosage of 5 – 25 ppm in finished fuels and between 15 – 45 ppm in cracked components.

Product Availability

PDP is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 190 kg drum non-returnable steel drums.

Description

PDAP gasoline antioxidant is a blend of 50% amine and 50% phenolic antioxidants.

Uses

PDAP is an extremely effective antioxidant for use in all types of gasoline.

Features

PDAP controls gum formation, extends induction period and is frequently used to stabilize cracked blending components.

Applications

PDAP can be used in both leaded and unleaded fuels. It provides excellent protection against decomposition of lead anti-knock compounds.

Benefits

- Prevents soluble gum formation
- Can also be used to chemically sweeten sour gasoline in the presence of air and caustic.
- Good handling properties

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PA – Antioxidant for gasoline**Typical Properties**

Appearance:	Colorless to yellow Liquid
Sp. Gr. @ 20 C:	0.92-0.96
Flash Point PMCC, C:	90 min.
Vis. @ 40 C, cSt:	6 – 10

Dosage rates

FFC gasoline:	10 - 100 wt. ppm
Pyrolysis gasoline:	10 - 100 wt. ppm
Inhibitor – sweetening:	16 – 16 wt. ppm

Product Availability

PA is in inventory

Applications

PA Antioxidant can be used to control the storage stability of motor and aviation gasoline and jet fuels. It is particularly effective in low olefinic gasoline blends. PA also helps prevent TEL decomposition in leaded fuel.

PA Antioxidant meets the requirements for JP-4, JP-5 and JP-8 (NATO F-34, F40 and F-44) as a jet fuel additives as specified in MIL-T-5624 and MIL-T-83133.

Benefits

- PA inhibits gum forming reactions and extends induction periods.
- PA helps prevent TEL decomposition.
- PA inhibits peroxide formation and color degradation of jet fuel.
- PA is approved for military use.

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 180 kg drum non-returnable steel drums.

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PAJ – Antioxidant for gasoline**Typical Properties**

Appearance:	Clear yellow Liquid
Sp. Gr. @ 20 C:	0.92-0.96
Flash Point PMCC, C:	90 min.
Vis. @ 40 C, cSt:	6 – 10

Dosage rates

FFC gasoline:	10 - 100 wt. ppm
Pyrolysis gasoline:	10 - 100 wt. ppm
Inhibitor – sweetening:	16 - 16 wt. ppm
Diesel:	20 - 150 wt.ppm

Product Availability

PADJ is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 180 kg drum non-returnable steel drums.

Applications

PADJ Antioxidant can be used to control the storage stability of motor and aviation gasoline and diesel and jet fuels. It is particularly effective in low olefinic gasoline blends. PADJDJ also helps prevent TEL decomposition in leaded aviation fuel.

PADJ Antioxidant meets the requirements for JP-4, JP-5 and JP-8 (NATO F-34, F40 and F-44) as a jet fuel additives as specified in MIL-T-5624 and MIL-T-83133.

Benefits

- PADJ inhibits gum forming reactions and extends induction periods.
- PADJ helps prevent TEL decomposition.
- PADJ inhibits peroxide formation and color degradation of jet fuel.
- PADJ is approved for military use.

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PAL – Antioxidant for Lube

Typical Properties

Appearance:	Clear Yellow to Dark Brown Liquid
Sp. Gr. @ 80 F:	0.98-0.99
Flash Point (PMCC) F	>161 min.

Product Availability

PAL is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 200 kg drum non-returnable steel drums.

Applications

PAL Antioxidant is suitable for use in mineral and synthetic oils and greases over a very wide temperature range. PAL Antioxidant is ashless and contains no sulphur, phosphors or metals.

Particularly effective at temperatures above 392 F [200C] where other commercial lube oil antioxidants often fail. PAL can be combined with detergent additives to reduce sludge and varnish deposits.

Benefits

- PAL Antioxidant can provide induction periods of 500- 1000 hours in the ASTM D-942 Grease Bomb test. It is also an effective stabilizer when evaluated by the thin panel technique.
- PAL Antioxidant is a potent ashless antioxidant for the protection of lubricating oils and greases at high temperatures.
- PAL Antioxidant contains no sulphur, phosphorus or metallic elements.
- PAL Antioxidant acts as a metal passivator.
- PAL Antioxidant is non-corrosive.

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Composition: 75% min. 2,6-di-tert-butylphenol,
25% max. tert-butylphenols and tri-tert-butylphenols

Applications

For jet fuel, kerosene, diesel and gasoline fuels

Product Description

JK Antioxidant stabilizes the fuel by inhibiting gum formation and increasing induction period. It is effective in aviation gasoline, motor gasoline, jet fuel, kerosene and diesel fuel.

Approvals

JK Antioxidant is approved under the following specifications :

- Military
 - * MIL-T-5624
 - * MIL-T-38219
 - * MIL-T-83133
- France
 - * Air 3404C
 - * Air 3405D
 - * Air 3407B
- Joint Checklist
- Australia
 - * DEF 5208
 - * DEF STAN 91-91
- U.K. – MOD - * DERD 2498
- NATO
- IATA
- GE
- PWA
- Canada
 - * CGSB 3.22 * CGSB 3.23
 - * 3GP24M * CAN 2.3.22
 - * CAN 2.3.23
- ASTM * D910 * D1655
- Japan * JIS K2209

JK - ANTIOXIDANT

Typical Properties

Appearance..... colorless to yellow liquid
Specific Gravity, 60/60°F (15.6/15.6°C)0. 94
Crystallization Temp. Seeded, °F(°C).....66 (1 9)
Density, lb./gal, 60°F, (15.6°C)..... 7.85
Flash Point, PMCC, °F (°C).....22 0 (104)
Pour Point, °F (°C) -15 (-26)
Vapor Pressure, psi @ 68°F (20°C) 0.01
Viscosity, cSt @ 100°F (38°C).....9
77°F(25°C)17

Dosage

JK Antioxidant is soluble in gasoline(s) in all proportions and may be added to gasoline directly or as a stock solution.

Recommended Treat Rate

1 - 10 ptb (3 - 28 mg/L) or 0.0030 - 0.0303 gal /
1000 gal (1 gal / 7.9Mbbl)

Product Availability

JK Antioxidant is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 180 kg drum non-returnable steel drums.

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MD - METAL DEACTIVATOR

Typical Properties

Appearance:	Clear Amber to Brown Liquid
Sp. Gr. @ 15.6 C:	0.97- 1.00
Pour Point:, C	Below - 24
Flash Point (PMCC) F	>75 min.
Vis. @ 38 C, cSt:	1 – 6

Dosage

As metal contamination of any fuel is likely to be very low it is often easier to determine whether a deactivator is required by adding 20 wt ppm of MD to the fuel under test [Potential Gum or Induction Period] and record the effects.

Where MD metal deactivator has a positive benefit compared to untreated fuel, the most cost-effective dosage can be easily established. Under normal conditions, a dosage rate between 2-10 wt ppm would be expected.

Product Availability

MD is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 205 kg drum non-returnable steel drums.

Applications

MD metal deactivator can be used to inhibit the gum and sediment formation caused by the catalytic effect of dissolved metal ions, particularly Cu⁺⁺ ions present at very low [parts per billion] levels in some gasoline, kerosene and other middle distillate fuels. In such cases, a small amount of MD deactivator will greatly enhance the performance of the antioxidants used.

Benefits

- MD Metal deactivator controls the catalytic effect of metals on the stability of gasoline and distillates.
- MD will help retard gum and sediment formation and can significantly reduce the costs and consumption of antioxidant or fuel stabilizers.
- MD deactivator exhibits excellent cold weather handling properties.

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JET PCI – Corrosion Inhibitor**Typical Properties**

Appearance:	Clear yellow - Amber Liquid
Sp. Gr. @ 20 C:	0.93-0.94
Pour Point:	-18
Flash Point PMCC, C:	52 min.
Vis. @ 40 C, cSt:	55 – 95

Dosage Rates

Pipeline protection:	3- 8 wt ppm
Finished Fuel Additive:	3- 50 wt ppm

Product Availability

JET PCI is in inventory

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 180 kg drum non-returnable steel drums.

Applications

JET PCI additive provides both corrosion inhibition and lubricity enhancement to jet kerosene and other finished fuel blends.

JET PC I Inhibitor is included on the Qualified Product List, QPL-25017, for use in JP-4 and other fuels designated by Military Specification MIL-I-25017. It is approved by NATO and IATA as an aviation turbine fuel lubricity enhancement additive.

JET PCI Inhibitor can be used to provide critical lubricity enhancement in low sulphur diesel and kerosene fuels.

Benefits

- JET PC inhibitor provides protection of ferrous metal surfaces against corrosion.
- JET PC enhances lubricity of jet kerosene and other desulphurised stocks.
- JET PC provides jet fuel WSIM of 95 at the Maximum Allowable Concentration.
- JET PC has good low temperature handling properties.

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ANTIKNOCK 01 – Octane Booster

Package designed to provide refiners an economical solution to meet gasoline octane requirements, AND greatly improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

Octane Increase: up to 27 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

ANTIKNOCK 02 – Octane Booster

Package designed to provide refiners an economical solution to meet gasoline octane requirements, AND greatly improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

Octane Increase: up to 15 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

ANTIKNOCK 03 – Octane Booster

Package designed to provide refiners an economical solution to meet gasoline octane requirements, AND greatly improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

Octane Increase: up to 10 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

Composition: Petroleum distillates, Amines
Proprietary formula

Applications

Package designed to provide refiners an economical solution to meet gasoline octane requirements, AND greatly improve fuel quality and answer environmental challenges.

Can be used as primary antiknock for low and high-octane gasoline.

Can be used as secondary antiknock.

Does not contain MTBE or ALCOHOLS

Product Benefits

- Increases octane levels of all type of gasoline.
- Stabilizes gasoline.
- Improves combustion.
- Eliminates and prevents carbon and gum deposits.
- Reduces or inhibits HC emissions.
- Reduces SO₂ emissions.

Octane Increase: up to 20 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

General Description

For a general description of the chemical and physical properties, please refer to the Material Safety Data Sheet.

Feeding and Dosage

Dosage will vary upon the desire to reach a certain octane level. Magnitude of octane increase depends upon gasoline composition and the original octane level of the gasoline. Contact your Roma representative for additional information on customized solutions.

ANTIKNOCK 01 – Fuel Quality Improver

ANTIKNOCK01 is typically injected directly to the gasoline stream being treated.

Compatibility

ANTIKNOCK01 has no adverse effect on:

Fuel specification (see fuel composition)

Refinery equipment

Distribution center equipment

Delivery systems and vehicles

Engine wear

Engine operability

Exhaust (with catalytic converter or not)

Shelf Life

18 months from the manufacturing date. Keep the product from direct light. Color of product may become darker as it stays longer than 12 months in storage

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 200kgs gallon-non-returnable steel drums.

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Composition: Petroleum distillates, Amines
Proprietary formula

Applications

Package designed to provide refiners an economical solution to meet gasoline octane requirements, AND greatly improve fuel quality and answer environmental challenges.

Can be used as primary antiknock for low and high-octane gasoline.

Can be used as secondary antiknock.

Does not contain MTBE or ALCOHOLS

Product Benefits

- Increases octane levels of all type of gasoline.
- Stabilizes gasoline.
- Improves combustion.
- Eliminates and prevents carbon and gum deposits.
- Reduces or inhibits HC emissions.
- Reduces SO₂ emissions.

Octane Increase: up to 15 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

General Description

For a general description of the chemical and physical properties, please refer to the Material Safety Data Sheet.

Feeding and Dosage

Dosage will vary upon the desire to reach a certain octane level. Magnitude of octane increase depends upon gasoline composition and the original octane level of the gasoline. Contact your Roma representative for additional information on customized solutions.

ANTIKNOCK 02 – Fuel Quality Improver

ANTIKNOCK02 is typically injected directly to the gasoline stream being treated.

Compatibility

ANTIKNOCK02 has no adverse effect on:

Fuel specification (see fuel composition)

Refinery equipment

Distribution center equipment

Delivery systems and vehicles

Engine wear

Engine operability

Exhaust (with catalytic converter or not)

Shelf Life

18 months from the manufacturing date. Keep the product from direct light. Color of product may become darker as it stays longer than 12 months in storage.

Handling and Storage

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Shipping

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Composition: Petroleum distillates, Amines
Proprietary formula

Applications

Package designed to provide refiners an economical solution to meet gasoline octane requirements, AND greatly improve fuel quality and answer environmental challenges.

Can be used as primary antiknock for low and high-octane gasoline.

Can be used as secondary antiknock.

Does not contain MTBE or ALCOHOLS

Product Benefits

- Increases octane levels of all type of gasoline.
- Stabilizes gasoline.
- Improves combustion.
- Eliminates and prevents carbon and gum deposits.
- Reduces or inhibits HC emissions.
- Reduces SO₂ emissions.

Octane Increase: up to 10 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

General Description

For a general description of the chemical and physical properties, please refer to the Material Safety Data Sheet.

Feeding and Dosage

Dosage will vary upon the desire to reach a certain octane level. Magnitude of octane increase depends upon gasoline composition and the original octane level of the gasoline. Contact your Roma representative for additional information on customized solutions.

ANTIKNOCK 03 – Fuel Quality Improver

ANTIKNOCK03 is typically injected directly to the gasoline stream being treated.

Compatibility

ANTIKNOCK03 has no adverse effect on:

Fuel specification (see fuel composition)

Refinery equipment

Distribution center equipment

Delivery systems and vehicles

Engine wear

Engine operability

Exhaust (with catalytic converter or not)

Shelf Life

18 months from the manufacturing date. Keep the product from direct light. Color of product may become darker as it stays longer than 12 months in storage

Handling and Storage

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 200kgs gallon-non-returnable steel drums.

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CETANE improves efficiently and economically **Cetane Numbers** of diesel oil. It thus offers larger flexibility to refiners to improve diesel fuel quality while maximizing refinery yields.

Through its action to raise Cetane Numbers, **Cetane** guarantees environmental advantages of High Cetane Number diesel fuels and so better auto-ignition and combustion in addition to reduced exhaust emissions.

Cetane is designed to satisfy efficiently the strong trends of fuel emission reduction requirements prescribed by the new specifications worldwide.

Cetane is not only used to improve the quality of diesel fuel, but also to enhance the performance of diesel engine, allowing:

- quicker cold startup,
- diminution of engine startup noise,
- reduction in engine knock and wear,
- production of lower pressures resulting in smoother performance,
- decrease or elimination of carbon build-up on injector nozzles,
- better fuel economy and engine life.

Composition:

Petroleum distillates
2-ethylhexyl nitrate
Proprietary formula

Description

Cetane increases cetane number rating of diesel fuels and improves cetane quality of distillate stocks, which have less than diesel fuel quality.

Applications

Increase cetane number rating of diesel fuels.

Concentration - Dosage

Normal use range is 0.05-0.50 vol % of fuel.

Properties

Appearance	Light straw colored liquid
Specific Gravity, 60/60F (16°F/16°C)	0.967
Density, Lb/gal, 60F (16C)	0.96 g/ml 20°C
Boiling Point	> 100°C
Flash Point, TCC F (C)	175 (79)
Pour Point, F (C)	<-60 (-51)
Vapor Pressure	27 Pa, a 20°C; 40-53 Pa,
Ignition Temperature:	Auto Ignition 215°C
Viscosity	1.8 cSt 20°C

Cetane – Cetane Improver for diesel**General Description**

For a general description of the chemical and physical properties, please refer to the Material Safety Data Sheet.

Feeding and Dosage

Cetane may be blended into diesel fuel using injection equipment with variable rate control.

Personal safety, first aid and storage and handling

WARNING: Harmful if inhaled. Combustible. May cause irritation. Avoid breathing vapor. Keep container closed. Use adequate ventilation. DO NOT HEAT. Thermally decomposes at temperatures above 212F (100C). Risk of explosion if heated under confinement.

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

Shipping

In Isomodular Delivery Tanks, and 55 gallon-non-returnable steel drums.

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PPD010- POUR POINT DEPRESSANT FOR PIPELINE TRANSPORTATION OF WAXY CRUDE OIL**General Application**

PPD010 improves the fluidity of very waxy crude oils so that they can be pipelined at temperature below their natural pour points and enables inland refineries to be supplied via long distance pipelines (non-heated). This also avoids the risk of blockage of the pipeline when shut down and when the oil cools statically. PPD010 decomposes at about 300 °C and does not interfere with the quality of the distillate or residue fractions. Recommended storage temperature should be between 30 °C to 60 °C and best injection temperature is about 65 °C. PPD010 could be used for injecting continuously into flow lines at 200 ppm to 800 ppm according to the severity of the waxy crude or residual fuel oils.

PPD012- POUR POINT DEPRESSANT FOR PIPELINE TRANSPORTATION OF WAXY CRUDE OIL**General Application**

PPD012 improves the fluidity of very waxy crude oils so that they can be pipelined at temperature below their natural pour points and enables inland refineries to be supplied via long distance pipelines (non-heated). This also avoids the risk of blockage of the pipeline when shut down and when the oil cools statically. PPD010 decomposes at about 300 °C and does not interfere with the quality of the distillate or residue fractions. Recommended storage temperature should be between 30 °C to 60 °C and best injection temperature is about 65 °C. PPD010 could be used for injecting continuously into flow lines at 200 ppm to 800 ppm according to the severity of the waxy crude or residual fuel oils.

CFPP01 - POUR POINT DEPRESSANT AND A COLD FILTER PLUG POINT FOR DIESEL FUEL**Description:**

CFPP01 is a blend of ashless organic polymers in a petroleum solvent. It is an excellent winter diesel performance additive that substantially reduces the Cold Filter Plug Point (CFPP). PT-CFPP01 provides excellent low temperature fuel operability and substantially reduces cold filter plug point (CFPP).

General Application

CFPP01 provides excellent low temperature fuel operability and reduces or eliminates the use of kerosene blending. It substantially reduces the Cold Filter Plug Point.

CFPP01 could be used for injecting continuously into flow lines at 200 ppm to 800 ppm.

PPD010- Pour Point Depressant For Pipeline Transportation Of Waxy Crude Oil

Description:

PPD010 is a blend of ashless organic polymers in xylene as a petroleum solvent.

Compatibility:

Compatibility test should be carried on in laboratory.

Typical Product Characteristics

Active matter, % (wi).....50.00 %
Viscosity @ 20°C (68°F).....N/A
Viscosity @ 40°C (104°F)> 300 cSt
Specific Gravity @ 40°C (104°F)..... 0.870
Density @ 40°C (104°F) kg / m3..... 870
Density @ 40°C (104°F) lb / US gal ...N/A
Mineral Oil content, % wiN/A
Flash Point, PMCC>28°C
Pour Point24 °C
Sediment contentN/A
Appearance clear pale yellow liquid

Above data should be regarded as "typical average values" only.

General Application

PPD010 improves the fluidity of very waxy crude oils so that they can be pipelined at temperature below their natural pour points and enables inland refineries to be supplied via long distance pipelines (non-heated). This also avoids the risk of blockage of the pipeline when shut down and when the oil cools statically. PPD010 decomposes at about 300 °C and does not interfere with the quality of the distillate or residue fractions. Recommended storage temperature should be between 30 °C to 60 °C and best injection temperature is about 65 °C.

PPD010 could be used for injecting continuously into flow lines at 200 ppm to 800 ppm according to the severity of the waxy crude or residual fuel oils.

Packaging and Handling

PPD010 is available in 200 liters (55 US gallons) non returnable steel drums. Shelf life in plant storage at 30 °C to 65 °C is one year.

Net weight per drum: 175 kg (385 lbs)

Improper handling of PPD010 can be injurious to workers. Observe all safety precautions listed on the label and in the Material Safety Data Sheet.

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 Specific Gravity @ 40°C (104°F)..... 0.870
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 Density @ 40°C (104°F) lb / US gal ...N/A
 Mineral Oil content, % wiN/A
 Flash Point, PMCC >14°C
 Pour Point 27 °C
 Sediment contentN/A
 Appearance clear pale yellow liquid

Above data should be regarded as "typical average values" only.

General Application

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WELL 6240 - Solids Precipitation Inhibitor/Solvent Concentrate

WELL6240 is a concentrated blend of organic solvents, penetrants, and dispersants for prevention and dissolution of asphaltene and paraffin deposits. WELL6240 is used for a variety of applications where these troublesome deposits cause plugging and reduced production. This multifunctional product provides superior deposit and sludge control compared to treatment programs using only solvents. WELL6240 does not interfere with the quality of the distillate or residue fractions.

WELL 6242 - Work Over Fluid

A very effective and economical work-over fluid was developed to serve the Oil & Gas Industry in areas where condensate is used to reduce oil viscosity or remove asphaltenes and paraffin deposits.

The unique features of this product are as follows:

- No asphaltene precipitation after prolonged contact with oil.
- A reduction of viscosity from 10,000 cps to 2,500 cps is achieved with an addition to the oil of 7% by volume of WELL6242
- The flash point is 42 C.

WELL 6245 - Slop Treatment

A very effective and economical slop treatment fluid was developed to serve the Oil & Gas Industry in the area where slop is generated as part of daily production operations.

The unique features of this product are as follows:

- Reduces interfacial tension between oil & water.
- Greatly improves oil separation / recovery and removes oil from solids
- Reacts only with oil.
- Changes the wettability of solids from oil to water-wet.
- Eliminates the oil/water emulsion.
- Reduces the viscosity of the oil.

PCI – Pipeline Corrosion Inhibitor

PCI provides protection of ferrous metal surfaces against corrosion.

Work Over Fluid

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- The flash point is 42 C.

Product Characteristics

Density at 2583 kg/liter

Flash Point42 C

Appearance.....Clear Fluid

WELL 6242**Methods of Application**

For a work-over with heavy oil gravity (11 to 14 API), blend lease crude oil in a ratio of 93% crude to 7% WELL6242.

Development of this fluid alleviates all negative side effects of using condensate e.g. a low flash point (-18 C) and asphaltene precipitation upon contact with oil.

Packaging, Handling, Shipping

WELL6242 is a liquid packaged that can be shipped in Isomodular Delivery Tanks, and 55 gallon-non-returnable steel drums.

Read the label and Material Safety Data Sheet for complete handling information before using or storing this product.

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The unique features of this product are as follows:

- Reduces interfacial tension between oil & water.
- Greatly improves oil separation / recovery and removes oil from solids
- Reacts only with oil.
- Changes the wettability of solids from oil to water-wet.
- Eliminates the oil/water emulsion.
- Reduces the viscosity of the oil.

Product Characteristics

Density at 25 C.....89 g/ ml

Flash Point.....68 C

Appearance.....Clear, light yellow liquid

Methods of Application

It is found that the addition of WELL6245 to slop in quantities of 1% to 5% greatly aided the recovery of clean sales oil from the centrifuge. The chemical addition resulted in a 5-12 times productivity increase.

Packaging, Handling, Shipping

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Tank Cleaner

Sludge Remover – Tank Cleaner

Specifications:

Color	Colorless to light amber
Clarity	Clear
Odor	Mild petroleum
Viscosity	Thin
Flash Point	150 F (65 C)
PH in Water Emulsion	7
Greenline	Yes
Percent Chlorinated Solvents	None
Percent Butyl	None
Evaporation Rate	Moderately slow
Solvency	Excellent
Effect on Metals	Non-corrosive on all metals
RCRA Waste Category	Non-hazardous waste
Pounds per Gallon	8.1

Non Hazardous

Combustible

Handling and Storage

Read the label and Material Safety data Sheet for complete handling information using or storing this product.

Shipping

5500 is shipped in bulk in isotank or in 400 lbs non-returnable drums.

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Product Description

5500 is a highly effective sludge remover that is also used **to recover oil** that otherwise would be dumped. The recovered oil can be pumped from the surface, and then be blended to HFO to make a high quality fuel with improved combustion characteristic.

Characteristics:

- Aggressive Solvency
- Leaves No Residue
- High Flash
- Non-Butyl
- Non-Hazardous Waste
- No HAP's
- Non-Chlorinated

Applications:

- Oil tank cleaning
- Oil recovery from sludge

Directions for sludge removal: For maximum results, pour on the surface of sludge 10 drums of diesel # 2 for each drum of PT-5500. Leave the mixture crack through the surface for 1 to 2 weeks depending on the sludge composition. Pump out oil recovered from sludge. Dispose impurities in accordance to local, state and federal regulations.

GO GREEN ! look to EnviroClear to help your plant meet its water treatment and regulatory needs and protect our fragile ecosystem.

EnviroClear isn't just good for the environment; it's good for the bottom line too!

Environmentally friendly

- No negative impact on the environment, a totally green chemistry
- Biodegradable
- Completely sustainable chemistry – made from 100% renewable resources
- Safer for operators
- Good for your company's image

Outstanding performance

- Superior oil /water separation
- Turbidity and color reduction
- BOD and oil and grease removal
- Does not affect water pH like inorganic salts do
- Effective on a wide variety of wastewaters

Lower total cost

Because **EnviroClear** is metal-free, so is the sludge, reducing sludge volume and disposal costs. And because **EnviroClear** doesn't change the pH of system water, pH correction and additional alkali costs are eliminated.

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EnviroClear can provide exceptional water clarity at a lower total cost than traditional chemistries.

Packaging and handling

EnviroClear is a liquid available in drums, intermediate bulk containers, and in bulk. This product should be used within 6 months of delivery.

Comprehensive materials of construction studies have not yet been conducted for this product. However, fiberglass, polypropylene, polyethylene, and other plastics should be suitable. **Refer to the Material Safety Data Sheet for suitable materials of construction for handling and storing this product.**

EnviroClear

Vegetable based coagulant/clarifier Good for plants and our planet

- Completely green, NSF 60 approved
- Superior oil/water separation
- Excellent turbidity and color removal
- Numerous oil field and wastewater applications

EnviroClear is an organic, cationic, metal free, vegetable based coagulant. This product is designed to replace aluminum sulfate, ferric chloride, and ferric sulfate as a primary coagulant.

EnviroClear does not alter pH; therefore, there is no need to add alkalinity to the system as is common with metal coagulants.

EnviroClear can be used in conjunction with other polymers in low turbidity waters where coagulation might be difficult.

EnviroClear can also be used efficiently in oil/water separation processes.

This product has NSF approval for potable water.

Dosage and feeding

EnviroClear is a water soluble product which may be fed neat from the shipping container, or may be diluted with water to a convenient feeding strength. **EnviroClear** should be fed to an area of good agitation. The recommended feed rate of this product is from 1– 100 ppm.

Dosage calculation:

Dosage (lbs/day) = volume of water to be treated (gpm) x 0.012 x ppm feed rate

Testing and control

Prior to the initiation of a program using BPL 5828, the product should be compared to other similar products to ensure that the most effective product is chosen. It is recommended that **EnviroClear** be diluted to a concentration of from 0.1% to 1% before jar testing. Further jar testing may become necessary to modify the dosage if effluent quality deteriorates.

Typical product characteristics

Appearance.....	dark brown liquid
Odor.....	sweet, light
Density at 25°C (77°F)	1.11 g/cm ³
pH (neat)	1.2 – 2.3
Flash point	100°C (212°F)

