1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EBR 8020
PRODUCT CODE: 5745, 5746

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

PHYSICAL APPEARANCE: Clear, water-white liquid.

IMMEDIATE CONCERNS: DANGER! Flammable liquid and vapor. May cause eye, skin and respiratory tract irritation. May cause asphyxiation, or brain, lung or other organ injury if inhaled, swallowed or absorbed by the skin.

POTENTIAL HEALTH EFFECTS

EYES: Liquid is severely irritating to the eyes. High vapor concentrations are also irritating.

SKIN: 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).

INGESTION: Ingestion may cause headache, dizziness, fatigue, and central nervous system depression. Can cause gastroenteric irritations, narcosis and injury to the kidneys and liver.

INHALATION: Vapors may be irritating to the nose, throat, and respiratory tract. Exposure to high vapor concentrations may cause central nervous system (CNS) depression.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Irritation as noted above. Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur.

CHRONIC EFFECTS: Repeated or prolonged exposure may irritate the mucous membranes. May cause adverse liver effects.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing eye and skin disorders may be aggravated by exposure.

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

TARGET ORGAN STATEMENT: Near fatal exposures may result in congestive effects to a wide variety of organs.

SENSITIZATION: 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 adrenalin-like agents. Prolonged and repeated exposures to high concentrations of toluene 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 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 in the work environment may cause signs of hearing loss.

COMMENTS HEALTH: Laboratory studies have shown that harmful by inhalation and if swallowed. Possible risks of irreversible effects.

HEALTH HAZARDS: Light hydrocarbons like this one have been associated with cardiac sensitization in abuser situations. Hypoxia or the injection of adrenalin-like substances enhances these effects.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
<th>EINECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>70 - 80</td>
<td>67-64-1</td>
<td>200-662-2</td>
</tr>
<tr>
<td>2-Methoxy-1-Methylethylacetate</td>
<td>19.2 - 25</td>
<td>108-65-6</td>
<td>203-603-9</td>
</tr>
<tr>
<td>2-METHOXYPROPYL ACETATE</td>
<td>&lt; 1</td>
<td>70657-70-4</td>
<td>274-724-2</td>
</tr>
</tbody>
</table>

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: Flush skin with water while removing contaminated clothing. If irritation occurs, get medical attention. Do not reuse clothing or shoes until cleaned.

INGESTION: If swallowed, do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.

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: A. Treatment of severe systemic intoxication (narcosis) from either vapor exposure or ingestion is primarily supportive. Acetone has minimal toxicity on other organ systems and if the victim can be supported through the period of central nervous system depression and respiratory failure, the prognosis is good.

1. Following recent ingestion, acetone may be removed by gastric lavage. Emesis is not recommended. Activated charcoal is recommended.

2. Mechanically assisted ventilation may be necessary.

3. Treat symptomatically and monitor blood glucose.

B. Eye exposures usually do not require any specific treatment if liquid acetone is promptly washed out of eyes. If exposure was prolonged, some initial corneal damage may be present. It is advisable for these
individuals to be seen by an opthamologist.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** -20°C (-4°F) TAG CC  
**FLAMMABLE LIMITS:** 2.5% by v/v for Acetone to 13% v/v for Acetone  
**AUTOIGNITION TEMPERATURE:** No data available.  
**FLAMMABLE CLASS:** OSHA flammability class: Class IB flammable liquid.  
**EXTINGUISHING MEDIA:** Use water fog, "alcohol" foam, dry chemical, or CO2.  
**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide and unidentified organic compounds may be formed during combustion.  
**EXPLOSION HAZARDS:** Extremely flammable and its vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidants.  
**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.  
**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

**SMALL SPILL:** Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Absorb liquid on vermiculite, floor absorbent or other absorbent material. Personal not wearing proper personal protective equipment should be excluded from area of spill.  
**LARGE SPILL:** Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing personal protective equipment should be excluded from area of spill until clean-up has been completed. Shut off source of leak if safe to do so. Dike and contain spill. Prevent from entering drains, sewers, streams or other bodies of water. If runoff occurs, notify authorities as required. Remove with vacuum trucks or pump into clean storage/salvage vessels for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for proper disposal.  
**ENVIRONMENTAL PRECAUTIONS**  
**WATER SPILL:** Keep material out of storm sewers and ditches which lead to waterways.  
**GENERAL PROCEDURES:** WARNING. Flammable. Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.

### 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 in an area designed for storage of flammable liquids. (OSHA 29 CFR 1910.106) Protect from temperature extremes and sunlight, and store away from incompatible substances and in accordance with 29 CFR 1910.106. Avoid acids, bases, oxidizers, explosives, nitrogen-fluorine compounds, sulfites, perchlorates, reducing agents and plastics.

**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)**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>SupplierOEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
<td>ppm</td>
</tr>
<tr>
<td>Acetone</td>
<td>TWA 1000</td>
<td>2400</td>
<td>250</td>
</tr>
<tr>
<td>2-Methoxy-1-Methylethylacetate</td>
<td>TWA</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-METHOXYPROPYL ACETATE</td>
<td>TWA</td>
<td>(1)</td>
<td>(1)</td>
</tr>
</tbody>
</table>

**OSHA TABLE COMMENTS:**
1. NL = Not Listed

**ENGINEERING CONTROLS:** 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.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Use chemical safety goggles and 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.

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

**RESPIRATORY:** If exposure may or does exceed occupational exposure limits (Sec. 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-suppling respirator or an air-purifying respirator for organic vapors.

**PROTECTIVE CLOTHING:** Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required. Safety-toed shoes should be worn when handling drums.
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.

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

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Flash Point (°C)</th>
<th>Boiling Point (°C)</th>
<th>Auto Ignition (°C)</th>
<th>Solubility in Water</th>
<th>Specific Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td></td>
<td></td>
<td></td>
<td>Miscible</td>
<td>0.797</td>
</tr>
<tr>
<td>2-Methoxy-1-Methylethylacetate</td>
<td>116</td>
<td>140 760 mmHg</td>
<td>272</td>
<td>Appreciable</td>
<td>0.96</td>
</tr>
</tbody>
</table>

**PHYSICAL STATE:** Liquid

**ODOR:** Sweet, mint-like odor detectable at 20 ppm.

**COLOR:** Clear, colorless liquid.

**pH:** NA = Not Applicable

**PERCENT VOLATILE:** 100

**VAPOR PRESSURE:** 3.7 mm Hg at 20°C

**VAPOR DENSITY:** 2 (Air=1)

**BOILING POINT:** Not Known

**MELTING POINT:** Not Known

**FLASHPOINT AND METHOD:** -20°C (-4°F) TAG CC

**SOLUBILITY IN WATER:** Complete.

**EVAPORATION RATE:** 12. (n-Butyl Acetate=1)

**DENSITY:** 6.942 lbs./gal.

**SPECIFIC GRAVITY:** 0.797 to 1.00

**MOLECULAR WEIGHT:** Mixture

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable at ambient room temperature in closed containers. Keep away from heat, sparks and flame.

**POLYMERIZATION:** Will not occur under normal conditions.

**CONDITIONS TO AVOID:** Avoid heat, sparks, flame. Direct sunlight.

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

**INCOMPATIBLE MATERIALS:** Acids and oxidizers.
11. TOXICOLOGICAL INFORMATION

ACUTE

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD_{50} (rat)</th>
<th>DERMAL LD_{50} (rabbit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>5800 mg/kg (Rat)</td>
<td>&gt; 5 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>2-Methoxy-1-Methylethylacetate</td>
<td>8532 mg/kg (Rat)</td>
<td></td>
</tr>
</tbody>
</table>

DERMAL LD_{50}: Dermal LD50 for propylene glycol monomethyl ether acetate: greater than 5000 mg/kg (rabbit)

INHALATION LC_{50}: Propylene Glycol, Monomethyl Ether Acetate: Inhalation LD50: 35.7 mg/l 4 hr. (Rat)

EYE EFFECTS: Acetone: immediate acute effects: 500 ppm (eye human)

SKIN EFFECTS: Acetone Immediate (Acute) effects: 500 mg./24 hr. (rabbit) Mild reaction.

CHRONIC: Propylene glycol, monomethyl ether acetate: Vapors may have a narcotic effect if inhaled in high concentrations.

COMMENTS: Other Data: Biological Action Level: 270 mg/L in urine at end of work shift = excessive exposure to acetone.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Keep out of waterways.

AQUATIC TOXICITY (ACUTE)

96-HOUR LC_{50}: 5540 mg/l (rainbow trout). Results shown are for Acetone.

48-HOUR EC_{50}: 10 mg/l (Daphnia) Results shown are for Acetone.

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

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.

RCRA/EPA WASTE INFORMATION: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

Flammable Liquid

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

313 REPORTABLE INGREDIENTS: To the best of our knowledge, this product is not listed as a toxic chemical.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: To the best of our knowledge, this product is not listed as an extremely hazardous substance.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CERCLA RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>70 - 80</td>
<td>5,000 lbs.</td>
</tr>
</tbody>
</table>

TSCA (TOXIC SUBSTANCE CONTROL ACT)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
</tr>
<tr>
<td>2-Methoxy-1-Methylethylacetate</td>
<td>108-65-6</td>
</tr>
</tbody>
</table>

GENERAL COMMENTS: The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

16. OTHER INFORMATION

PREPARED BY: Compliance Dept.
REVISION SUMMARY: New MSDS

MANUFACTURER DISCLAIMER: The information contained herein is based on the data available to us and is believed to be accurate. However, Tarr Acquisition, LLC (Tarr, LLC) makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Tarr, LLC assumes no responsibility for injuries from the use of the product described herein.