

MATERIAL SAFETY DATA SHEET



Date Issued: 06/20/2006
MSDS No: 4355
Date-Revised: 11/12/2007
Revision No: 1

KW THINNER #2

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: KW THINNER #2
PRODUCT CODE: 4355

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! Poison. Flammable. Vapor harmful. May be fatal or cause blindness if swallowed. Avoid prolonged breathing of vapors. Avoid contact with eyes and skin.

POTENTIAL HEALTH EFFECTS

EYES: Liquid is moderately irritating to the eyes. High vapor concentrations may also be irritating. Direct contact with the liquid or exposure to its vapors or mists may cause stinging, tearing, redness, swelling and eye damage.

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: POISONOUS. May be fatal or cause blindness if swallowed. Ingestion may cause irritation of the digestive tract and may have a narcotic effect including signs of CNS depression such as dizziness, headache, drowsiness, loss of coordination, and fatigue.

INHALATION: May cause mild irritation to the nose, throat and respiratory tract and may result in central nervous system (CNS) depression.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Shortness of breathing, confused behavior, redness of skin, swelling of tissues, watery eyes, and nausea. 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. Aspiration pneumonitis may be evidenced by coughing, labored breathing and cyanosis.

CHRONIC EFFECTS: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impaired function from preexisting disorders may be aggravated by exposure to this

product. 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.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: Contains Methanol which has been established as a teratogen by inhalation. See Sec.11 for details.

MEDICAL CONDITIONS AGGRAVATED: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impaired function from preexisting disorders may be aggravated by exposure to this product.

COMMENTS HEALTH: Laboratory studies have shown that harmful by inhalation and if swallowed. Possible risks of irreversible effects. Can cause optic nerve damage (blindness).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Acetone	74 - 82	000067-64-1
Ethyl methyl ketone	1 - 9	000078-93-3
Acetic Acid Ethyl Ester	1 - 9	000141-78-6
Solvent naphtha, light aliphatic	2.5 - 10.5	064742-89-8
Methanol	4 - 6	000067-56-1

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN: Remove contaminated clothing/shoes. Flush skin with water for at least 15 minutes. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

INGESTION: Call poison control center or get medical help immediately. If patient is conscious and alert, give 8 ounces of water or juice and induce vomiting, keeping patient's head below hips to prevent aspiration of liquid into lungs.

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: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol

metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, pancreas, heart, blood-forming system, male reproductive system auditory system, exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

ADDITIONAL INFORMATION: Near fatal exposures may result in congestive effects to a wide variety of organs.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (1°F) Lowest flash of chemical constituents within product.

FLAMMABLE LIMITS: 0.018 to 0.36

AUTOIGNITION TEMPERATURE: Not Determined

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: When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the 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.

FIRE FIGHTING EQUIPMENT: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

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. Poisonous and Flammable Liquid. 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: Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Section 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to risk assessment of local circumstances to help determine appropriate controls for safe handling storage and disposal of this material.

HANDLING: Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

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.

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
Acetone	TWA	1000	2400	500			
	STEL			750			
Ethyl methyl ketone	TWA	200	590	200	590		
	STEL			300	885		
Acetic Acid Ethyl Ester	TWA	400 ^[1]	1400 ^[1]	400	1400	NL	NL
	STEL	NL	NL	NL	NL	NL	NL
Solvent naphtha, light aliphatic	TWA	^[2]	^[2]			100 ^[3]	400 ^[3]
Methanol	TWA	200	260	200	262		
	STEL			250	328		

OSHA TABLE COMMENTS:

1. US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910-1000)
2. Our supplier has adopted, as Interim Standards, the OSHA PELs that were established in 1989 and later rescinded.
3. In the absence of occupational exposure standards for this product, it is recommended that these values are adopted.

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.

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

PROTECTIVE CLOTHING: Where splashing is possible, wear impervious clothing and boots.

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

PHYSICAL STATE: Liquid

ODOR: Mild odor.

APPEARANCE: Clear, water-white liquid.

COLOR: Clear, colorless liquid.

pH: Essentially neutral.

VAPOR PRESSURE: 16.5 mmHg

Notes: 14-99 mmHg

VAPOR DENSITY: Heavier than air.

BOILING POINT: (147°F) to (200°F)

FREEZING POINT: NDA = no data available.

MELTING POINT: No data available.

FLASHPOINT AND METHOD: (1°F) Lowest flash of chemical constituents within product.

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: Slower than ether.

DENSITY: 6.66

SPECIFIC GRAVITY: 0.780 to 1.00

10. STABILITY AND REACTIVITY

STABILITY: Avoid heat, sparks, flame and contact with strong oxidizing agents.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid heat, sparks, flame and contact with strong oxidizing agents. Do not store or handle in aluminum equipment at temperatures above 120 deg. F.

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

INCOMPATIBLE MATERIALS: Strong oxidizing agents and strong alkalies.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Solvent naphtha, light aliphatic	> 2000 MG/KG Rat	> 2000 mg/kg (rat)	> 5000 ppm / 1 hour (rat)

DERMAL LD₅₀: mg/kg (rat)

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

SKIN ABSORPTION: mL/kg

ORAL LD₅₀: mg/kg (mouse)

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

INHALATION LC₅₀: gm/m³/2H (mouse)

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

EYE EFFECTS: Poison. May be fatal or cause blindness, if swallowed. Cannot be made nonpoisonous.

SKIN EFFECTS: Irritating to skin.

CHRONIC: Cardiovascular system: Chronic abuse of similar materials has been associated with irregular heart rhythms and cardiac arrest. Central nervous system: Repeated exposure affects the nervous system. Kidney: caused kidney effects in male rats which are not considered relevant to humans.

CARCINOGENICITY

Notes: This product may contain benzene (CAS No. 71-43-2) at a concentration less than 300 ppm.

REPRODUCTIVE EFFECTS: 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 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-butyl ketone and 2,5-hexanedione) and the liver and kidney toxicity of haloalkane solvents. 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.

TARGET ORGANS: 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.

TERATOGENIC EFFECTS: 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 of 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-butyl ketone and 5-hexanedione) and the liver and kidney toxicity of haloalkane solvents.

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

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not flush to sewer.

ECOTOXICOLOGICAL INFORMATION: Acute toxicity data ethyl acetate, if available, are listed below.

Oxygen Demand Data:

BOD-5: 1,240 mg/g

BOD-20: 1,240 mg/g

BOD-20: 1,430 mg/g

COD: 1,540 mg/g

ThBOD: 1,820 mg/g

Acute Aquatic Effects Data:

48 h LC-50 (golden orfe): 270 mg/l

48 h LC-50 (golden orfe): 333 mg/l

24 h LC-50 (daphnid): 3090 mg/l

24 h EC-50 (daphnid): 3090 mg/l

AQUATIC TOXICITY (ACUTE): Acute Toxicity for Solvent Naphtha (Petroleum), Medium Aliphatic:

Fish: Low toxicity: LC/EC/IC50 greater than 1000 mg/l

Aquatic Invertebrates: Low toxicity: LC/EC/IC50 greater than 1000 mg/l

Algae: Low toxicity: LC/EC/IC50 greater than 100 mg/l

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: Flammable Liquids, N.O.S.

TECHNICAL NAME: (Acetone, Ethyl Acetate)

PRIMARY HAZARD CLASS/DIVISION: 3

SECONDARY HAZARD CLASS/DIVISION: 6.1

UN/NA NUMBER: UN 1993

PACKING GROUP: II

NAERG: 128

LABEL: Flammable (3), poison (6.1) liquid

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Flammable Liquid



Toxic

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: Methyl ethyl ketone (CAS 78-93-3), Methyl alcohol (CAS 67-56-1), Cyclohexane (CAS 110-82-7) and n-Hexane (CAS 110-54-3).

TITLE III NOTES: This product contains Solvent naphtha, light aliphatic, which may contain the following constituents: heptane, n- (CAS 142-82-5) less than 2.5% by weight, methylcyclohexane (CAS 108-87-2) less than 2.5% by weight and cyclohexane (CAS 110-82-7) less than 1.5% by weight.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: To the best of our knowledge, none of the chemicals in this product are listed as an extremely hazardous substance under Section 302 of SARA Title III nor does this product contain any other such substances.

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.

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the State of California to cause cancer.: Benzene.

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the State of California to cause reproductive harm.: Benzene.

16. OTHER INFORMATION

PREPARED BY: Compliance Dept.

REVISION SUMMARY: Revision #: 1 This MSDS replaces the June 20, 2006 MSDS. Any changes in information are as follows: In Section 1 Prepared By

HMIS RATING

HEALTH:	<input type="checkbox"/>	3
FLAMMABILITY:		3
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:	H	

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