MATERIAL SAFETY DATA SHEET

BLEND DA

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Tarr, Inc. of Arizona
4115 W. Turney Avenue

Phoenix, AZ 85019

INFORMATION PHONE: (602) 233-2000

EMERGENCY PHONE: **CHEMTREC 800-424-9300 (US) Day or night**
International Call Collect CHEMTREC 202-483-7616

PRODUCT NAME: **BLEND DA**

PRODUCT NUMBER: BDA

UPC NUMBER:

PREPARED BY: Patricia Rodabaugh

DATE PREPARED: 9/19/1997

LAST REVISION: 9/19/1997

SYNONYMS:

Portland, Oregon
Phoenix, Arizona
Auburn, Washington
Vancouver, Washington

Print Date: 12/27/2004

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL	ACGIH TLV	NOTE
Toluene	108-88-3	49-53	100 ppm	50 ppm (skin)	
2-Propanol	67-63-0	22-26	400 ppm	400 ppm	
Acetone	67-64-1	17-21	750 ppm	750 ppm	
Diacetone Alcohol	123-42-2	4-8	50 ppm	50 ppm	

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING! Flammable liquid and vapor. Harmful or fatal if swallowed. Vapor harmful.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Liquid is moderately irritating to the eyes. High vapor concentrations may also be irritating.

INHALATION: Exposure to high concentrations may result in central nervous system (CNS) depression.

INGESTION: Liquid is moderately toxic and may be harmful if swallowed; may produce CNS depression. Ingestion of product may result in vomiting; aspiration (breathing) of vomitus into the lungs must be avoided as even small quantities may result in aspir. pneumontis.

SKIN CONTACT: Liquid is mildly irritating to the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

SIGNS AND SYMPTOMS OF EXPOSURE:
Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur. Aspiration pneumonitis may be evidenced by coughing, labored breathing an cyanosis (bluish skin). In severe cases death may result.

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. If irritation persists, get medical attention.

INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

INGESTION: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.*

SKIN CONTACT: Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

AGGRAVATED MEDICAL CONDITIONS:

Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impared function from preexisiting disorders may be aggravated by exposure to this product.

SUPPLEMENTAL HEALTH INFORMATION:

*Note to physician: If more than 2.0 ml per kg has been ingested and vomiting has not occurred, emesis should be induced with supervision. Keep victim's head below hips to prevent aspiration.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 57 F **FLASH POINT METHOD USED:** Tag Closed Cup

AUTOIGNITION: NDA **LEL:** 1 **UEL:** 12.8

EXTINGUISHING MEDIA:

Use water fog, "alcohol" foam, dry chemical, or CO2.

SPECIAL FIRE FIGHTING PROCEDURES:

WARNING. Flammable Liquid. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

When heated above the flash point this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mist or spray may be flammable at temperatures below the flash point.

COMBUSTION PRODUCTS:

Carbon monoxide and unidentified organic compounds may be formed during combustion.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

Remove all sources of ignition and provide ventilation. Wear protective equipment as given in Section 8. Dike around large spills to prevent spreading. Absorb small spills with inert material (clay, sand). Prevent contamination of surface waters.

7. HANLDING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

OTHER PRECAUTIONS:

Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

If exposure may or does exceed occupational exposure limits (Sec. 2) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-suppling respir. of an air-purifying respir. for organic vapors.

VENTILATION:

Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

PROTECTIVE GLOVES:

Test data indicate the best protection is provided by neoprene, nitrile, and natural rubber gloves.

EYE PROTECTION:

Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required.

WORK / HYGENIC PRACTICES:

Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet.

ENGINEERING CONTROLS:

Facilities storing or utilizing this material should be equipped with and eyewash facility and a safety shower. Use explosion-proof ventilaiton as reuired to control vapor concentrations. Air-dry contaminated clothing in a well ventilated area then launder before reusing.

EXPOSURE GUIDELINES:

May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventillation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY IN WATER: Solubility negligible in water

APPEARANCE AND ODOR: Clear, colorless liquid with pungent odor.

BOILING POINT:	133 F	**PERCENT VOLATILE:**	100
VAPOR PRESSURE:	22 - 180	**PH:**	N/A
EVAPORATION RATE:	Slower than ether	**MOLECULAR WEIGHT:**	NDA
POUNDS PER GALLON:	6.48	**VAPOR DENSITY:**	Lighter than air
SPECIFIC GRAVITY:	77.319	**OTHER PROPERTIES:**	
MELTING POINT:	NDA		
FREEZING POINT:	NDA		

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid heat, sparks, flame and contact with strong oxidizing agents. Prevent vapor accumulation.

INCOMPATIBILITY:

Strong oxidizers.

HAZARDOUS DECOMPOSITION OR BY PRODUCTS:

Carbon monoxide and unidentified organic compounds may be formed during combustion.

HAZARDOUS POLYMERIZATION: Will Not Occur

CONDITIONS TO AVOID: Avoid heat, flame, and other sources of ignition.

11. TOXICOLOGY INFORMATION

This product may contain benzene (CAS No. 71-43-2) at a concentration less than 300 ppm.

12. ECOLOGICAL INFORMATION

Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

13. DISPOSAL CONSIDERATIONS

The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORTATION INFORMATION

DOT Proper Shipping Name:	Flammable liquids, N.O.S. (Toluene, IPA)	**PACKING GROUP:**	II
		GUIDE NUMBER:	128
HAZARD CLASS:	3	**DOT CLASS:**	Flammable liquid
UN NUMBER:	UN 1993		

15. REGULATORY INFORMATION

This product is listed on the EPA/TSCA inventory of chemical substances. Per 40 CFR part 82, this product does not contain nor was it directly manufactured with any class I or class II ozone depleting substance.

16. OTHER INFORMATON

HMIS INFORMATION: **HEALTH:** 2 **FLAMMABILITY:** 3 **REACTIVITY:** 0 **PROTECTIVE:** G

SARA Title III Information:

SARA 302: To the best of our knowledge, none of the chemicals in this product are listed as an Extremely Hazardous Substance under Section 302 of SARA Title III nor does this product contain any other such substances.

SARA 311/312: This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

SARA 313: toluene (108-88-3)

Supplemental Health Info.: Laboratory animals exposed to Diacetone alcohol (CAS 123-42-2) by inhalation to vapor concentrations up to 950 ppm for 6 hr/day, 5 day/wk for 6 weeks showed evidence of kidney and liver damage. similar effects were seen in animals exposed to 40 mg/kg/day for 30 days in drinking water.

In Response to a TSCA test rule, several studies of isopropanol (IPA) have been completed. The studies and their results are as follows: 1) Both mutagenicity studies, the mouse mononucleus and CHD assays, were negative. 2) Rat and rabbit oral teratogenicity and developmental toxicology: A) There was no evidence that IPA caused teratogenicity in rats or rabbits. B) Developmental toxicity was seen in rats at 1200 mg/kg (evidenced by decrease body weight**) while no developmental toxicity was seen in the rabbit study. For rats, the NOAEL was 400 mg/kg: for rabbits, 480 mg/kg. This work also identified pregnant rabbits to be approximately eight times more sensitive to IPA's lethal effects than non-pregnant rabbits**.

Other test reule related studies: 3: Rat oral reproductive toxicity: In the rat reporductive toxicity study, the NOAEL for reproduction indicies was 1000 mg/kg, however, there was a marked increase in post-weaning pup mortality at this level**. The NOAEL for this effect was 500 mg/kg. Also, the NOAEL for parental female body weight decrease ws 100 mg/kg. 4) In rat inhalation neurtoxicity and oral developmental neuratoxicity studies, there was no evidence that IPA caused neurotoxicity in adults (max dose 5000 ppm) or offspring (max dose 1200 mg/kg). 5) Subchronic rat and mouse inhalation toxicity: The subchronic NOAEL was 500 ppm based on clinical signs of CNS depression (both species) and increased body weight and blood effects (rat only) seen at 1500 ppm. (note: the information tagged by "**" above were submitted to EPA under the requirements of TSCA: 8(e).)

While there is no evidence that industrially acceptable levels of toluene vapors (e.g., the TLV) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels of toluene produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms. This latter effect was shown to be enhanced by hypoxia or the injection of adrenaline-like agents. Prolonged and repeated exposures to high concentrations of toluene (mixed solvent) have resulted in hearing loss in laboratory rats. While the effect of solvents on the human auditory system is uncertain, solvent abusers exposed to high doses of toluene show signs of hearing loss and occupational exposure to toluene (mixed solvent) may interact with noise in causing hearing loss in the work environment. The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with toluene (mixed solvent) in the work environment may cause signs of hearing loss. Toluene is not known to be mutagenic or carcinogenic. However, the available human and experimental data are limited and insufficient to assess carcinogenic potential. Toluene is not listed as a carcinogen by NTP, IARC, or OSHA. Intentional abuse of toluene vapors has been linked to damage of brain, liver, kidney and to death. Many case studies involving abuse during pregnancy clearly indicate that toluene is a developmental toxicant. Developmental toxic effects comparable to those observed in humans have been seen in lab animals but the effects were generally associated with maternal toxicity.

N/A = Not Applicable
NDA = No Data Available

Disclaimer

The information contained herein is based on the data available to us and is believed to be accurate. However, Tarr, Incorporated makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Tarr, Inc. assumes no responsibility for injuries from the use of the product described herein.