

MATERIAL SAFETY DATA SHEET



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MSDS No: 4324

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EBR 4115

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EBR 4115

PRODUCT CODE: 4324

MANUFACTURER

Tarr Acquisition, LLC

4115 W. Turney Ave.

Phoenix AZ 85019

Service Number: 602-233-2000

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation) :(800) 424 - 9300

CANUTEC (Canadian Transportation) :(613) 996 - 6666

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: WARNING! Flammable liquid and vapor. Harmful or fatal if swallowed.
Vapor harmful.

POTENTIAL HEALTH EFFECTS

EYES: May cause moderate irritation, including burning sensation, tearing, redness or swelling.

SKIN: Liquid is mildly irritating to the skin. May cause a burning sensation, redness and/or swelling.
Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

INGESTION: Liquid is moderately toxic and may be harmful if swallowed; may product 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 aspiration pneumonitis.

INHALATION: Prolonged overexposure to either vapor or mist may cause coughing, shortness of breath, dizziness and drunkenness.High vapor concentrations may cause drowsiness and irritation or produce central nervous system (CNS) depression.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), pain in the abdomen, blood abnormalities (breakage of red blood cells), kidney damage and death. Shortness of breathing, confused behavior, redness of skin, swelling of tissues, watery eyes, and nausea.

CHRONIC EFFECTS: Repeated or prolonged exposure may irritate the mucous membranes.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing disorders or diseases of the eye. This material

may affect mucous tissue and/or aggravate mucous membrane dysfunction.

ROUTES OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

TARGET ORGAN STATEMENT: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects; mild, reversible kidney effects; nasal damage.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
2-Methoxy-1-Methylethylacetate	30 - 35	000108-65-6
2-METHOXYPROPYL ACETATE	< 2	070657-70-4
Acetone	2 - 6	000067-64-1
1-Methoxy-2-Propanol	60 - 66	107-98-2
2-METHOXYPROPANOL	< 2	1589-47-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention, if irritation occurs or persists.

SKIN: Remove contaminated clothing as needed. Wash thoroughly with soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if discomfort persists.

INGESTION: If large quantity swallowed, give lukewarm water (pint 1/2 litre). If victim completely conscious/alert. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Seek immediate medical attention.

NOTES TO PHYSICIAN: Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. If pain, blinking, tears, or redness continue, patient should contact ophthalmologist.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: < 47°C (116°F) TAG CC

FLAMMABLE LIMITS: 0.015 to 0.16

AUTOIGNITION TEMPERATURE: ~ (522°F) to (530°F)

EXTINGUISHING MEDIA: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Do NOT use straight streams of water.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide and unidentified organic compounds may be formed during combustion.

EXPLOSION HAZARDS: When heated above the flash point, releases flammable vapors. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays/mists may be combustible at temperatures below normal flash point.

FIRE FIGHTING PROCEDURES: Fight fire from a safe distance/protected location. Heat may build enough pressure to rupture closed containers/spreading fire/increasing risk of burns/injuries. Use water spray/fog for cooling. Avoid frothing/stream explosion. Burning liquid may float on water. Although water soluble, may not be practical to extinguish fire by water dilution. Notify authorities immediately. If liquid enters sewer/public waters.

FIRE FIGHTING EQUIPMENT: Do not enter fire area without proper protection. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Release can cause fire or explosion. Liquids/vapors may ignite. Evacuate/limit access. Equip responders with proper protection. Extinguish all ignition sources. Stop release. Prevent flow to sewer/public waters. Notify fire and environmental authorities. Slippery walking/spread granular cover or soak up. Soak up small spills with inert solids. Use suitable disposal containers. On water, material is soluble and may float or sink. Contain/collect rapidly to minimize dispersion. Disperse residue to reduce aquatic harm. Report per regulatory requirements.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: 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.

HANDLING: It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present. Alternately, positive steps should be taken to reduce any accumulated peroxides to a safe level before concentrating the liquid. Use only non-sparking tools. Properly ground containers before beginning transfer. All equipment must conform to applicable electrical code. Handle empty containers with care. Flammable/combustible residue remains after emptying. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Extinguish all ignition sources. Check atmosphere for explosiveness and oxygen deficiencies. Wear recommended personal protective equipment. Observe precautions pertaining to confined space entry.

STORAGE: Store only in tightly closed, properly vented containers away from heat, sparks, open flame and strong oxidizing agents. Storage under nitrogen atmosphere is recommended to minimize possible formation of highly reactive peroxides. Store in properly lined steel/stainless steel to avoid slight discoloration from mild steel/copper. Aluminum (5000 series alloys - U.S. Aluminum Association Standard) showed no corrosion after 30 days contact with PM Acetate at 71 degrees C (160 deg. F). Some plastics/rubbers are attacked by Glycol Ethers/Ether Esters. This product will absorb water if exposed to

air.

COMMENTS: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) 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; they may explode and cause injury or death.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
2-Methoxy-1-Methylethylacetate	TWA			[1]	[1]	30	
	STEL					90	
2-METHOXYPROPYL ACETATE	TWA			[1]	[1]		
Acetone	TWA	1000	2400	500			
	STEL			750			
1-Methoxy-2-Propanol	TWA	100	360	100	369		
	STEL	150	540	150	553		
OSHA TABLE COMMENTS: 1. NL = Not Listed							

ENGINEERING CONTROLS: Local exhaust and general ventilation must be adequate to meet exposure limit(s).

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles and face shield in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

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

RESPIRATORY: If overexposure has been determined or documented, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

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

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Sweet, ether-like odor.

APPEARANCE: Colorless, mobile liquid.

COLOR: Clear, colorless liquid.

PERCENT VOLATILE: 100

VAPOR DENSITY: Heavier than air.

BOILING POINT: ~ (133°F) to (302°F)

FREEZING POINT: NDA = no data available.

MELTING POINT: No data available.

FLASHPOINT AND METHOD: < 47°C (116°F) TAG CC

SOLUBILITY IN WATER: Appreciable (10 percent or more)

EVAPORATION RATE: Slower than ether.

DENSITY: 7.77

SPECIFIC GRAVITY: 0.930 to 0.970

10. STABILITY AND REACTIVITY

STABILITY: This material is stable when properly handled and stored.

POLYMERIZATION: None Expected.

CONDITIONS TO AVOID: Avoid extended contact with air or oxygen. In contact with moisture, this hygroscopic (i.e. absorbs water from the air) material may degrade or become contaminated. Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield carbon monoxide and carbon dioxide.

INCOMPATIBLE MATERIALS: Strong oxidizing agents. Moisture and humidity. May react with oxygen to form peroxides. However, there is no known evidence that it has nearly the peroxide forming potential as, for example diethyl ether, etc.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
2-Methoxy-1-Methylethylacetate	8532 MG/KG Rat	> 5 MG/KG Rabbit	
1-Methoxy-2-Propanol	5660	13000	15000

DERMAL LD₅₀: > 5 MG/KG (rabbit)

ORAL LD₅₀: 8532 mg/kg (rat)

INHALATION LC₅₀: Repeated Dose Toxicity - On repeated, prolonged exposure may be a nasal irritant.

CHRONIC: 1- Methoxy-2-propanol acetate: Repeated Dose Toxicity - No known chronic health effects.

REPRODUCTIVE EFFECTS: 2-Methoxy-1-propanol acetate: Repeated Dose Toxicity 2-Methoxy-1-Propanol has been shown to cause developmental effects in offspring of female rabbits exposed to 0, 145, 225, 350, and 545 ppm by inhalation during pregnancy. 145 ppm was the no observed effect level (NOEL) in this study.

COMMENTS: All information in this section is related to Glycol Ether PM Acetate.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: It may enter soil and may contaminate water.

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

GENERAL COMMENTS: Biodegradation: Data for a closely related material suggest it will be inherently biodegradable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: 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.

EMPTY CONTAINER: 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.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquids, N.O.S.

TECHNICAL NAME: (1-methoxy-2-propanol, 1-methoxy-2-propanol acetate)

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN 1993

PACKING GROUP: III

NAERG: 128

LABEL: Flammable liquid

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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

FIRE: Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes
CHRONIC: Yes

TSCA (TOXIC SUBSTANCE CONTROL ACT)

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

16. OTHER INFORMATION

PREPARED BY: Compliance Dept.

REVISION SUMMARY: Revision #: 1. This MSDS replaces the December 16, 2005 MSDS., Any changes in information are as follows: In Section 1: Reason for Issue, Prepared ByIn Section 15: SARA 313 Reportable Ingredients

HMIS RATING

HEALTH:	2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	H

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