SAFETY DATA SHEET

Date Prepared : 11/25/2015
MSDS No : 93045

SRS 500

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SRS 500

MANUFACTURER
Tarr, LLC
P.O. Box 12570
Portland, OR 97212
Product Stewardship: 503-288-5294

24 HR. EMERGENCY TELEPHONE NUMBERS
CHEMTREC (US Transportation) :(800) 424 - 9300
CANUTEC (Canadian Transportation) :(613) 996 - 6666

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 4
Respiratory Tract Irritation, Category 3
Skin Irritation, Category 3

Physical:

Combustible Liquid, Category 4

GHS LABEL

Exclamation mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H227: Combustible liquid.
H315 + H320: Causes skin and eye irritation.
H305: May be harmful if swallowed and enters airways.
H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENT(S)

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240: Ground and bond container and receiving equipment.

SRS 500

P243: Take action to prevent static discharges.

Response:

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.
P307+P311: IF exposed: Call a POISON CENTER or doctor/physician.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P220: Keep away from clothing and other combustible materials.
P102: Keep out of reach of children.

Disposal:

P273: Avoid release to the environment.
4160WT6Y: Dispose of contents/container to an approved waste disposal plant.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: WARNING! COMBUSTIBLE LIQUID AND VAPOR. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES SKIN IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE.

POTENTIAL HEALTH EFFECTS

EYES: Causes irritation, redness, and pain. May possibly cause corneal clouding.

SKIN: Mildly irritating to the skin.

INGESTION: May cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, or diarrhea.

INHALATION: Mild irritant if vapor or mist from heated solvent is inhaled. Coughing, possible breathing difficulties may be observed.

MEDICAL CONDITIONS AGGRAVATED: No information found.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Vol. %	CAS
1-Methyl-2-pyrrolidinone	46 - 48	872-50-4
Triethylene glycol	4 - 6	112-27-6
MIPA	10 - 12	78-96-6
Diethylene glycol ethyl ether	17 - 19	111-90-0
SULFOLANE	18 - 20	126-33-0

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open or until all material has been removed. Get medical attention without delay, preferably from an ophthalmologist.

SRS 500

SKIN: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.

INGESTION: If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CHRONIC EFFECTS: Minor skin irritation on repeated contact.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use regular foam, dry chemical, or carbon dioxide (CO2).

EXPLOSION HAZARDS: Above the flash point, explosive vapor-air mixtures may be formed.

FIRE FIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Remove all sources of ignition and provide ventilation. Wear protective clothing as given in section 8. Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover free product, if possible. Cover spill with inert, non-combustible absorbent material and remove to closed containers for disposal using non-sparking equipment. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Report spill as per regulatory requirements. Leaking drum should be emptied or placed into an oversized (recovery) drum.

7. HANDLING AND STORAGE

HANDLING: Wash thoroughly after handling. Follow all SDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Never use pressure to empty a container.

STORAGE: Keep in a tightly closed container. Store in a cool, dry, ventilated area away form sources of heat or ignition. Protect against physical damage. Store separately from reactive or combustible materials, and out of direct sunlight. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

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

SRS 500

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		SupplierOEL	
Chemical Name		ppm	mg/m³	ppm	mg/m³
MIPA	TWA	[1]	[1]	NL	NL
	STEL			NL	NL

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/or full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work areas.

RESPIRATORY: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If use conditions generate vapors or mists, wear a NIOSH-approved respirator appropriate for those emission levels. Appropriate respirators may be a full facepiece air-purifying cartridge respirator equipped for organic vapors/mists., a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator.

PROTECTIVE CLOTHING: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.Some operations may require the use of an impervious full-body encapsulating suit.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Slight amine odor.

COLOR: Light yellow.

FLASHPOINT AND METHOD: (205°F) CC

BOILING POINT: (356°F)

SOLUBILITY IN WATER: Complete.

EVAPORATION RATE: < 1 (n-Butyl Acetate=1)

DENSITY: 8.86

SPECIFIC GRAVITY: 1.07 to 1.090

VISCOSITY: Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable under ordinary conditions of use and storage. Hygroscopic and basic.

CONDITIONS TO AVOID: Avoid heat, flames, ignition sources and incompatibles.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may produce carbon dioxide, carbon monoxide, nitrogen oxides.

INCOMPATIBLE MATERIALS: Strong oxidants and acids. Reacts with chlorinating agents to form the amide. Reacts with sulfur or carbon disulfide at high temperatures and pressures.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD_{50} (rat)	DERMAL LD_{50} (rabbit)	INHALATION LC_{50} (rat)
1-Methyl-2-pyrrolidinone	3914 mg/kg	2200 to 4000	> 5100
Triethylene glycol	2206 to 17000	> 5000	> 4.4
Diethylene glycol ethyl ether	5500 to 9740	8500	> 200

EYE EFFECTS: Irritating to eyes.

SKIN EFFECTS: Irritating to skin.

CARCINOGENICITY

IARC: None Expected.

NTP: None Expected.

MUTAGENICITY: 1-methyl-2-pyrrolidinone: Investigated as a mutagen, reproductive effector.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: When 1-methyl-2-pyrrolidinone is released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this matieral may evaporate to a moderate extent. When released into water, this material is not expected to evaporate significantly. this material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition.

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

AQUATIC TOXICITY (ACUTE)

96-HOUR LC_{50}: > 100 mg/l (fish)

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and

can be dangerous. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. 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: Combustible Liquid, N.O.S.

TECHNICAL NAME: (1-Methyl-2-Pyrrolidinone)

PRIMARY HAZARD CLASS/DIVISION: Combustible liquid

UN/NA NUMBER: NA 1993

PACKING GROUP: III

NAERG: 128

OTHER SHIPPING INFORMATION: Not DOT regulated in non bulk containers.

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.

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

302/304 EMERGENCY PLANNING

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

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements under CFR 40 CFR 720.30.

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

16. OTHER INFORMATION

APPROVED BY: Compliance

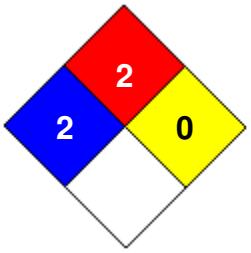
PREPARED BY: Compliance **Date Prepared:** 11/25/2015

SRS 500

HMIS RATING

HEALTH		2
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		

NFPA CODES



NFPA STORAGE CLASSIFICATION: These ratings are part of a specific hazard communication program and should be disregarded where individuals are not trained in the use of this hazard rating system. You should be familiar with the hazard communication programs applicable to your workplace.

HMIS RATINGS NOTES: The HMIS rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in the SDS must be considered.

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.