



TS MaxClean™

TS MaxClean™ is a game-changer in hydrocarbon remediation. Its non-toxic and requires no digging and hauling which promotes its cost-effectiveness.

TS MaxClean™ gets the job done 5 times faster than conventional methods saving time, money, and the environment.

Powered by





Before/After Tank Leak Cleanup on Gravel

This inert liquid turns hydrocarbons into non-hazardous sand.

TTS MaxClean™ is a non-toxic liquid requiring minimal PPE, environmentally friendly, and designed for ease of use.

TS MaxClean™ can be applied on hard surfaces, soils, and liquids.

TS MaxClean™ reacts with the hydrocarbons (oil) which then turns into a white powder requiring no soil removal and can be swept away on solid surfaces.

TS MaxClean™ can even be applied on large hydrocarbon spills on the ocean.

TS MaxClean™ reacts with and then encapsulates the hydrocarbons turning it into sand (silica), which falls harmlessly to the sea bottom with no harmful effects to the marine environment.

TS MaxClean™ is a game-changer in hydrocarbon remediation. It's non-toxic and requires no soil removal or digging which promotes its cost-effectiveness.

TS MaxClean™ is a reliable hydrocarbon cleanup solution for the planet. And we are all about a cleaner planet.





TS MaxClean™ Results

Analyte	Before mg/kg	Day 2	Day 3	
C6-C12	1271	77.3	<50	Below Limit
C12-C28	9172	1387	<50	Below Limit

Figure 1: Results accessed from a farm in Louisiana. Results indicate the concentration of hydrocarbons dropping to below US EPA acceptable levels in under 72 hrs.

In the USA, TS MaxClean™ has treated soils from multiple spills has been tested at EPA certified third party labs.

Results demonstrate that hydrocarbon concentrations dropped below EPA limits and minimum detection activity (MDA).

The vitrification process quickly took place at typical ambient temperatures (10 – 40 °C).

Before/After Hydrocarbon Soil Cleanup





More Results

- **Crude Oil:** “A single application at a rate of 2.5 gallons/yd³ reduced hydrocarbon petroleum leachability by 72% to satisfy minimum standards. No soil removal or further treatment required.”
- **PCB Transformer Oil:** “Results revealed a decline from the original concentration of 920,000 ppm PCB to an average of 5,665 ppm PCB in the gel layer – a reduction of 99%. Only a residual percentage of 83 ppm remained in the aqueous phase.”
- **Petroleum Hydrocarbons in soil:** “Treatment stabilization using MaxClean shortened job completion by at least six weeks with a reduction in treatment costs of approximately \$122/yd³.”
- **Diesel & Semi-Volatile Organic Compounds:** “An average decline of 59% for the semi-volatile compounds and 68% reduction of diesel. The study has shown that the mobilities of selected organic compounds are effectively reduced when treated with MaxClean .”
- **Gasoline in Water:** “After gradual addition and mixing of MaxClean to the gasoline/water mixture, with aeration and agitation: a 98% reduction BTEX (34 ppm). Since the level of Benzene measured 0.5 ppm, the treated liquid was pumped and discharged into the city waste treatment facility by city employees.”
- **Oil Refinery Waste Sludge:** “TPH reduction percentages were 48%. Similar results were obtained from sludge contaminated soils; TPH was reduced by 45% ... thereby reducing the cost for treatment.”
- **Hydrocarbon Spill on Hwy. 31:** “Initial TPH levels were found to be 3,900 ppm and following treatment were reduced to 10 ppm. All visible evidence of a hydrocarbon spill was eliminated.”



Facts About TS MaxClean™

TS MaxClean™ is a non-toxic liquid that is sprayed onto contaminant sites. Its liquid state allows for easy application in any environment.

TS MaxClean™ requires no heating or cooling nor combined with any other material to be effective.

TS MaxClean™ once bonded, vitrified, and cured, the captured containment cannot be released through natural weathering processes.

TS MaxClean™ longevity is similar to that of standard vitrification which can last from decades to centuries. Laboratory techniques are required to break down the silica particles to release the hydrocarbon containment.

TS MaxClean™ tanks are pre-positioned around an oil-related worksite, can reduce response times between spill occurrences and resolution, therefore reducing material and labor costs.





How to Use TS MaxClean™

TS MaxClean™ has a long shelf-life when properly stored in opaque storage vessels.

TS MaxClean™ does not require climate-controlled environments to maintain its effectiveness. However, if stored in such an environment, it has been shown to be effective for up to 5 years.

TS MaxClean™ emits no harmful vapors once the container is opened or during application.

TS MaxClean™ can work in minutes on small spills, depending on the weather conditions.

TS MaxClean™ is non-flammable and may be applied on metals either by spraying and/or wiping with a standard cloth.





TS MaxClean™ Environmental Impacts

All conventional methods can have harmful, residual effects to the environment during remediation. This can negatively impact vegetation and local wildlife even though the hydrocarbon concentration has been diminished.

TS MaxClean has an adjustable pH depending on type of hydrocarbon. Once cured, the pH will return to nominal levels. A secondary neutralizer may be added to accelerate pH restoration if desired. This results in soil pH similar to that before the spill occurred. This reduces environmental impact, improves corporate-community relations, and can prevent fees invoked due to potential legal settlements.

Titan Source 1 has a “passion for protecting the environment” and focuses on producing environmentally safe, and cost-effective solution(s) to a problem.

Before/After of Tank Rupture on Concrete





EPA & NSF Status

EPA STATUS:

EPA requirements regarding soils only affect the transportation of contaminated materials beyond property lines. Therefore, applying TS MaxClean™ to contaminated soils and treating them on-site does not exceed codes of conduct promulgated by the EPA Clean Air and Water Act. Titan is pursuing the EPA “Special Dispensation”, particularly for states such as California.

NSF STATUS:

This product is registered with the National Sanitation Foundation. It is also tested as safe in and around water. TS MaxClean™ is optimal for off-shore, waterway, and areas where runoff or sewer influx is a potential.





TS MaxClean™ The Clean Sustainable Way

How can you contact us?

USA Team:

225.772.4411
6313 Equity Drive
Baton Rouge, Louisiana 70809

UK Team:

+44 1279 902 345
Weston Business Centres, Parsonage Road.
Takeley, Essex, CM22 PU, UK

Powered By

