MULTI-USE LACQUER THINNER

MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **MULTI-USE LACQUER THINNER**

SYNONYMS: None.

PRODUCT CODE: 6801, 16801, VIRGIN

PRODUCT USE: Lacquer thinner.
If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

24-HOUR EMERGENCY PHONE NUMBERS

These numbers are for emergency use only. If you desire non-emergency product information, please call a phone number listed below.	**MEDICAL:**	**TRANSPORTATION (SPILL):**
	1-800-752-7869	**1-800-468-1760**

SUPPLIER: Safety-Kleen Systems, Inc.
5400 Legacy Drive
Cluster II, Building 3
Plano, Texas 75024
USA
1-800-669-5740
www.Safety-Kleen.com

TECHNICAL INFORMATION: 1-800-669-5740 Press 1, then 1, then Enter 7500

MSDS FORM NUMBER: 82410 **ISSUE:** September 25, 2006

ORIGINAL ISSUE: July 20, 1989 **SUPERSEDES:** September 20, 2004

PREPARED BY: Product MSDS Coordinator **APPROVED BY:** MSDS Task Force

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

				OSHA PEL**		ACGIH TLV®			
WT%	NAME	SYNONYM	CAS NO.	TWA	STEL	TWA	STEL	LD[a]	LC[b]
				ppm	ppm	ppm	ppm	mg/kg	
0-50*	Toluene	Methylbenzene	108-88-3	200 ppm	300 (ceiling)	50 (skin)	N. Av.	636 (14.1 mL/kg)[c]	49 g/m3/4H
10-30	Acetone	Dimethyl ketone	67-64-1	1000 ppm 2400 mg/m^3	N. Av.	500	750	5800	50100 mg/m3/8H
0-35*	Solvent naphtha (petroleum), light aliphatic	N. Av.	64742-89-8	N. Av.[d]	N. Av.	N. Av.	300[d]	N. Av.	N. Av.
2-15*	Isopropyl alcohol	Isopropanol	67-63-0	400 ppm 980 mg/m^3	N. Av.	200	400	5045 (12800 mg/kg)[c]	16000 ppm/8H
5-10*	Methyl ethyl ketone	2-Butanone	78-93-3	200 ppm 590 mg/m^3	N. Av.	200	300	2737 (6480 mg/kg)[c]	23500 mg/m3/8H
0-10*	Ethyl 3-ethoxypropanoate	Ethyl-3-ethoxy propionate	763-69-9	N. Av.[e]	N. Av.	N. Av.	N. Av.	5000 (10 mL/kg)[c]	N. Av.
0-10*	Isobutyl acetate	2-Methylpropyl ester acetic acid	110-19-0	150 ppm 700 mg/m^3	N. Av.	150	N. Av.	13400 (>17400 mg/kg)[c]	N. Av.
2-5	Methyl isobutyl ketone	4-methyl-2-pentanone	108-10-1	100 ppm 410 mg/m^3	N. Av.	50	75	2080 (>20 mL/kg)[c]	N. Av.
0-5*	Xylenes (o-, m-, p-isomers)	Dimethylbenzene	1330-20-7	100 ppm 435 mg/m^3	N. Av.	100	150	4300 (>1700 mg/kg)[c]	5000 ppm/4H
0-5*	Methyl alcohol	Methanol	67-56-1	200 ppm 260 mg/m^3	N. Av.	200 (skin)	250	5628 (15800 mg/kg)[c]	64000 ppm/4H

* Even though the concentration range does not fall under the ranges prescribed by WHMIS, this is the actual range which varies with each batch of the product.
**OSHA Final PEL value (enforceable). Some States have adopted more stringent values.

N. Av. = Not Available
[a]Oral-Rat LD_{50}
[b]Inhalation-Rat LC_{50}
[c]Skin-Rabbit LD_{50}
[d]Based on VM & P Naphtha the TWA is 300 ppm
[e]Manufacturer recommended: 50 ppm TWA and 100 ppm STEL

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE
Liquid, clear and colorless, solvent odor

DANGER!

PHYSICAL HAZARDS
Extremely flammable liquid and vapor.
Vapor may cause flash fire.

HEALTH HAZARDS
May be harmful if inhaled.
May be harmful if absorbed through the skin.
May be harmful or fatal if swallowed.
May be severely irritating to eyes. May cause damage and/or blindness.
May irritate the respiratory tract (nose, throat, and lungs) and skin.
Contains material which may cause birth defects.
Contains material which may cause eye, skin, heart, liver, kidney, central nervous system, and brain damage.

ENVIRONMENTAL HAZARDS
Toxic to fish.

POTENTIAL HEALTH EFFECTS

INHALATION (BREATHING): High concentrations of vapor or mist may be harmful if inhaled. High concentrations of methanol vapor or mist may cause blindness. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

EYES: May be severely irritating to the eyes. May cause tearing, redness, swelling, burns, and/or eye damage.

SKIN: May cause irritation. Toluene and methyl alcohol may be absorbed through the skin and cause harm as noted under **INHALATION (BREATHING)**.

INGESTION (SWALLOWING): May be harmful or fatal if swallowed. Swallowing methanol may cause blindness and/or death. May cause throat irritation, a burning sensation, abdominal spasms, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing respiratory tract (nose, throat, and lungs), cardiovascular, liver, kidney, central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

CHRONIC: Prolonged or repeated inhalation may cause brain, liver, kidney, heart, and central nervous system damage; and toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis). Prolonged or repeated inhalation or ingestion exposure may have reproductive toxicity and/or teratogenicity effects.

CANCER INFORMATION: No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

POTENTIAL ENVIRONMENTAL EFFECTS
Toxic to fish. See **SECTION 12: ECOLOGICAL INFORMATION**.

SECTION 4: FIRST AID MEASURES

INHALATION (BREATHING): Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

EYES: If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

SKIN: Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.

INGESTION (SWALLOWING): Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: Treat symptomatically and supportively. Increased sensitivity of the heart to Adrenaline (epinephrine) may be caused by overexposure to product. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869 for additional information.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Less than 20ºF (-7ºC) Tag Closed Cup

FLAMMABLE LIMITS IN AIR: **LOWER:** 1 VOL% minimum (approximately) **UPPER:** 36 VOL% maximum (approximately)

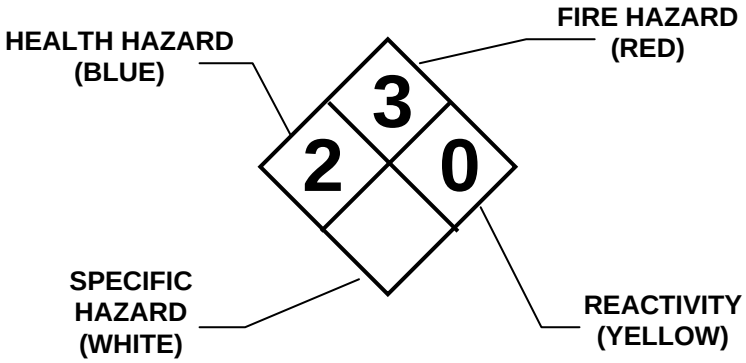
AUTOIGNITION TEMPERATURE: 711ºF (377ºC) minimum (approximately)

HAZARDOUS COMBUSTION PRODUCTS: Decomposition and combustion materials may be toxic. Burning may produce hydrocarbon gases, aldehydes, alcohols, organic acids, carbon monoxide and unidentified organic compounds.

CONDITIONS OF FLAMMABILITY: Heat, sparks, or flame.

EXTINGUISHING MEDIA: Carbon dioxide, alcohol-resistant foam, dry chemical, or water spray.

NFPA 704 HAZARD IDENTIFICATION: This information is intended solely for the use by individuals trained in this system.



FIRE FIGHTING INSTRUCTIONS: Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

FIRE AND EXPLOSION HAZARDS: Vapor explosion hazard indoors, outdoors, or in sewers. Vapors may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire or explosion hazard. Heated containers may rupture, explode, or be thrown into the air. "Empty" containers may retain residue and can be dangerous. Products are not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire or explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION.**

SECTION 7: HANDLING AND STORAGE

HANDLING: Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product.

SHIPPING AND STORING: Keep container tightly closed when not in use and during transport. Store containers below 120°F (49°C) Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition; containers may explode and cause injury or death. Empty product containers may retain product residue and can be dangerous. See **SECTION 14: TRANSPORTATION INFORMATION** for Packing Group information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use NIOSH air-certified, air-supplied respirators (self-contained breathing apparatus or air-line) respiratory protective equipment when concentration of methanol may exceed applicable exposure limits. Otherwise, use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

EYE PROTECTION: Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

SKIN PROTECTION: Where skin contact is likely, wear laminate (Ansell Edmont Barrier®, North Silver Shield®, Safety 4 4h®) or equivalent protective gloves; use of natural rubber (latex), polyvinyl chloride (PVC), neoprene or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

PERSONAL HYGIENE:	Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, and/or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with this product.
OTHER PROTECTIVE EQUIPMENT:	Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, APPEARANCE, AND ODOR:	Liquid, clear and colorless, solvent odor
ODOR THRESHOLD:	Not available.
MOLECULAR WEIGHT:	Not available.
SPECIFIC GRAVITY:	0.84 (water = 1)
DENSITY:	7 LB/US gal (840 g/L)
VAPOR DENSITY:	5.0 (air = 1) maximum (approximately)
VAPOR PRESSURE:	Not available.
BOILING POINT:	56-172°C (133-342°F)
FREEZING/MELTING POINT:	Not available.
pH:	Not applicable
EVAPORATION RATE:	Not available.
SOLUBILITY IN WATER:	Slight.
FLASH POINT:	Less than 20ºF (-7ºC) Tag Closed Cup
FLAMMABLE LIMITS IN AIR:	**LOWER:** 1 VOL% minimum (approximately) **UPPER:** 36 VOL% maximum (approximately)
AUTOIGNITION TEMPERATURE:	711ºF (377ºC) minimum (approximately)

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.

INCOMPATIBILITY: Avoid acids, alkalies, oxidizing agents, reducing agents, reactive halogens, or reactive metals.

REACTIVITY: Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

HAZARDOUS DECOMPOSITION PRODUCTS: None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS**.

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION: Based on best current information, there is no known human sensitization associated with this product.

MUTAGENICITY: Toluene, isopropyl alcohol, methyl alcohol, acetone and xylene have demonstrated experimental effects of mutagenicity.

Based on best current information, the other components listed in **SECTION 2** are not mutagens

CARCINOGENICITY: Based on best current information, there is no known carcinogenicity as categorized by ACGIH A1 or A2 substances; as categorized by IARC Group 1, Group 2A, or Group 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Also see **SECTION 15: CALIFORNIA**.

REPRODUCTIVE TOXICITY: Toluene, xylene, isopropyl alcohol and acetone have demonstrated animal effects of reproductive toxicity.

Based on best current information, the other components listed in **SECTION 2** are not reproductive toxicants.

Also see **SECTION 15: CALIFORNIA**.

TERATOGENICITY: Toluene, methyl ethyl ketone, acetone, methyl isobutyl ketone, isopropyl alcohol, methyl alcohol and xylene have demonstrated animal effects of teragenicity.

Based on best current information, the other components listed in **SECTION 2** are not teratogens.

TOXICOLOGICALLY SYNERGISTIC PRODUCT(S): Based on best current information, there are no known toxicologically synergistic products associated with this product. Ingested alcohol is synergistic with most of these solvents.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:

Toluene (108-88-3)

Test & Species		Conditions
96 Hr LC50 rainbow trout	24.0 mg/L	Static
96 Hr LC50 bluegill	24.0 mg/L	Static
96 Hr LC50 fathead minnow	31.7 mg/L	flow-through

Acetone (67-64-1)

Test & Species		Conditions
96 Hr LC50 rainbow trout	5540 mg/L	Static
96 Hr LC50 fathead minnow	6210 mg/L	flow-through
96 Hr LC50 bluegill	8300 mg/L	Static

Isopropyl alcohol (67-63-0)

Test & Species		Conditions
96 Hr LC50 fathead minnow (29 days old)	94900 mg/L	flow-through
96 Hr LC50 fathead minnow (31 days old)	61200 mg/L	flow-through

Methyl ethyl ketone (78-93-3)

Test & Species		Conditions
96 Hr LC50 fathead minnow	3220 mg/L	flow-through
96 Hr LC50 bluegill	1690 mg/L	

Isobutyl acetate (110-19-0)

Test & Species		Conditions
96 Hr LC50 bluegill	100 mg/L	Static

Methyl isobutyl ketone (108-10-1)

Test & Species		Conditions
96 Hr LC50 fathead minnow	505 mg/L	flow-through
24 Hr LC50 goldfish	460 mg/L	
96 Hr EC50 freshwater algae (Selenastrum capricornutum)	400 mg/L	

Xylenes (o-, m-, p- isomers) (1330-20-7)

Test & Species		Conditions
96 Hr LC50 fathead minnow	13.4 mg/L	flow-through
96 Hr LC50 rainbow trout	8.05 mg/L	flow-through
96 Hr LC50 bluegill	16.1 mg/L	flow-through

Methyl alcohol (67-56-1)

Test & Species		Conditions
96 Hr LC50 rainbow trout (fingerling)	13 mg/L	
48 Hr LC50 trout	8000 mg/L	
96 Hr LC50 fathead minnow (28 days old)	29400 mg/L	flow-through

OCTANOL/WATER PARTITION COEFFICIENT: Log Pow = 2.73 (Based on toluene)

VOLATILE ORGANIC COMPOUNDS: 70 to 85 WT%; 5 to 6 LB/US gal (590 to 720 g/l)
As per 40 CFR Part 51.100(s).

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

USEPA WASTE CODE(S): D001, D035
Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

SECTION 14: TRANSPORT INFORMATION

DOT:
Shipping Name: Paint related material
UN/NA #: UN1263 **Hazard Class:** 3 **Packing Group:** II
Required Label(s): FLAMMABLE LIQUID

TDG:
Shipping Name: PAINT RELATED MATERIAL
UN/NA #: UN1263 **Hazard Class:** 3 **Packing Group:** II
Required Label(s): FLAMMABLE LIQUID

EMERGENCY RESPONSE GUIDE NUMBER: 127
Reference *North American Emergency Response Guidebook*

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS 302 AND 304: Based on the ingredients listed in **SECTION 2**, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS 311 AND 312: This product poses the following health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
Fire Hazard

SARA SECTION 313: This product does contain "toxic" chemical(s) subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Material	CAS
Toluene	108-88-3
Isopropyl alcohol	67-63-0
Methyl ethyl ketone	78-93-3
Methyl isobutyl ketone	108-10-1
Xylenes	1330-20-7
Methyl alcohol	67-56-1

CERCLA: Based on the ingredients listed in SECTION 2, this product contains the following "hazardous substances" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Material	CAS	RQ
Toluene	108-88-3	1000 lb (454 kg)
Methyl ethyl ketone	78-93-3	5000 lb (2270 kg)
Methyl isobutyl ketone	108-10-1	5000 lb (2270 kg)
Xylenes	1330-20-7	100 lb (45.4 kg)
Methyl alcohol	67-56-1	5000 lb (2270 kg)
Acetone	67-64-1	5000 lb (2270 kg)
Isobutyl acetate	110-19-0	5000 lb (2270 kg)

TSCA: All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

CALIFORNIA: This product may contain a detectable amount of benzene CAS 71-43-2 and methylene chloride CAS 75-09-2. WARNING: These chemicals are known to the State of California to cause cancer.

This product contains a detectable amount of toluene CAS 108-88-3 and may contain a detectable amount benzene CAS 71-43-2. WARNING: These chemicals are known to the State of California to cause birth defects or other reproductive harm.

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

WHMIS: B2, D1A, D2A, D2B

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): All the components of this product are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

SECTION 16. OTHER INFORMATION

REVISION INFORMATION: This MSDS has been revised in the following sections: Section 1, Product Code.

LABEL/OTHER INFORMATION: Not available.