MATERIAL SAFETY DATA SHEET

CALIBRATING FLUID

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Tarr, LLC

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PRODUCT NAME: CALIBRATING FLUID

PRODUCT NUMBER: CF

UPC NUMBER:

PREPARED BY: Patricia Rodabaugh

DATE PREPARED: 12/13/2004 **LAST REVISION:** 5/10/2001

SYNONYMS:

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name

CAS # Weight % OSHA PEL

ACGIH TLV

NOTE

Solvent naphtha, mineral spirits

64742-88-7 61-67 100 ppm*

100 ppm*

Xylenes 1330-20-7 1-2 100 ppm 100 ppm

Trimethylbenzene, 1,2,4,- 95-63-6 1-4 25 ppm 25 ppm

Naphtha (petroleum), heavy alkylate 64741-65-7 31-39 100 ppm * 100 ppm *

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: COMBUSTIBLE. Harmful or fatal if swallowed - can enter lungs and cause damage. May cause eye and skin

irritation or injury.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Liquid or vapor may cause eye irritation.

INHALATION: Vapors may be irritating to the nose, throat, and respiratory tract. High vapor concentrations may cause 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 moderately 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 and cyanosis.

4. FIRST AID MEASURES

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

occurs, get medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be

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

Print Date: 12/13/2004

administered by qualified personnel. 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:

May cause skin and liver disease, may attack respiratory tract.

SUPPLEMENTAL HEALTH INFORMATION:

Laboratory studies have shown that petroleum distillates may cause kidney, liver, or lung damage. reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 133 F FLASH POINT METHOD USED: Tag Closed Cup

AUTOIGNITION: NDA LEL: 0.009 UEL: 0.07

EXTINGUISHING MEDIA:

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

SPECIAL FIRE FIGHTING PROCEDURES:

The use of SCBA is recommended for firefighters. Water spray may used to cool containers exposed to heat or flame.

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:

Control spilled liquid by diking with inert material such as sand or earth. Collect spilled material in sealable containers for recovery or disposal. Remainder of spill may normally be washed to the sanitary sewer providing environmental control limits

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:

KEEP OUT OF REACH OF CHILDREN! 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:

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Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots

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:

Wear gloves and protective clothing which are impervious to this product for the duration of anticipated exposure, if there is potential for skin contact.

WORK / HYGENIC PRACTICES:

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

ENGINEERING CONTROLS:

Use this material only in well ventilated areas.

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: Colorless, clear liquid. Mild odor.

BOILING POINT: 279-337F **PERCENT VOLATILE:** 100

VAPOR PRESSURE: 1-21 PH: N/A

EVAPORATION RATE: Slower than ether **MOLECULAR WEIGHT:** NDA

POUNDS PER GALLON: 6.36 VAPOR DENSITY: Heavier than air

SPECIFIC GRAVITY: 0.765-0.775 OTHER PROPERTIES: Aromatic, Vol. %, Max.: 20.0

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.

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 or equal to 0.01 percent.

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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: Combustible liquid, n.o.s., (naphtha) **PACKING GROUP:** III **GUIDE NUMBER:** 128

HAZARD CLASS: Combustible liquid DOT CLASS: Combustible Liquid

UN NUMBER: NA 1993

15. REGULATORY INFORMATION

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

16. OTHER INFORMATON

HMIS INFORMATION: HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 0 PROTECTIVE: H

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

Seciton 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: Xylene (1330-20-7) and trimethyl benzene (95-63-6)

Supplemental Health Info.: Xylene is not listed as a carcinogen by NTP, IARC, or OSHA and we are not aware of data indicating it is mutagenic,

carcinogenic or a skin sensitizer. Laboratory animals exposed to prolonged and repeated high doses of xylene by various routes have shown hearing loss and effects in liver, kidneys, lungs, spleen, heart, blood and adrenals; developmental toxicity studies showed embryolethal/toxic and teratogenic effects with maternal toxicity. The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with xylene in the work environment may cause signs of hearing loss.

A chronic feeding study in rats with ethyl benzene caused cancer (increase in total malignant tumors). Developmental toxicity studies in rats with ethyl benzene showed evidence of skeletal and other malformations at maternally toxic doses; similar effects were not seen in rabbits. Ethyl benzene was not mutagenic in: Ames test, yeast, drosophila, sister chromatic exchange with cultured human lymphocytes cells and in vitro cytogenetics assay with CHO cells.

N/A = Not Applicable
NDA = No Data Available

Disclaimer

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