



Section 1: Chemical Product and Company Identification

Mixture

Part Number(s): TNDS8740, TNDS8540, TNDS8440

Description: Titan Fuel Stabilizer, 250 mL, 500 mL & 946 mL respectively

Manufacturer / Supplier: Shrader Canada Limited

Address: 830 Progress Court, Oakville, Ontario L6L 6K1

Revision Date: 2013-03-15 **Product Use:** Fuel additive

Chemical Family:

Section 2: Composition/Information on Ingredients

Component Name:	%	LD50 and LC50	ACGIH TWA	Ecotoxicity - Aquatic Toxicity
Distillates (petroleum), hydrotreated middle 64742-46-7	30-60	Inhalation LC50 Rat:4.6 mg/L 4h Oral LD50 Rat:7400 mg/kg Dermal LD50 Rabbit:2000 mg/kg	Not available	Not Available
Isopropanol 67-63-0	10-30	Dermal LD50 Rabbit:12800 mg/kg Dermal LD50 Rat:12800 mg/kg Oral LD50 Rat:4396 mg/kg Inhalation LC50 Rat:72.6 mg/L 4h	= 200 ppm TWA =400 ppm STEL	LC50 (96 h) fathead minnow (31 days old): 61200 mg/L. Cond: flow-through LC50 (96 h) fathead minnow (29 days old): 94900 mg/L. Cond: flow-through EC50 (5 min) Photobacterium phosphoreum: 35390 mg/L
Stoddard Solvent 8052-41-3	10-30	Oral LD50 Rat: > 5000 mg/kg Dermal LD50 Rabbit: > 3000 mg/kg Inhalation LC50 Rat: > 1300 ppm 4h	= 100 ppm TWA	Not Available
1,2,4-Trimethylbenzene 95-63-6	1-5	Inhalation LC50 Rat:18 g/m³ 4h Oral LD50 Rat:3400 mg/kg Oral LD50 Rat:8970 mg/kg Dermal LD50 Rabbit:3160 mg/kg	= 25 ppm TWA	LC50 (96 h) fathead minnow: 7.72 mg/L. Cond: flow-through LC50 (96 h) goldfish: 12.52 mg/L. Cond: flow-through LC50 (96 h) fathead minnow: 7.72 mg/L. Cond: flow-through
n-Nonane 111-84-2	0.5-1.5	Inhalation LC50 Rat:3200 ppm 4h	= 200 ppm TWA	Not Available

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Component Name:	%	מתם LC50	ACGIH TWA	Ecotoxicity - Aquatic Toxicity
Solvent Naphtha (Petroleum), Light Aromatic 64742-95-6	0.1-1.0	Inhalation LC50 Rat:3400 ppm 4h Oral LD50 Rat:8400 mg/kg Dermal LD50 Rabbit:2000 mg/kg Inhalation LC50 Rat:5.2 mg/L 4h	Not available	Not Available
Xylene (mixture of isomers) 1330-20-7	0.1-1.0	Oral LD50 Rat:4300 mg/kg Inhalation LC50 Rat:5000 ppm 4h Dermal LD50 Rabbit:1700 mg/kg	= 100 ppm TWA =150 ppm STEL	LC50 (96 h) fathead minnow: 13.4 mg/L. Cond: flow-through LC50 (96 h) rainbow trout: 8.05 mg/L. Cond: flow-through LC50 (96 h) bluegill: 16.1 mg/L. Cond: flow-through EC50 (48 h) water flea: 3.82 mg/L EC50 (24 h) Photobacterium phosphoreum: 0.0084 mg/L
1,3,5-Trimethylbenzene 108-67-8	0.1-1.0	Inhalation LC50 Rat:24 g/m³ 4h Oral LD50 Rat:8970 mg/kg	= 25 ppm TWA	LC50 (96 h) goldfish: 12.5 mg/L. Cond: LC50 (96 h) goldfish: 12.52 mg/L. Cond: flow-through LC50 (72 h) goldfish: 13.7 mg/L. Cond: LC50 (96 h) fathead minnow: 7.72 mg/L. Cond: flow-through LC50 (96 h) fathead minnow: 3.48 mg/L. Cond: EC50 (24 h) water flea: 50 mg/L
Ethylbenzene 100-41-4	0.1-1.0	Dermal LD50 Rabbit:15354 mg/kg Inhalation LC50 Rat:17.2 mg/L 4h Oral LD50 Rat:3500 mg/kg	= 100 ppm TWA =125 ppm STEL	LC50 (96 h) bluegill: 150.0 mg/L. Cond: static LC50 (96 h) fathead minnow: 9.09 mg/L. Cond: flow-through LC50 (96 h) rainbow trout: 14.0 mg/L. Cond: static EC50 (48 h) water flea: 2.1 mg/L EC50 (30 min) Photobacterium phosphoreum: 9.68 mg/L
Naphthalene 91-20-3	0.1 1.0	Dermal LD50 Rat:2500 mg/kg Oral LD50 Rat:490 mg/kg Dermal LD50 Rabbit:20 g/kg Inhalation LC50 Rat:340 mg/m³ 1h	=15 ppm STEL Skin - potential significant contribution to overall exposure by	LC50 (96 h) fathead minnow: 6.14 mg/L. Cond: flow-through LC50 (96 h) rainbow trout (juvenile): 1.60 mg/L.

Section 3: Hazards Identification

Ingestion: Ingestion of small amounts during normal handling is not likely

to cause injury. Larger amounts may cause effects similar to those described under inhalation. Ingestion of large amounts will probably cause stomach irritation. Symptoms include nausea, vomiting and diarrhea. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can

be fatal.

Inhalation: High concentrations may cause respiratory irritation and central

nervous system depression with results ranging from dizziness and

headache to unconsciousness.

Skin Contact: Skin irritant.

Eye Contact: Direct contact causes eye irritation. Symptoms will include pain,

redness and tearing. Vapours will irritate the eyes.

Chronic Effects: Reports have associated repeated and prolonged occupational

overexposure to various organic solvents with internal organ, brain and nervous system damage. Contains materials which may cause cancer, depending on duration and level of exposure. See Section

#11 for details.

Section 4: First Aid Measures

Ingestion: Do not induce vomiting. Never give anything by mouth if victim

is rapidly losing consciousness, is unconscious or is convulsing. Drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical

attention immediately.

Inhalation: If inhaled, remove to fresh air. If breathing is difficult give

oxygen. If not breathing give artificial respiration and get

medical attention immediately.

Skin Contact: Remove contaminated clothing and launder before reuse. Wash with

soap and water. Get medical attention if irritation develops and/or

persists.

Eye Contact: Immediately flush eyes with large amounts of water for at least

15 minutes, lifting upper and lower lids. Remove contact lenses if any after the initial flushing and then continue flushing. Get

medical attention if irritation persists.

Section 5: Fire Fighting Measures

Flash Point (°C): 13

Flame Projection: Not Applicable

NFPA Classification: Flammable Liquid, Class IB

Lower Explosive Limit: Not Available
Upper Explosive Limit: Not Available
Autoignition Temp. (°C): Not Available

Sensitivity to Mechanical Impact:

Not Available

Conditions of Flammability:

Extremely flammable. Flammable when heated to temperatures above the flash point and on contact with an ignition source. Vapours are heavier than air and may travel or be moved along the ground to an ignition source at locations distant from material handling. Do not use on vehicles unless cool.

Sensitivity to Static Discharge:

Take precautionary measures against static discharges, such as bonding and grounding when dispensing.

Hazardous Combustion:

Carbon dioxide, carbon monoxide and other unidentified organic compounds.

Extinguishing Media:

Alcohol foam or water fog for large fires. Carbon dioxide or dry chemical for small fires. Use water spray to cool fire exposed containers and prevent bursting. Do not use a direct stream of water.

Section 6: Accidental Release Measures

Leak or Spill Procedures:

Contain spilled material. Avoid contamination of natural waterways. Wear suitable protective clothing. Follow applicable explosion and fire precautions during the response. Stop the spill at the source when safe to do so. For large spills, dike the area to prevent spreading. Pump excess to a salvage container. Absorb residues and small spills with a non-flammable absorbent material and collect adsorbate for disposal. For large quantities refer to the environmental ministry.

Section 7: Handling and Storage

Handling Procedures:

Extremely flammable. Keep away from heat, sparks, flame and other sources of ignition. Do not cut, weld, drill or grind on or near this container. Use with adequate ventilation. Avoid breathing vapours or mist. Use good personal hygiene. Avoid smoking, eating and drinking during use. Wash with soap and water after handling. Containers of this material may contain hazardous residues when emptied.

Storage Requirements:

Extremely flammable. Store in a cool area, away from all sources of heat, ignition and incompatibles. Keep containers tightly closed when not in use.

Section 8: Exposure Controls / Personal Protection

Respiratory: Not normally required. If the TLV is exceeded, a NIOSH-approved

respirator is advised.

Gloves: Nitrile. Neoprene.

Eyewear: Chemical splash goggles. Contact lenses should not be worn. They

may contribute to the severity of the injury.

Clothing: Sufficient clothing to prevent skin contact.

Ventilation: Sufficient mechanical ventilation to maintain exposures below the

TLV. General mechanical ventilation is not recommended as the sole

means of controlling exposure. Make-up air should always be

supplied to balance air exhausted.

Other protective equipment: Emergency showers and eyewash facilities should be nearby. The

selection of personal protective equipment will vary depending on

the conditions of use.

Section 9: Physical and Chemical Properties

Physical State: Liquid Color: Red

Odour: Alcohol odour.

Vapour Density (Air=1): > 1
VOC %: > 95

pH: Not Applicable Solubility in Water: Negligible Specific Gravity (H2O=1): 0.822 @ 15°C Viscosity: < 14cSt @ 40°C

Section 10: Stability and Reactivity

Conditions of Instability:

Stable at ambient and moderately elevated temperatures and pressures.

Hazardous Polymerization:

Hazardous polymerization will not occur.

Hazardous Decomposition:

See hazardous combustion products.

Incompatible Materials:

Avoid strong oxidizers (e.g HOOH, HNO3).

Conditions of Reactivity:

Avoid excessive heat, sparks and open flame. Avoid contact with incompatible materials.

Section 11: Toxicological Information

Irritancy of Product:

Moderately irritating to eyes and skin. Vapours or mists may cause respiratory irritation.

Sensitization to product:

Contains no known skin or respiratory sensitizers.

Carcinogenicity:

Contains 0.1 - 1.0% by wt ethylbenzene, which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by IARC. Contains 0.1 - 1.0% by wt naphthalene, which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by IARC. Contains trace amounts of cumene, which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by IARC.

Reproductive Effects:

Not Available

Teratogenicity:

Contains a component that contains xylene. Xylene is reported to be fetotoxic.

Mutagenicity:

Not Available

Synergystic Products:

Not Available

Section 12: Ecological Information

Environmental: Toxic to aquatic life. Aromatic hydrocarbons may be

bioaccumulative but they have no food chain concentration potential. See composition/information on ingredients.

Biodegradability: Not available.

Section 13: Disposal Considerations

Waste Disposal: Reuse or recycling should be given priority over disposal under

any circumstances. Destroy by incineration or biological treatment according to applicable legislation. Dispose of in accordance with

municipal, provincial and federal regulations.

Section 14: Transportation Information

Road shipment: FLAMMABLE LIQUID, N.O.S. (Isopropanol, Stoddard Solvent), Class

3, UN 1993, PG II, ERG #128.

Marine shipment: UN1993, FLAMMABLE LIQUID, N.O.S. (Isopropanol, Stoddard Solvent),

Class 3, PG II, EmS# F-E, S-E

Air Shipment: Flammable Liquid, N.O.S., (Isopropanol, Stoddard Solvent), Class

3, UN1993, PG II, PI Y341/353.

Exemption:

LTD QTY exemptions may be used if product is packaged in accordance with Schedule 1 of Canada's TDGR or if packaged in accordance with the provisions of the IMDG Code.

Product may be reclassified for air transportation if packaged in accordance to IATA regulations (i.e. Consumer Commodity, Class 9, ID 8000).

Section 15: Regulatory Information

WHMIS: B2 D2A D2B

CEPA: All components are listed on the Domestic Substances List (DSL).

CPR Compliance: This product has been classified in accordance with the hazard criteria of

the CPR and the MSDS contains all of the information required by the CPR.

Section 16: Other Information

HMIS Rating: 2*30B

Prepared By: Regulatory Compliance, Shrader Canada Limited

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