MATERIAL SAFETY DATA SHEET
As per ISO 11014-1

PRODUCT IDENTIFICATION
Product Name: Fuelfix
Product Type: Diesel Fuel expurgate
Manufacturer: Clean Fuel Technology
Contact number: 076 019 4298

PHYSICAL AND CHEMICAL PROPERTIES
Physical state and appearance: Liquid
Colour: Colourless. Clear
Odour: Rancid
Boiling/condensation point: 170ºC
Melting/freezing point: -70.4ºC
Evaporation rate: 0.07
Vapor pressure: 0.002 kPa (@20 ºC)
Density: 0.903 (Water = 1)
Relative vapour density: 4.1 (Air = 1)
Viscosity: 6,61(@20 ºC)

HAZARDS IDENTIFICATION
FLAMMABLE LIQUID AND VAPOUR. VAPOUR MAY CAUSE FLASH FIRE. Keep away from heat, sparks, and flame. Avoid contact with eyes, skin, and clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

FIRST AID
In case of Eye Contact: Liquid, mist or vapour at high concentrations will cause conjunctival irritation and corneal damage.
First Aid Eye: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 10 minutes, keep eyelids open. Cold water may be used. Get medical attention if soreness or redness persists.
In case of Skin Contact: May cause skin irritation. Vapour may be absorbed through skin, in toxicological amounts.
First Aid Skin: Flush skin with plenty of water for at least 10 minutes while removing contaminated clothing and shoes (as washing continues). Cold water may be used. Wash clothes before reuse. Thoroughly clean shoes before reuse. Get medical attention urgently.
In case of Inhalation: Causes irritation of the nose, throat, respiratory tract, and headaches. High concentrations may cause severe nose, throat and respiratory tract irritation, loss of consciousness, kidney, or liver damage.
First Aid Inhalation: Remove to fresh air. If not breathing apply artificial respiration. If breathing is laboured, give oxygen. Get medical attention.
In case of Ingestion: A large dose may cause gastrointestinal irritation, nervous system depression, liver and kidney damage and loss of consciousness.
First Aid Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Wash out mouth. Keep warm and at rest. Have victim drink 240-300ml of water to dilute stomach contents. Get medical attention urgently.

Notes to physician: Support respiratory and cardiovascular function.

FIRE FIGHTING MEASURES

Flammability of Product: Flammable
Auto-flammability: 238ºC
Flash points: OPEN CUP: 66ºC - CLOSED CUP 62ºC
Explosion limits: LOWER: 0.7% UPPER: 12.7%
Products of combustion: These products are carbon oxides (CO, CO2)
Fire hazards in presence of various substances: Flammable in the presence of direct sunlight, open flames, and sparks, of high temperatures and strong oxidizing materials.
Firefighting media and instructions: Use alcohol foam. Use DRY chemical powder or carbon dioxide. Keep surrounding containers and area cool with water sprays.
Protective clothing (fire): Be sure to use an approved/certified respirator or equivalent.

ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing. Wear respiratory protection. Eliminate all sources of ignition.
Environmental Precautions: Try to prevent material from entering drains and water sources. Advise authorities if spillage has entered a water source or sewer or has contaminated soil or vegetation.
Spillages: Contain and absorb using earth sand or other inert material. Transfer into suitable containers for recovery or disposal. Finally flush the area with plenty of water.

HANDLING AND STORAGE

Handling: Keep away from heat sparks and flame. Keep container closed when not in use. Use only with adequate ventilation.
Storage: Storage area should be dry and cool.
Suitable storage materials are: mild steel, polypropylene. Where trace iron contaminated or slight discoloration is critical, store in coated mild steel. Do not store in galvanized mild steel, copper, and its alloys. For gaskets and seals use butyl rubber PTFE.

EXPOSURE CONTROLS, PERSONAL PROTECTION

Occupational Exposure Standards: None assigned
Engineering Controls: Exposure to this material may be controlled in several ways. The measures appropriate for a particular worksite depend on how the material is used and on the potential for exposure. Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure mechanical ventilation (Dilution and local exhaust) and control process conditions. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform satisfactorily, should be used.

Personal protection

Eyes: Chemical Splash goggles
Body: Chemical resistant protective suite
Respiratory: Vapour respirator. Use an approved/certified or equivalent. Wear appropriate respirator when ventilation is inadequate
Hands: PVC or rubber gloves
Feet: Chemical resistant safety boots

STABILITY AND REACTIVITY

Product is stable under normal conditions
Conditions to avoid: High temperatures (Heat), exposure to direct sunlight.
Incompatibility with various substances or materials: Reactive with strong oxidizing agents.
Hazardous decomposition: None

TOXICOLOGICAL INFORMATION

Acute toxicity: Low order of acute toxicity. Oral LD50 470mg/Kg
Dermal LD50 220mg/Kg
Irritancy: There are no reports of adverse long-term effects following repeated exposure
Eyes: Mild conjunctival irritation
Skin: Minimal signs of irritation

ECOLOGICAL INFORMATION

Ecotoxicity: Product is rated non-hazardous to aquatic species
Mobility: Product is involatile and water-soluble. Product is likely to pass off as vapor from soil, but only slowly from water.
Bio-accumulation: Product does not bioaccumulate

DISPOSAL

Product Disposal

Incineration: Dispose of in accordance with all applicable local and national regulations. If correctly incinerated, this material will decompose to carbon dioxide and water only.
Container Disposal: Labels should not be removed from containers until they have been cleaned. Do not cut, puncture, or weld on or near the container.
Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. After cleaning, all existing labels should be removed.

TRANSPORT INFORMATION

Transport Classification. Not dangerous for transport.

REGULATORY INFORMATION

Labeling Information: irritant
Risk phases: R36 Irritating to eyes
S phases: S2 Keep out of reach of children, S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.