

Material Safety Data Sheet

Aug 17th 2006

PROFUEL X-1 & X-2

Section 1: Product and Company Identification

Product Name

ProFuel

Manufacturer/Distributor

Driving Force Technologies LLC
20 Westwoods Drive
Liberty, Missouri 64068

H	2	
F	2	
R	0	
PE	B	

Phone Numbers

Product Information: 816-222-9090
Medical Emergency 816-222-9092

Section 2: Composition/ Information on Ingredients

Components	CAS Number	Wt %
Oxidized Light Distillate	64742-98-9	30 - 60
2-Butoxyethanol	111-76-2	10 - 20
2-Ethylhexanol	104-76-7	5 - 20
Petroleum Distillate	64742-94-5	5 - 20
- Naphthalene*	91-20-3	<2
- 1,2,4-Trimethylbenzene*	95-63-6	<0.4
Petroleum Distillates	64741-44-2	10 - 15

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Section 3: Hazards Identification

Emergency Overview

Red liquid with pungent odor. Warning! May cause respiratory tract irritation. Avoid contact with eyes and skin.

HMIS Rating:

Health: 2

Flammability: 2

Reactivity: 0

PPE: B

Potential Health Effects

Eye Contact: Eye contact may cause eye irritation with discomfort, tearing, or blurring of vision.

Skin Contact: Prolonged and repeated skin contact may cause defatting and dermatitis.

Inhalation: Inhalation may cause irritation of the respiratory tract; headache, nausea dizziness, weakness and fatigue.

Ingestion: Vomiting may result. Pulmonary aspiration hazard if vomiting occurs.

Reports have associated repeated and prolonged occupational overexposure to hydrocarbon solvents with permanent brain and nervous system damage.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, and ACGIH as carcinogens.

Section 4: First Aid Measures

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Ingestion

If affected person is conscious, give plenty of water to drink. Drink two large glasses of water. Never give anything by mouth to an unconscious person. Induce vomiting by sticking finger in throat. Get immediate medical attention.

Section 5: Fire Fighting Measures

Flammable Properties:

Flash Point: 142 °F (61 °C) Minimum (**Method:** TCC) **Burn Rate:** Unknown

Flammable Limits:

Lower Flammable Limit: Not Established **Upper Flammable Limit:** Not Established

Flammability Classification: Flammable Liquid

Autoignition Temperature: Not Established

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide, Some metallic oxides

Extinguishing Media: Water Spray (Fog), Foam, Dry Chemical

Additional Considerations: Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

FIRE FIGHTING INSTRUCTIONS: Fire fighters should wear positive pressure NIOSH approved self-contained breathing apparatus (SCBA) and full turnout gear.

NFPA RATING:

Health: 2 **Flammability:** 2 **Reactivity:** 0 **Protective equipment:** B

Section 6: Accidental Release Measures

Note: Review Fire Fighting Measures and Handling (Personnel) Sections before proceeding with clean up. Use appropriate Personal Protective Equipment during clean up. Soak up with sawdust, sand, oil dry or other absorbent material. Remove source of heat, sparks, flame, impact, friction, or electricity. Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean-Up

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways

Accidental Release Measures

Spills are slippery and should be cleaned up promptly. Unless released material is cleaned up immediately for reprocessing, recycling, or reuse, a release of 100 lbs. may trigger the reporting requirements of CERCLA Section 103.

Section 7: Handling and Storage

Handling: Keep away from heat, sparks and flame. Do not ingest. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Storage: Store in a segregated and approved area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Keep container in a well-ventilated place.

Incompatible materials: Strong oxidizing and reducing agents.

Special Packaging Materials: Not applicable

Section 8: Exposure Control/ Personal Protection**Engineering Controls**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protective Equipment

Eye/Face Protection: Wear coverall chemical splash goggles or safety glasses. Goggles with a face shield may be necessary depending on quantity of material and conditions of use.

Skin Protection: Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, boots hood and jacket.

Respirators: Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

Exposure Limits

Petroleum Distillates:

PEL (OSHA): 500 ppm, 50 mg/m³, 8 hr TWA
TLV (ACGIH): None established

1, 2, 4-trimethylbenzene:

PEL (OSHA): None established
TLV (ACGIH): 25 ppm, 8 hr TWA

Section 9: Physical and Chemical Properties

Appearance:	Red Liquid
Odor:	Pungent
Physical State:	Liquid
pH:	Not Applicable
Boiling Point:	Not Available
Melting Point:	Not Available
Freezing Point:	Not Available
Solubility in Water:	Moderate
Vapor Density:	Not Available
Volatile Organic Compounds (VOC):	Not Available
Evaporation Rate:	Not Available
Specific Gravity:	.89 @ 68°F (20°C)
Density (lb/gal):	7.42 @ 68°F (20°C)

Section 10: Stability and Reactivity

Chemical Stability: The product is stable.

Incompatibility with other Materials: Strong oxidizing and reducing agents.

Conditions to avoid: High temperatures, sparks, and open flames.

Hazardous Decomposition Products: Decomposes with heat. May produce dangerous levels of carbon monoxide on combustion.

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

ACCUTE EXPOSURE

Eye Irritation: Moderate to strong eye irritant. Based on actual data Irritation may occur with exposure to vapors.

Skin Irritation: May cause skin irritation. Based on actual data. Prolonged or repeated occupational exposure may cause dermatitis.

Respiratory Irritation: May cause nose, throat and lung irritation. Based on data from components or similar materials.

Dermal Toxicity: The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.

Inhalation Toxicity No data available to indicate product or components may be a toxic inhalation hazard.

Oral Toxicity: The LD50 in rats is > 5000 mg/kg. Based on data from components or similar materials. Ingestion causes CNS depression. Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in pulmonary edema and chemical pneumonitis.

Dermal Sensitization: No data available to indicate product or components may be a skin sensitizer.

Inhalation Sensitization: No data available to indicate product or components may be respiratory sensitizers.

CHRONIC EXPOSURE

Chronic Toxicity: No data available to indicate product or components present at greater than 1% are chronic health hazards.

Carcinogenicity: No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive Toxicity: No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

Teratogenicity: No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

Section 12: Ecological Information

ENVIRONMENTAL TOXICITY

Freshwater Fish Toxicity: Not determined.

Freshwater Invertebrates Toxicity: Not determined.

Algal Inhibition: Not determined.

Saltwater Fish Toxicity: Not determined.

Saltwater Invertebrates Toxicity: Not determined.

Bacteria Toxicity: Not determined.
Miscellaneous Toxicity: Not determined.

ENVIRONMENTAL FATE

Biodegradation: Adequate data is not available to estimate the biodegradation potential of this material.
Bioaccumulation: 10 – 25% of the components display no potential to bioconcentrate.
Soil Mobility: Not determined.

Section 13: Disposal Considerations

Waste Disposal: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

Section 14: Transport Information

DOT

For Non-bulk Shipments:

This product is not regulated by DOT for non-bulk shipments.

For Bulk Shipments:

Proper Shipping Name: Consumer Commodity
Hazard Class: ORMD

This product has been reclassified as ORMD with the proper name change as Consumer Commodity.

DOT (Elevated)

For Non-bulk Shipments:

This product is not regulated by DOT for non-bulk shipments.

For Bulk Shipments:

Proper Shipping Name: Elevated temperature liquid, flammable, n.o.s

Hazard Class:	3
Subsidiary Hazard Class:	N.A.
I.D. No. (UN/NA):	UN3256
Packing Group:	III
Special Information:	
Marine Pollutant:	No
Reportable Quantity:	N.A.
DOT Label(s):	Flammable Liquid

ICAO/IATA

The product is not regulated by ICAO/ICAO.

IMO/IMDG:

The product is not regulated by IMO/IMDG.

IMO/IMDG (Elevated):

Proper Shipping Name:	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.
Hazard Class:	3
Subsidiary Hazard Class:	N.A.
I.D. No. (UN/NA):	UN3256
Packing Group:	III
Marine Pollutant:	No
Special Information:	Flash Point \geq 72 °C

Section 15: Regulatory Information

U.S. Federal Regulations:

TSCA: All components appears in TSCA Inventory

OSHA: None

CERCLA SARA HAZARD CATEGORY:

Section 311 and 312: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: None

Section 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: 1,2,4-trimethylbenzene (5 - 10%)

State regulations:

State Right to Know information is not provided.

California prop. 65 (no significant risk level): Benzene

International Regulations:

Canadian WHMIS:

WHMIS Class B-3: Combustible liquid with a flash point between 61.1°C (142°F) and 93.3°C (200°F).

WHMIS Class D-1B: Material causing immediate and serious toxic effects (TOXIC). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the CPR.

Canadian Environmental Protection Act (CEPA): Additional information available upon request.

EU Regulations:

Hazard Symbol(s): T

Risk Phrases: R10 - Flammable
R20 - Harmful by inhalation
R25 - Toxic if swallowed
R65 - Harmful: may cause lung damage if swallowed

Safety Phrases: S23 - Do not breathe vapour
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S7/9- Keep container tightly closed and in a well-ventilated place

EINECS: Additional information available upon request. All components are listed on EINECS

Section 16: Other Information

The information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Driving Force Technologies LLC. The Data on this sheet related only to the specific material designed herein. Driving Force Technologies LLC assumes no legal responsibility for the use or reliance on this data.

End of MSDS