SAFETY-KLEEN 85% ACETONE
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **SAFETY-KLEEN 85% ACETONE**

SYNONYMS: Dimethyl ketone; 2-Propanone; Dimethyl formaldehyde; Beta-Ketopropane; Pyroacetic ether.

PRODUCT CODE: 1021823, 1024823

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

This number is for emergency use only. If you desire non-emergency product information, please call a phone number listed below.

24-HOUR EMERGENCY PHONE NUMBER MEDICAL AND TRANSPORTATION (SPILL):

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 Extension 7500

MSDS FORM NUMBER: 82316 **ISSUE:** October 27, 2005

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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 mg/m^3	STEL	TWA ppm	STEL ppm	LD[a]	LC[b]
85-95	2-Propanone	Acetone	67-64-1	2400	N.Av.	500	750	1800 (20,000) [g]	76 (2500) [c]
5-10	2-Butanone	Methyl Ethyl ketone	78-93-3	590 (200 ppm)	N.Av.	200	300	2600 (6400) [g]	32[d] (3000) [c]
0-10*	Methylbenzene	Toluene	108-88-3	200 ppm	N.Av.	50	N.Av.	636 (8390) [g]	12.5 (500) [c] (>267,000) [f]
0-10*	Dimethylbenzene	Xylene	1330-20-7	435 (100 ppm)	N.Av.	100	150	4300 (>1700) [g]	5000[e]
0-10*	Ethyl ester acetic acid	Ethyl acetate	141-78-6	1400 (400 ppm)	N.Av.	400	N.Av.	5620 (>20) [h]	2000[c]
0-10*	Butyl ester acetic acid	N-Butyl acetate	123-86-4	710 (150 ppm)	N.Av.	150	200	10768 (>17,600) [g]	390[e] (1700) [c]

*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.
N. Av. = Not Available

[a]Oral-Rat LD_{50} (mg/kg)
[b]Inhalation-Rat LC_{50}(mg/L/4H)
[c]NIOSH IDLH ppm
[d]Inhalation-Mouse LC_{50} (g/m^3/4H)
[e]Inhalation-Rat LC_{50} (ppm/4H)
[f]Inhalation-Rat LC_{50} (ppm/1H)
[g]Skin-Rabbit LD_{50}(mg/kg)
[h]Skin-Rabbit LD_{50} (mL/kg)

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE
Colorless to straw yellow liquid, mild 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 skin.
May be harmful if swallowed.
May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin.
Contains material which may cause liver, kidney, eye and central nervous system damage.
ENVIRONMENTAL HAZARDS
Acetone may be harmful to aquatic life.

POTENTIAL HEALTH EFFECTS

INHALATION (BREATHING): High concentrations of vapor or mist may be harmful if inhaled. 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. High concentrations of vapor or mist may cause liver or kidney damage. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

EYES: May cause irritation, stinging, and/or burns.

SKIN: May cause irritation, swelling, blistering, and/or burns. Toluene may be absorbed through the skin and cause harm as noted under **INHALATION (BREATHING)**.

INGESTION (SWALLOWING): May be harmful if swallowed. May cause throat irritation, nausea, vomiting, diarrhea, and central nervous system effects as noted under **INHALATION (BREATHING)**. Aspiration hazard: 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 cardiovascular, liver, kidney, respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

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

CANCER INFORMATION: For more information, see **SECTION 11: CARCINOGENICITY** and **SECTION 15: CALIFORNIA.**

POTENTIAL ENVIRONMENTAL EFFECTS: Product may be harmful to aquatic life. 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. Wash contaminated clothing before reuse. Discard any shoes or clothing items that cannot be decontaminated.

INGESTION (SWALLOWING): Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 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. For acetone poisoning, administration of gastric lavage and/or activated charcoal slurry, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: -4°F (-20°C)

FLAMMABLE LIMITS IN AIR: **LOWER:** 2.5 VOL % **UPPER:** 13 VOL%

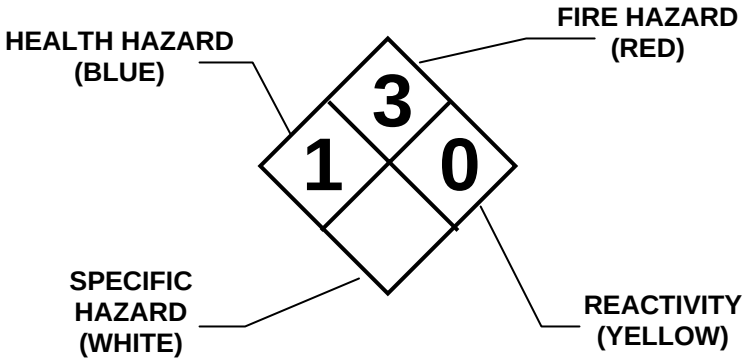
AUTOIGNITION TEMPERATURE: 869°F (465°C)

HAZARDOUS COMBUSTION PRODUCTS: Decomposition and combustion materials may be toxic. Burning may produce hydrocarbons, carbon monoxide, and unidentified organic compounds.

CONDITIONS OF FLAMMABILITY: Heat, sparks, or flame.

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

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. Vapor 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, spark proof 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 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, spark proof 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 when using this product.

SHIPPING AND STORING: Keep container tightly closed when not in use and during transport. 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-certified, air-purifying respirators with N-, 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. 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. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

EYE PROTECTION: Wearing chemical goggles is recommended. Contact lenses may be worn with eye protection.

SKIN PROTECTION: Where skin contact is likely, wear polyvinyl alcohol (PVA), laminate 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 face shield, 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: Colorless to straw yellow liquid, mild odor.

ODOR THRESHOLD: 20 ppm

MOLECULAR WEIGHT: 58.1

SPECIFIC GRAVITY: 0.79 (water =1)

DENSITY:	6.7 LB/US gal (790/g/L)
VAPOR DENSITY:	2 (air = 1)
VAPOR PRESSURE:	180 mm Hg @ 68°F (20°C)
BOILING POINT:	133ºF (56.2ºC)
FREEZING/MELTING POINT:	-139°F (-95°C)
pH:	Not applicable.
EVAPORATION RATE:	6 (butyl acetate = 1)
SOLUBILITY IN WATER:	Complete
FLASH POINT:	-4°F (-20°C)
FLAMMABLE LIMITS IN AIR:	**LOWER:** 2.5 VOL % **UPPER:** 13 VOL%
AUTOIGNITION TEMPERATURE:	869°F (465°C)

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.
INCOMPATIBILITY:	Avoid acids, alkalies, oxidizing 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, xylene, ethyl acetate and acetone 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 for the components listed in **SECTION 2**, 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 3: CANCER INFORMATION** and **SECTION 15: CALIFORNIA**.
REPRODUCTIVE TOXICITY:	Xylene has demonstrated human effects of reproductive toxicity. Acetone, methyl ethyl ketone, n-butyl acetate, and tolune have demonstrated animal effects of reproductive toxicity. Based on best current information, the other components listed in **SECTION 2** are not reproductive toxins. Also see **SECTION 15: CALIFORNIA.**
TERATOGENICITY:	Toluene, methyl ethyl ketone, n-butyl acetate, and xylene have demonstrated experimental effects of teratogenicity. 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.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:

Based upon components, this product may be harmful to aquatic life.

Component Analysis - Ecotoxicity - Aquatic Toxicity

2-Propanone (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

2-Butanone (78-93-3)

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

Dimethylbenzene (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

Ethyl ester acetic acid (141-78-6)

Test & Species		Conditions
96 Hr LC50 fathead minnow	230 mg/L	flow-through

Methylbenzene (108-88-3)

Test & Species		Conditions
96 Hr LC50 fathead minnow*	25 mg/L	flow-through
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

*(1 day old)

Butyl ester acetic acid (123-86-4)

Test & Species		Conditions
96 Hr LC50 fathead minnow	18 mg/L	flow-through
96 Hr LC50 bluegill	100 mg/L	static
96 Hr EC50 freshwater algae*	320 mg/L	

*(Scenedesmus subspicatus)

OCTANOL/WATER PARTITION COEFFICIENT:	Log Pow=-0.24
VOLATILE ORGANIC COMPOUNDS:	5 to 15 WT%; 0.3 to 1 LB/US gal; 40 to 120 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): If discarded, this product is considered a RCRA ignitable waste, D001 and must be managed in accordance with 40 CFR Part 261. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

SECTION 14: TRANSPORT INFORMATION

DOT:
Shipping Name: Flammable liquids, n.o.s. (Acetone, Methyl Ethyl Ketone)
UN/NA #: UN1993 **Hazard Class:** 3 **Packing Group:** II
Required Label(s): FLAMMABLE LIQUID

TDG:
Shipping Name: Flammable liquid, n.o.s. (Acetone, Methyl Ethyl Ketone),
UN/NA #: UN1993 **Hazard Class:** 3 **Packing Group:** II
Required Label(s): FLAMMABLE LIQUID

EMERGENCY RESPONSE GUIDE NUMBER: 128
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: The following components are 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	De Minimis Concentration
Toluene	108-88-3	1.0 %
Xylene	1330-20-7	1.0 %
Methyl ethyl ketone	78-93-3	

CERCLA: Based on the ingredient(s) listed in SECTION 2, this product contains the following "hazardous substance(s)" 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 (final)
Acetone	67-64-1	5000 LB (2270 KG)
Methyl ethyl ketone	78-93-3	5000 LB (2270 KG)
Tolune	108-88-3	1000 LB (454 KG)
Xylene	1330-20-7	100 LB (45.4 KG)
Ethyl acetate	141-78-6	5000 LB (2270 KG)
n-Butyl acetate	123-86-4	5000 LB (2270 KG)

TSCA: All the components of these products 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 does not contain detectable amounts of any chemical known to the State of California to cause cancer.

This product contains detectable amounts of toluene CAS 108-88-3. WARNING: This chemical is known to the State of California to cause reproductive/developmental effects.

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, D2A, D2B

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): All the components of these products 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: Revised format, updated Medical Emergency phone number, revised sections: 1, 2, 8, 11, 12, 14, 15, and 16.

LABEL/OTHER INFORMATION: Not Available.