

# MATERIAL SAFETY DATA SHEET



Date Issued: 04/15/2007  
MSDS No: 3404  
Revision No: New MSDS

340SG

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 340SG  
**PRODUCT CODE:** 3404

### 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. May cause allergic skin reaction. May cause central nervous system depression. May cause liver damage. May cause kidney damage. May cause fetal effects based upon animal studies. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Forms explosive mixture with air. Target Organs: Kidneys, central nervous system, liver.

### POTENTIAL HEALTH EFFECTS

**EYES:** Vapors may cause eye irritation. May cause chemical conjunctivitis and corneal damage.

**SKIN:** May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause irritation and dermatitis. May cause cyanosis of the extremities.

**INGESTION:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Ingestion and large amounts may cause CNS depression.

**INHALATION:** May cause respiratory tract irritation. May cause effects similar to those described for ingestion. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**ACUTE TOXICITY:** 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.

**CHRONIC EFFECTS:** Prolonged or repeated skin contact may cause defatting and dermatitis. May cause liver and kidney damage. May cause fetal effects.

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

**TARGET ORGAN STATEMENT:** Kidneys, central nervous system, liver.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Hexane, 1,6-diisocyanato-	< 0.1	000822-06-0
Hexane, 1,6-diisocyanato-, homopolymer	65 - 71	028182-81-2
n-Butyl acetate	1 - 5	000123-86-4
Ethyl methyl ketone	1 - 5	000078-93-3
Acetic Acid Ethyl Ester	2 - 6	000141-78-6
Toluene-2,4-diisocyanate	< 0.1	000584-84-9
Aromatic Polyisocyanate (CAS# is a trade secret)	23 - 29	

### 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:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Call a physician if irritation develops. Wash clothing before reuse.

**INGESTION:** DO NOT INDUCE VOMITING. Do not attempt to give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get 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 and supportively.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** (23°F) Lowest flash of chemical constituents within product.

**FLAMMABLE LIMITS:** 0% to 11.5%

**AUTOIGNITION TEMPERATURE:** Not Determined

**GENERAL HAZARD:** Flammable liquid and vapor.

**EXTINGUISHING MEDIA:** Use "alcohol resistant" foam, dry chemical, or CO<sub>2</sub>. Water may be

ineffective, but water applied as a spray can absorb some of the fire's heat and should be used to keep fire-exposed containers cool.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, isocyanic vapors and unidentified organic compounds may be generated by thermal decomposition or 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:** 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.

## 6. ACCIDENTAL RELEASE MEASURES

**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:** Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form. Ground and bond all equipment when transferring from one container to another.

**STORAGE:** Store away from heat, sparks, and open flame. Keep containers tightly closed when not in use. Do not weld, cut, grind, solder, or drill on or near empty containers. Empty containers may contain explosive concentrations of product vapors.

**STORAGE TEMPERATURE:** 0°C (32°F) Minimum to 29°C (84.2°F) Maximum

**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 <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Hexane, 1,6-diisocyanato-	TWA			0.005	0.034	0.02	
Hexane, 1,6-diisocyanato-, homopolymer	TWA						0.5
	STEL					[1]	1.00 [1]
n-Butyl acetate	TWA	150	710	150	713		
	STEL			200	950		
Ethyl methyl ketone	TWA	200	590	200	590		
	STEL			300	885		
Acetic Acid Ethyl Ester	TWA	400 [2]	1400 [2]	400	1440	NL	NL
	STEL					NL	NL
Toluene-2,4-diisocyanate	TWA			0.005			
	STEL			0.02			
<b>OSHA TABLE COMMENTS:</b>							
1. 15 min.							
2. US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910-1000)							

**ENGINEERING CONTROLS:** Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**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-supplying respirator or an air-purifying respirator for organic vapors.

**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:** 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.

**COMMENTS:** 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:** Characteristic odor.

**APPEARANCE:** Clear, water-white to yellowish liquid.

**pH:** Essentially neutral.

**BOILING POINT:** (167°F) to (258°F)

**FLASHPOINT AND METHOD:** (23°F) Lowest flash of chemical constituents within product.

**DENSITY:** 9.623

**SPECIFIC GRAVITY:** 0.810 to 1.17

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable at room temperature in closed containers under normal storage and handling conditions. Forms explosive mixtures with air (72 deg. F/22 deg. C).

**CONDITIONS TO AVOID:** High temperatures, incompatible materials, ignition sources, excess heat, strong oxidants, plastics, resins, rubber.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, isocyanic vapors and unidentified organic compounds may be generated by thermal decomposition or combustion.

**INCOMPATIBLE MATERIALS:** Water, amines, strong bases, strong oxidizers, alcohols, copper alloys, aluminum.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

#### **DERMAL LD<sub>50</sub>:**

**Notes:** Dermal LD50 for Ethyl acetate: greater than 20 mL/kg (rabbit). Highest dose tested.

#### **ORAL LD<sub>50</sub>:**

**Notes:** Oral LD50 for ethyl acetate: 5600 mg/kg (rat).

#### **INHALATION LC<sub>50</sub>:**

**Notes:** Ethyl Acetate: Inhalation LC50: 16000 ppm/6 hours, Rat

**EYE EFFECTS:** Severely irritating to rabbit eye.

**SKIN EFFECTS:** Mildly irritating to rabbit skin (24 hour exposure).

**CHRONIC:** Irritation to lungs and nasal cavity.

**SENSITIZATION:** Not sensitizing (guinea pig)

**REPRODUCTIVE EFFECTS:** n-butyl acetate: Embryo or Fetus: Fetotoxicity/ specific Developmental Abnormalities: Musculoskeletal, Inhalation rat  $TCLo=1500\text{ppm}/7\text{H}$ .

**TERATOGENIC EFFECTS:** Birth defects are unlikely. Exposures having no effect on the mother should have no effect on the fetus. Did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

**MUTAGENICITY: MUTAGENICITY (EFFECTS ON GENETIC MATERIAL):** Results of in vitro ("test tube") mutagenicity studies have been negative Desmodur N3300. Animal mutagenicity studies were negative.

**GENERAL COMMENTS:** In pregnant female rodents exposed by inhalation to high concentrations of methyl ethyl ketone (MEK) vapor (15x the OSHA PEL/TWA) minor developmentally toxic effects to the fetuses were observed. MEK has been demonstrated to potentiate (i.e. shorten the time of onset) the peripheral neuropathy caused by either n-hexane or methyl n-butyl ketone. MEK by itself has not been demonstrated to cause peripheral neuropathy. MEK can potentiate the neurotoxicity of hexacarbon compounds (n-hexane, methyl n-butylketone, and 2,5-hexanedione) and the liver and kidney toxicity of haloalkane solvents.

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** N-Butyl Acetates: Fish: Fathead Minnow  $LC50=18.0\text{ mg/L}; 96\text{ Hr.}$ ; Unspecified fish: Bluegill/Sunfish:  $LC50=100.0\text{ mg/L}; 96\text{ Hr.}$ ; Static condition water flea  $EC50=44.0\text{ mg/L}; 48\text{ Hr.}$ ; 23 deg. C Algae:  $LC50=320.0\text{ mg/L}; 96\text{ Hr.}$ ; Unspecified bacteria: Phytobacterium phosphoreum:  $EC50=3100.0-130\text{ mg/L}; 5, 15\text{ minutes}$ ; Microtox test, 15 deg. C

**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

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Paint Related Material

**PRIMARY HAZARD CLASS/DIVISION:** 3

**UN/NA NUMBER:** UN 1263

**PACKING GROUP:** II

**NAERG:** 128

**LABEL:** Flammable liquid

## 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:** Yes **ACUTE:** Yes  
**CHRONIC:** Yes

**313 REPORTABLE INGREDIENTS:** 2,4-Toluene Diisocyanate  
2,6-Toluene Diisocyanate

#### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** 2,4-Toluene Diisocyanate  
2,6-Toluene Diisocyanate

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA RQ:** Component RQ (lbs)

Hexane 5000

N-Butyl acetate 5000

Ehtyl methyl ketone 5000

Acetic acid ethyl ester 5000

Toluene 1000

#### 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.

**OSHA HAZARD COMM. RULE:** This product is considered hazardous by OSHA.

## 16. OTHER INFORMATION

**PREPARED BY:** Compliance Dept.

**REVISION SUMMARY:** New MSDS

**HMIS RATING**

<b>HEALTH:</b>	<input type="checkbox"/>	<b>2</b>
<b>FLAMMABILITY:</b>		<b>3</b>
<b>PHYSICAL HAZARD:</b>		<b>1</b>
<b>PERSONAL PROTECTION:</b>		

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