

PRA[®] - Petroleum Remediation Additive

Safety Data Sheet

Complies with ANSI Standard ANSI Z400.1-2004

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements. Complies with occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072

Trade name: Plutus Environmental Technologies Inc.
Product Name: PRA[®] Petroleum Remediation Additive
Version 1.0 / EN

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Print Date: 9/05/2018
Revision Date: 9/05/2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE

1.1 Product Identifier

Chemical Composition and Components Data for PRA[®] - Petroleum Remediation Additive

No hazardous components detected. PRA[®] is a proprietary blend of surfactants and organic solvents.

Contains no HAP, ODC or NP surfactants.

CAS# not applicable as material is non-hazardous and non-flammable in aqueous form.

Not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910, 1200).

The material complies with REACH regulations. The material is manufactured from a blend of food grade surfactants and emulsions and is non-hazardous and environmentally friendly

Mixtures - PRA[®] - Petroleum Remediation Additive

PRA[®] is for the removal and prevention of wax buildup in oil wells, pipelines and storage tanks.

It is a proprietary blend of surfactants and organic solvents in aqueous solution; 5 ppm Orcoacid Ortofast Turq for identification. Contains no HAP, ODC or NP surfactants. A toxicological report is available if requested.

HMIS Classification: Not applicable
Expected route of Entry: Skin contact / inhalation / eyes / digestion
Inhalation: Not applicable - no effect from inhalation
Contact with Skin: Hands may redden if immersed for several hours
Contact with Eyes: Flush eyes with water or saline solution. Call doctor if any irritation or irritation persists
Ingestion: May cause Diarrhoea if volume ingested
There are no known medical conditions generally aggravated by exposure.
Product does not contain any carcinogens as listed by OSHA-IARC or NTP

1.2 Relevant Identified Uses

PRA[®] - Petroleum Remediation Additive

PRA[®] is for the removal and prevention of wax buildup in oil wells, pipelines and storage tanks. PRA[®] is injected down hole into wells and allowed to circulate for 2 complete circulations of the total casing volume and may be injected into active pipelines. PRA[®] returns or keeps in the liquid phase and does not allow precipitated wax to return to the solid phase.

1.3 Supplier Details

Company Contact Information

Plutus Environmental Technologies Inc.
3138 Hatcher Mountain Road
Sevierville, Tennessee 37862. USA.

Contact Name

James Hatcher

Telephone Number for Information

+1 (865) 765 2413

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1.4 Emergency Telephone Number

+1 (865) 214 0350

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of PRA[®]

Contains no HAP, ODC or NP surfactants.

CAS# not applicable as material is non-hazardous and non-flammable in aqueous form.

Not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910, 1200).

2.2 Label Elements

Not considered hazardous - hazard labelling not applicable.

2.3 Other Hazards

Material is non-hazardous.

SECTION 3: INFORMATION ON INGREDIENTS

3.1 Substances

Contains no HAP, ODC or NP surfactants. PRA[®] is a highly confidential blend of organic materials, natural surfactants, degreasers and emulsifiers. It is 100% biodegradable and zero Hazmat rated.

SECTION 4: FIRST AID MEASURES

4.1 Description of Measures

Inhalation:	Not applicable - no effect from inhalation
Contact with Skin:	Hands may redden if immersed for several hours. Wash skin with copious amounts of fresh water
Contact with Eyes:	Flush eyes with water or saline solution. Call doctor if any irritation or irritation persists
Ingestion:	May cause Diarrhoea if volume ingested. Drink copious amounts of fresh water. Do not induce vomiting.

SECTION 5: FIREFIGHTING MEASURES

Material is not hazardous and is in aqueous form, is non-flammable, no flash point, no upper or lower explosion point, no ignition temperature, no hazardous combustion products, no special fire fighting procedures, no unusual fire or explosion properties or risks and may be safely washed/poured down drains.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Material is non-hazardous and may be safely washed/poured down drains.

There are no specific hazards. Flammable limits (Lel and UEL - Lower & Upper Explosive Limits) are not applicable. In case material is released or spilled: Mop up or use absorbent materials; dispose of waste materials in waste receptacles/trash cans, rinse surfaces thoroughly and apply local safety spill measures as required may be safely washed/poured down drains. Spills do not need to be reported to National response centres.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Steps to be taken in case material is released or spilled: Mop up or use absorbent materials; dispose of waste materials in waste receptacles/trash cans, rinse surfaces thoroughly and apply local safety spill measures as required

Waste Disposal Method:	Material is non-hazardous: May be safely poured down drains
Precautions to be Taken in Handling and Storing:	Safety Glasses are recommended, all other Personal Protective Equipment (PPE) is not required when using this product, however, dust masks may be worn where wind or spray conditions warrant use
Other Precautions:	None Known
Precautions to Be Taken in Handling and Storing:	Material is in an aqueous phase at all times and is non-hazardous
Respiratory Protection (Specify Type):	N/A as Product does not contain VOCs
Local Exhaust:	None required
Mechanical (General) N/A	
Protective Gloves:	May be worn but not required other than for very sensitive skin types
Eye Protection:	Recommended
Other Protective Clothing or Equipment:	As needed or required by work site policies and safety procedures
Work/Hygienic Practices:	Always avoid excessive exposure

7.2 Packaging Materials

Container is LDPE and should be disposed of safely or recycled.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Material is non-hazardous and is in an aqueous solution at all times

Inhalation:	Not applicable - no effect from inhalation
Contact with Skin:	Hands may redden if immersed for several hours. Wash skin with copious amounts of fresh water
Contact with Eyes:	Flush eyes with water or saline solution. Call doctor if any irritation or irritation persists
Ingestion:	May cause Diarrhoea if volume ingested. Drink copious amounts of fresh water. Do not induce vomiting.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Material Form:	Aqueous Solution
Boiling Point:	H ₂ O = 100 °C
Specific Gravity (H ₂ O = 1):	1.01 to 1.03
Vapour Pressure (mm Hg):	Not applicable
Melting Point:	Not applicable
Vapour Density (Air = 1):	Not applicable
Evaporation Rate (Butyl Acetate = 1):	Not applicable
Solubility in Water:	Infinite
Appearance:	Colourless to light blue
Odour:	None to slight citrus odour
pH Value:	9 - 10
Flash Point:	None

No Hazardous ingredients detected. Proprietary blend of surfactants and organic solvents in aqueous solution; 5 ppm Orcoacid Ortofast Turq for identification. Contains no HAP, ODC or NP surfactants.

SECTION 10: STABILITY AND REACTIVITY DATA

10.1 Reactivity

Not applicable.

10.2 Chemical Stability

Material is stable.

10.3 Possibility of Hazardous Reactions

Not applicable. No polymerization will occur.

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10.4 Conditions to Avoid

Not applicable - none known. If all aqueous phase is evaporated the remaining components will completely volatilise.

10.5 Incompatible Materials

Hydrocarbon-based substances; Aluminium; Silicone.

10.6 Hazardous Decomposition Products

None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Product information: Proprietary blend of surfactants and organic solvents in aqueous solution.
Contains no HAP, ODC or NP surfactants. Toxicological report available if requested

Acute Oral Toxicity: Non-toxic and Non-Hazardous

Skin Irritation: No protection necessary although hands may redden if immersed for several hours,
wash skin with copious amounts of fresh water

Contacts with Eyes: Eye protection safety glasses recommended

If material contacts with eyes: Flush eyes with water or saline solution call doctor if any irritation or irritation persists

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecological Information

Non-toxic and Non-Hazardous.

Respiratory Protection (Specify Type)	N/A as Product does not contain VOCs
Ventilation	
Local Exhaust:	None required
Special:	None required
Mechanical (General)	N/A
Other	None Required
Protective Gloves:	Recommended but not required
Eye Protection:	Recommended
Other Protective Clothing or Equipment:	As needed or required by work site policies and procedures
Work/Hygienic Practices:	Always avoid excessive exposure

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12.2 Toxicity

Material Tested	Species	LC50 (ppm)	
PRA [®]	Menidia Beryllina	186.00	96-hr
	Mysidopsis Bahia	161.00	48-hr
In No. 2 Fuel Oil	Menidia Beryllina	5.45	96-hr
	Mysidopsis Bahia	10.20	48-hr
Reference Toxicant (SDS)	Menidia Beryllina	8.07	96-hr
	Mysidopsis Bahia	16.00	48-hr

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Environmentally Friendly. Non-Hazardous Material. May be safely poured down drains.

SECTION 14: TRANSPORT INFORMATION

Non-Hazardous Material.

The material is NOT covered by International regulations on the transport of dangerous goods (IMDG, IATA. ARD/RID) Ships under US code 55 for food grade materials.

SECTION 15: REGULATIONS

EC Risk (R) Phrase

The material is Non-Hazardous - not harmful if swallowed, However, may Cause Diarrhoea if volume ingested.

EC Safety (S) Phrase

The material is non-hazardous and may be washed down drains, the container is LDPE and should be disposed of safely or recycled.

SECTION 16: OTHER INFORMATION

The material complies with REACH regulations. The material is manufactured from a blend of food grade surfactants and emulsions and is non-hazardous and environmentally friendly.