



TVF Trans-Valve Fix

MSDS Number: TVF

Revision Date: 09/28/10

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1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: TVF Trans-Valve Fix
Revision Date: 09/28/10
MSDS Number: TVF
Product Code: 16-TVF

Manufacturer: The Blaster Corporation
8500 Sweet Valley Drive
Valley View, Ohio 44125

(216) 901-5800
(216) 901-5801 fax
www.blasterproducts.com

2 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS #	Percent	Exposure Limits
Zinc Alkyl Dithiophosphate	68649-42-3	1-10%	OSHA (TWA)- N/E ACGIH (TLV)- N/E
Propylene Glycol t-Butyl Ether	9003-13-8	0-10%	OSHA (TWA)- N/E ACGIH (TLV)- N/E
Isopropanol	67-63-0	10-20%	OSHA (TWA)- 400 ppm ACGIH (TWA)- 400 ppm
Petroleum Distillate (Mineral Oil)		40-55%	OSHA (TWA)- 5 mg/m3 oil mist ACGIH (TWA)- 5 mg/m3 oil mist
VM&P Naphtha	8032-32-4	20-30%	OSHA (TWA)- 300 ppm ACGIH (TWA)- 300 ppm

3 HAZARDS IDENTIFICATION

Route of Entry: Eyes, skin, inhalation, ingestion

Target Organs:

Inhalation: Tests on similar material indicate the possibility of the following symptoms: headache, nasal and respiratory irritation, nausea, drowsiness, breathlessness, fatigue, central nervous system depression, convulsions, and loss of consciousness.

Skin Contact: Tests on similar materials indicate acute irritation is expected to occur upon short-term exposure, chronic dermatitis on prolonged contact.

Eye Contact: Tests on similar materials suggest acute irritation be expected.

Ingestion: ACUTE ASPIRATION HAZARD. Tests on similar materials indicate possibility of the following symptoms: headache, nausea, drowsiness, fatigue, pneumonitis, pulmonary edema, central nervous system depression, convulsions, and loss of consciousness.



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4 FIRST AID MEASURES

- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Continue to monitor. Get medical attention.
- Skin Contact:** Remove contaminated clothing immediately! Wash skin with soap and water. If irritation develops, seek medical attention.
- Eye Contact:** Flush eye(s) with water for 15 minutes. Get medical attention. If eye irritation persists, obtain medical treatment.
- Ingestion:** If conscious, immediately give the person two large glasses of water. Do not induce vomiting. Get medical attention immediately.

5 FIRE FIGHTING MEASURES

Flash Point: 58 F (TCC) minimum

Flammable limits in air, % by volume:

Upper: No Information

Lower: No Information

Extinguishing Media:

Dry chemical, carbon dioxide, halon, or foam is recommended. Water spray may be used to cool containers or structures. Halon may decompose into toxic materials and carbon dioxide will displace oxygen, take proper precautions when using these materials.

Unusual Fire & Explosion Hazards:

This material may be ignited by heat, sparks, flames or other ignition sources (static electricity). Vapors are heavier than air and will collect in low areas (sewers) or travel considerable distances. If containers are not cooled in a fire, they may rupture and ignite.

Special Fire Fighting Procedures:

Emergency responders should wear self-contained breathing apparatus. Wear other protective gear as conditions warrant. Keep unauthorized people out and try to contain spills or leaks if it can be done safely. Material will float on water, avoid spreading the fire.

6 ACCIDENTAL RELEASE MEASURES

In case of spill or release, avoid vapors and ignition sources. Use appropriate protective devices and absorbents. Stop and contain the discharge if it can be done safely. Keep out of drains and waterways. Handle with trained personnel only. Notify authorities as required by law.

7 HANDLING AND STORAGE

Handling Precautions: Use in accordance with good industrial workplace practices. Avoid unnecessary contact. Wash thoroughly after handling. Use with good ventilation.

Storage Requirements: Store in a dry place away from excessive heat. Store containers with lids on and properly labeled.

Do not store at temperatures above 120 degrees F.



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8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Eye wash stations and emergency showers should be immediately available.

Protective Equipment: Eyes and Face: Standard safety glasses with splash shields typically offer adequate protection. Where excessive splashing or spraying is possible, a face shield should be used. Do not wear contacts.

Skin and clothing: Excessive contact should be avoided. Nitrile gloves, boots and aprons will provide adequate protection when contact cannot be avoided. Remove and wash any contaminated clothing immediately. Wash thoroughly after handling.

Respiratory: Good general ventilation should be sufficient to control airborne levels. Maintain airborne concentrations below OSHA established exposure limits of ingredients in Section 2. Use NIOSH approved respirator if ventilation is not adequate enough to maintain levels below these limits.

Exposure Guidelines/Other: The Blaster Corporation takes not responsibility for determining what measures are required for personal protection in any specific application. This information should be used with discretion.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	yellow/orange, transparent, thin	Boiling Point:	180 F
Physical State:	liquid	Freezing/Melting Pt.:	Not Determined
Odor:	typical solvent-like	Solubility:	nil
pH:	Not Determined	Spec Grav./Density:	0.83 - 0.85
Vapor Pressure:	Not Determined		
Vapor Density:	>1 (air = 1)		
Heat Value:	Not Determined		
VOC:	Not Determined		
Evap. Rate:	>1 (NBA=1)		
Bulk Density:	Not Determined		
Octanol:	Not Determined		
Molecular Weight:	Not Determined		
Particle Size:	Not Applicable		
Softening Point:	Not Applicable		
Viscosity:	Not Determined		
Percent Volatile:	Not Determined		
Sat. Vap. Concentrat.:	Not Determined		
Molecular Formula:	Not Determined		



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10 STABILITY AND REACTIVITY

Stability:	This product is stable.
Conditions to avoid:	Avoid excessive heat, sources of ignition and excessive water.
Materials to avoid (incompatibility):	Avoid contact with strong oxidizing agents and strong reducing agents (strong acids or bases.) Avoid mixture with water.
Hazardous Decomposition products:	Combustion will produce carbon monoxide, carbon dioxide and nitrogen-oxygen compounds
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

• Propylene Glycol t-Butyl Ether 9003-13-8

Acute Toxicity - Lethal Doses

LC50 (Inhl) Rat > 550 PPM 4 HOURS
LD50 (Oral) Rat 3771 MG/KG BWT
LD50 (Skin) Rabbit > 2000 MG/KG BWT

Acute Toxicity - Effects

Inhalation May produce symptoms of central nervous system depression including headache, dizziness, nausea, loss of sense of balance, drowsiness, visual disturbances, unconsciousness and sense of balance, drowsiness, visual disturbances, unconsciousness and death.
Ingestion High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure).
Skin Contact Not expected to be a skin absorption hazard.

Irritation

Skin Contact may cause mild skin irritation.
Eye Irritation can range from slight to severe. Neat liquid may produce severe eye irritation. A 20% solution in water was, at most, slightly irritating to the eye. Severe irritation may result in corneal opacity, redness, inflammation of the iris and swelling of the conjunctiva.

Sensitization: Not expected to be a sensitizer.

Target Organ Effects: Eye. Skin. Central nervous system effects.

Repeated Dose Toxicity

Low inherent toxicity following repeated inhalation exposure. Effects observed in male rats that inhaled high concentrations of PTB included a species- and sex-specific kidney toxicity mediated by a-2u-globulin nephropathy, a mechanism that is not relevant to humans. Liver changes indicative of an adaptive response to metabolizing PTB were observed in rats and mice.

Reproductive Effects

No adverse effect on reproductive performance was seen in male and female rats exposed by oral gavage in a one-generation reproductive toxicity study. Very slight effects on pup body weights and survival were noted in pups from dams exposed to 1000 mg/kg bwt/day of PTB.

Developmental Effects

Results from studies in pregnant rats and rabbits demonstrate PTB is not teratogenic or fetotoxic.

Genetic Toxicity

Based on the weight of evidence, PTB is not considered to be genotoxic in vitro. A weakly mutagenic response was noted in female mice from a mouse peripheral blood micronucleus assay while male mice were negative in the same study.

Carcinogenicity

Long term inhalation exposure to PTB vapor was associated with an increased incidence of liver tumors in male and female mice and a marginally increased incidence of liver and kidney tumors in male rats. Studies suggest that the rat kidney toxicity and subsequent tumors

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are due to a species and sex-specific mechanism and not relevant to humans. The weight of evidence from genotoxicity testing suggests that a non-genotoxic mechanism was most likely involved in the development of the rodent liver tumors. PTB is not classified for carcinogenicity by OSHA, NTP or the EPA. The International Agency for Research on Cancer (IARC) found inadequate human evidence and limited animal evidence of carcinogenicity for PTB and therefore was placed in IARC's Group 3 as not classifiable as to its carcinogenicity to humans.

Isopropanol

Additional Remarks Exposure can cause nausea, headache and vomiting. May be harmful by inhalation, ingestion, skin adsorption.

Eyes Irritating to eyes.

Skin Acute dermal LD50 (rabbit): 12,800 mg/kg

Inhalation Acute 4 hours LC50 (rat): 16,970 mg/l

Ingestion Acute oral LD50(rat): 5,045 mg/kg

CARCINOGENICITY

This product contains no carcinogenic substances.

VM&P Naphtha

Skin effects

May cause irritation or dermatitis with prolonged and repeated contact.

Oral effects

Tests on similar materials indicate an order of acute oral toxicity.

Inhalation effects

Acute toxicity expected on inhalation.

Medical conditions aggravated by overexposure

Dermatitis and sensitive skin - this product is not listed as carcinogenic or a potential carcinogen by the national toxicology program, by the I.A.R.C. monographs or by OSHA. Nevertheless, good industrial hygienic practices are recommended.

Petroleum Distillate (Mineral Oil)

INHALATION: Will not produce vapors unless heated to temperatures of ~300 F.°

EYE CONTACT: Irritating, but will not permanently injure eye tissue.

SKIN CONTACT: Prolonged or repeated contact may cause skin irritation.

INGESTION: Small amounts (tablespoonful) swallowed are not likely to cause injury. Larger amounts may cause nausea and vomiting. Consult a physician promptly.

CHRONIC (CANCER) INFORMATION: IARC Monographs state that when laboratory animals are exposed to severely hydrotreated oils, such as these product(s), there is insufficient evidence for cancer. Thus, these oils are Unlabeled in accordance with 29 CFR 1910.1200.

Median Lethal Dose (LD50 LC50) (Species)

Oral: Believed to be >5g/kg (rat); practically non-toxic

Inhalation: Not Determined

Dermal: Believed to be >3 g/kg (rat); practically non-toxic.

Irritation Index Estimation of Irritation (Species).

Skin: Believed to be <0.5/8.0 (rabbit); no appreciable effect

Eyes: Believed to be <15/110 (rabbit); no appreciable effect

Sensitization: Not Available

Other: None

NOTE: Some studies have linked the overexposure of "solvents" to lasting neurological effects and non-Hodgkins Lymphoma.



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12 ECOLOGICAL INFORMATION

Ecological information on this product as a mixture has not been determined.

13 DISPOSAL CONSIDERATIONS

Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.

Note that this handling and disposal information may also apply to empty containers, liners and rinsate. State or local regulations or restrictions are complex and may differ from federal regulations. This information is intended as an aid to proper handling and disposal; the final responsibility for handling and disposal is with the owner of the waste.

14 TRANSPORT INFORMATION

Dept. of Transportation (DOT):

This product, as it leaves Blaster's facilities, meets the definitions set forth in CFR 49 part 173.150c as a "consumer commodity." Allowing for certain exceptions (173.156) for domestic surface (ground) shipments.

Proper shipping name: Consumer Commodity
Hazard class: ORM-D

International (IMDT-IATA):

Proper shipping name: Flammable Liquid, n.o.s. (naphtha) Limited Quantities
Hazard class: 3
UN Number: 1993
Packing Group: I

15 REGULATORY INFORMATION

SARA 311:

Acute health:	Yes	Chronic health:	No
Fire:	Yes	Sudden release of pressure:	No
Reactive:	No		

SARA 313: Title III of the 1986 Super fund Amendments and Reauthorization Act (SARA) and 40 CFR PART 372.
Zinc Alkyl Dithiophosphate 68649-42-3

All the chemicals used in this product are TSCA listed.



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OTHER INFORMATION

Manufacturer's Disclaimer:

To the best of our knowledge, the information contained herein is accurate. However, neither The Blaster Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exists.

HMS Ratings

Health:	2
Fire:	3
Reactivity	0

END OF MSDS DOCUMENT