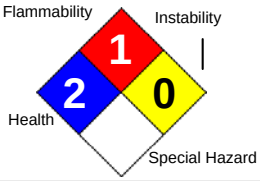
MATERIAL SAFETY DATA SHEET
Klean-Strip Aircraft Remover

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL		0
PPE		X



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Supercedes Revision: 08/21/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: 3404.14

Product Name: Klean-Strip Aircraft Remover

Manufacturer Information

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346

Information: W.M. Barr Customer Service (800)398-3892

Web site address: www.wmbarr.com

Preparer Name: W.M. Barr EHS Dept (901)775-0100

Synonyms

GAR343, QAR343

Revision Date: 01/22/2013

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA TWA	ACGIH TWA	Other Limits
1. Dichloromethane {Methylene chloride; R-30; Freon 30}	75-09-2	60.0 -100.0 %	25 ppm	50 ppm	No data.
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	5.0 -10.0 %	200 ppm	200 ppm	No data.
3. Tall oil	8002-26-4	1.0 -5.0 %	No data.	No data.	No data.
4. Ammonium hydroxide {Ammonia aqua; Ammonium liquor}	1336-21-6	1.0 -5.0 %	No data.	No data.	No data.
5. Xylene (mixed isomers) {Benzene, dimethyl-}	1330-20-7	1.0 -5.0 %	100 ppm	100 ppm	No data.

Hazardous Components (Chemical Name)	RTECS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. Dichloromethane {Methylene chloride; R-30; Freon 30}	PA8050000	125 ppm (15 min)	No data.	No data.	No data.
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	PC1400000	No data.	No data.	250 ppm	No data.
3. Tall oil	WW2860000	No data.	No data.	No data.	No data.
4. Ammonium hydroxide {Ammonia aqua; Ammonium liquor}	BQ9625000	No data.	No data.	No data.	No data.
5. Xylene (mixed isomers) {Benzene, dimethyl-}	ZE2100000	No data.	No data.	150 ppm	No data.

3. HAZARDS IDENTIFICATION

Emergency Overview

Danger! Poison. May be fatal or cause blindness if swallowed. Vapor harmful. Eye and skin irritant.

Potential Health Effects (Acute and Chronic)

Inhalation Acute Exposure Effects:

Vapor harmful. May cause dizziness; headache; watering of eyes; injuries to mucous membranes; irritation of the throat and respiratory tract; nausea; numbness in fingers, arms and legs; bronchospasm; hot flashes; tissue damage; spotted vision; dilation of pupils; increase of carboxyhemoglobin levels, which can cause stress to the cardiovascular system; arm, leg, and chest pains; depression of the central nervous system; bronchitis; pulmonary edema; chemical pneumonitis; difficulty breathing; vomiting; visual disturbances; giddiness; intoxication;

sleepiness; cough and dyspnea; cold, clammy, extremities, and diarrhea. Severe overexposure may cause irregular or rapid heartbeat; convulsions; unconsciousness; and death. Elevated carboxyhemoglobin levels can be additive to the increase caused by smoking and other carbon monoxide sources.

Skin Contact Acute Exposure Effects
This product is a skin irritant. May be absorbed through the skin. May cause irritation; burns; blisters; tissue destruction; drying and defatting of skin; and dermatitis. May cause symptoms listed under inhalation. Vapors and mist can irritate moist skin.

Eye Contact Acute Exposure Effects
This material is an eye irritant. May cause irritation and pain; conjunctivitis of eyes; corneal ulcerations of the eye; burns; and blindness. Vapors and mist can irritate eyes.

Ingestion Acute Exposure Effects
Poison. Cannot be made non-poisonous. May be fatal or cause blindness. May cause irritation to mouth, throat and stomach; headache; nausea; dizziness; stupor; liver, kidney and heart damage; depression of the central nervous system; narcosis; burning of esophagus, stomach, mouth and throat; vomiting; gastrointestinal irritation; diarrhea; abdominal pain; collapse; and death. May be corrosive to mouth and throat. May produce symptoms listed under inhalation. Liquid aspirated into lungs may cause chemical pneumonitis and systemic effects.

Chronic Exposure Effects
Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Prolonged or repeated contact may cause dermatitis. Prolonged skin contact may result in absorption of a harmful amount of this material. May cause headache; conjunctivitis; gastric disturbances; skin irritation; permanent central nervous system changes; decreased response to visual and auditory stimulation; visual impairment or blindness; hallucinations; changes in blood; blood disorders; kidney, liver or pancreatic damage; insomnia; giddiness; and death. May cause additional symptoms listed under inhalation.

Signs and Symptoms Of Exposure

See Potential Health Effects.

Medical Conditions Generally Aggravated By Exposure

Diseases of the blood; skin; eyes; liver; kidneys; lungs; cardiovascular; pulmonary; and respiratory systems; alcoholism; and rhythm disorders of the heart.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

4. FIRST AID MEASURES

Emergency and First Aid Procedures

Skin:
Immediately begin washing the skin thoroughly with large amounts of water and mild soap, if available, while removing contaminated clothing. Seek medical attention if irritation persists.

Eyes:
Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes, then seek immediate medical attention.

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion:
If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician, hospital emergency

room, or poison control center immediately. Never give anything by mouth to an unconscious person.

Note to Physician

Poison. This product contains methylene chloride and methanol.

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. Adrenalin should never be given to a person overexposed to methylene chloride.

Methylene Chloride is an aspiration hazard. Risk of aspiration must be weighed against possible toxicity of the material when determining whether to induce emesis or to perform gastric lavage. This material sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. This material is metabolized to carbon monoxide. Consequently, elevations in carboxyhemoglobin as high as 50% have been reported, and levels may continue to rise for several hours after exposure has ceased. Data in experimental animals suggest there is a narrow margin between concentrations causing anesthesia and death.

5. FIRE FIGHTING MEASURES

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data available.

Fire Fighting Instructions

Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

Contact of liquid or vapor with flame or hot surfaces will produce toxic gases and a corrosive residue that will cause deterioration of metal.

Flammable Properties and Hazards

Flashpoint: NO FLASH TO BOILING

Hazardous Combustion Products

carbon monoxide, carbon dioxide, phosgene, chlorine.

Extinguishing Media

Use carbon dioxide, dry powder or foam.

Unsuitable Extinguishing Media

No data available.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled

Clean-up

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area.

Small Spills

Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

Large Spills

Dike far ahead of spill for later disposal.

Waste Disposal
Dispose in accordance with applicable local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Wear protective clothing and take precautions to prevent all skin and eye contact.

Precautions To Be Taken in Storing

Store in a cool, dry place. Exposure to high temperatures or prolonged exposure to sun may cause can to leak or swell. Once opened, remover should be used within six months or discarded to avoid can deterioration. Do not store near flames or at elevated temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Equipment (Specify Type)

For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved self-contained breathing apparatus for chlorinated solvent vapors. A dust mask does not provide protection against vapors.

Eye Protection

Safety glasses, chemical goggles, or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Chemical goggles or face shields are recommended when splashing or spraying of chemical is possible. A faceshield provides more protection to help reduce chemical contact to the face and eyes.

Protective Gloves

Wear gloves with as much resistance to the chemical ingredients as possible. Laminate film gloves offer the best protection. Other glove materials will be degraded by methylene chloride, but may provide protection for some amount of time, based on the type of glove and the conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

Other Protective Clothing

Various application mehods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

Engineering Controls (Ventilation etc.)

Use only with adequate ventilation to prevent build up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering, STOP ventilation is inadequate. Leave area immediately.

Work/Hygienic/Maintenance Practices

A source of clean water should be available in the work area for flushing of the eyes and skin.

Wash hands thoroughly after use.
Do not eat, drink, or smoke in the work area.

Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use.

Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [X] Liquid [ ] Solid

Melting Point: No data.

Boiling Point: ~ 110 F

Autoignition Pt: No data.

Flash Pt: No data.

Specific Gravity (Water = 1): 1.1683 - 1.1985

Vapor Pressure (vs. Air or mm Hg): 350 MM HG at 20 C

Vapor Density (vs. Air = 1): > 1

Evaporation Rate: > 1

Solubility in Water: Partial

Percent Volatile: 95 % by weight.

VOC / Volume: 12 % WT

pH: 10 - 12

Appearance and Odor

No data available.

10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability

No data available.

Incompatibility - Materials To Avoid

Incompatible with strong oxidizing agents; strong caustics; strong alkalis; oxygen; nitorgen peroxide; chemically active metals such as aluminum and magnesium; sodium; potassium; and nitric acid.

Hazardous Decomposition Or Byproducts

Thermal decomposition may produce hydrogen chloride; chlorine gas; small quantities of phosgene; carbon monoxide; carbon dioxide; formaldehyde; and unidentified organic compounds in black smoke.

Hazardous Polymerization: Will occur [ ] Will not occur [X]

Conditions To Avoid - Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Information

Methylene Chloride:
ACUTE TOXICITY:
LC50 Rat inhalation 52 mg/L 4 hrs
LD50 Rat oral 985-1600 mg/kg
SKIN CORROSION / IRRITATION:
810 mg/24 hr skin rabbit - severe
100 mg/24 hr skin rabbit - moderate
SERIOUS EYE DAMAGE / IRRITATION:
162 mg eyes rabbit - moderate
10 mg eyes rabbit - mild
500 mg/24 hr eyes rabbit - mild
RESPIRATORY OR SKIN SENSITIZATION: Not a respiratory or skin sensitizer.

ASPIRATION HAZARD: Mehtylene chloride does present an aspiration hazard.
MUTAGENIC DATA: Positive results have been observed in the Ames test. In mammalian systems, responses have generally been negative.
IMMUNOTOXICITY: A study found there was no evidence of harm to the immune system of laboratory animals or reduced ability to combat disease.
NEUROTOXICITY: Tests in rats indicate no significant neurotoxic effects after exposure to concentrations up to 2,000 ppm for 90 days. No neurotoxic effects have been observed in humans at typical occupational exposure levels.
DEVELOPMENTAL/REPRODUCTIVE: No significant developmental effects were observed in female rats and mice exposed to 1,250 ppm during gestation. A similar result was observed in rats exposed to 4,500 ppm before and during gestation. A two-generation inhalation study showed no adverse reproductive effects in rats exposed to as much as 1,500 ppm for 14 weeks.
CARCINOGEN STATUS: Methylene chloride is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that are not considered relevant to worker exposure. Available epidemiological studies do not confirm an increased risk of cancer in humans. Available evidence suggests that this material is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

Methanol:
ACUTE TOXICITY:
LD50 Rat oral 5628 mg/kg
LC50 Rat inhalation 64000 ppm/4 hr
LC50 Rat inhalation 87.5 mg/L/6 hr
LD50 Mouse oral 7300 mg/kg
SKIN CORROSION / IRRITATION: LD50 Rabbit dermal 15,800 mg/kg bw
SERIOUS EYE DAMAGE / IRRITATION: Methanol is a mild to moderate eye irritant.
RESPIRATORY OR SKIN SENSITIZATION: Not a respiratory or skin sensitizer.
ASPIRATION HAZARD: Methanol presents an aspiration hazard.
MUTAGENIC DATA: No data.
IMMUNOTOXICITY: No data.
NEUROTOXICITY: Overexposure to methanol has been suggested as causing central nervous system damage in laboratory animals.
DEVELOPMENTAL/REPRODUCTIVE: The inhalation of methanol by pregnant rodents throughout the period of embryogenesis induces a wide range of concentration-dependent teratogenic and embryolethal effects. Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain.
CARCINOGEN STATUS: There is no evidence from animal studies to suggest methanol is a carcinogen.

Ammonium Hydroxide:
LD50 Rat oral 350 mg/kg

Xylene:
LD50 Rat oral 4.3 g/kg
LD50 Rat oral 10 mL/kg /Xylene/
LD50 Mouse oral 1590 mg/kg /Xylene/
LC50 Rat inhalation 6,350 ppm/4 hr
LCLo Rat inhalation 8,000 ppm/4 hr

LC50 Rat inhalation 6,350 ppm/4 hr
LC50 Mouse inhalation 3,907 ppm/6 hr
LD50 Rat oral 4.3 g/kg and 10 ml/kg /Xylene/
LD50 Mouse oral 1590 mg/kg /Xylene/
LC50 Rat oral 29,000 mg/cu m (6670 ppm) /Xylene/
LD50 Rat oral range from 3523 mg/kg to 8600 mg/kg. /Mixed Xylenes/ LD50 Mouse (B6C3F1) oral 5251 mg/kg (female) and 5627 mg/kg (male). /Mixed Xylenes/
LD50 Rabbit dermal > 5 ml/kg (43 g/kg). /Mixed Xylenes

Chronic Toxicological Effects

No data available.

Carcinogenicity/Other Information

IARC 2B - Possibly Carcinogenic to Humans
IARC 3: Not Classifiable as to Carcinogenicity in Humans.
ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
ACGIH A4 - Not Classifiable as a Human Carcinogen.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Dichloromethane {Methylene chloride; R-30; Freon 30}	75-09-2	Possible	2B	A3	Yes
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	n.a.	n.a.	n.a.	n.a.
3. Tall oil	8002-26-4	n.a.	n.a.	n.a.	n.a.
4. Ammonium hydroxide {Ammonia aqua; Ammonium liquor}	1336-21-6	n.a.	n.a.	n.a.	n.a.
5. Xylene (mixed isomers) {Benzene, dimethyl-}	1330-20-7	n.a.	3	A4	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information

No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose in accordance with applicable local, state, and federal regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name UN1760, Corrosive Liquid, N.O.S. 8, PGI (Ammonium Hydroxide, Methylene Chloride)

DOT Hazard Class: 8

DOT Hazard Label: CORROSIVE

UN/NA Number: 1760

Packing Group: I

Additional Transport Information

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

15. REGULATORY INFORMATION

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Dichloromethane {Methylene chloride; R-30; Freon 30}	75-09-2	No	Yes 1000 LB	Yes	Yes
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	No	Yes 5000 LB	Yes	No
3. Tall oil	8002-26-4	No	No	No	No
4. Ammonium hydroxide {Ammonia aqua; Ammonium liquor}	1336-21-6	No	Yes 1000 LB	No	No
5. Xylene (mixed isomers) {Benzene, dimethyl-}	1330-20-7	No	Yes 100 LB	Yes	Yes

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. Dichloromethane {Methylene chloride; R-30; Freon 30}	75-09-2	HAP	Yes	Inventory, 4 Test, 8A CAIR	Yes
2. Methanol {Methyl alcohol; Carbinol; Wood alcohol}	67-56-1	HAP	No	Inventory	Yes
3. Tall oil	8002-26-4	No	No	Inventory	No
4. Ammonium hydroxide {Ammonia aqua; Ammonium liquor}	1336-21-6	No	No	Inventory	No
5. Xylene (mixed isomers) {Benzene, dimethyl-}	1330-20-7	HAP	Yes	Inventory	No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302: EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.

Sec.304: EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.

Sec.313: EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.

Sec.110: EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control Act) Lists:

Inventory: Chemical Listed in the TSCA Inventory.

5A(2): Chemical Subject to Significant New Rules (SNURS)

6A: Commercial Chemical Control Rules

8A: Toxic Substances Subject To Information Rules on Production

8A CAIR: Comprehensive Assessment Information Rules - (CAIR)

8A PAIR: Preliminary Assessment Information Rules - (PAIR)

8C: Records of Allegations of Significant Adverse Reactions

8D: Health and Safety Data Reporting Rules

8D TERM: Health and Safety Data Reporting Rule Terminations

12(b): Notice of Export

Other Important Lists:

CWA NPDES: EPA Clean Water Act NPDES Permit Chemical

CAA HAP: EPA Clean Air Act Hazardous Air Pollutant

CAA ODC: EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)

CA PROP 65: California Proposition 65

International Regulatory Lists:

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[X] Yes [ ] No Acute (immediate) Health Hazard

[X] Yes [ ] No Chronic (delayed) Health Hazard

[ ] Yes [X] No Fire Hazard

[ ] Yes [X] No Sudden Release of Pressure Hazard

[ ] Yes [X] No Reactive Hazard

Regulatory Information Statement

All components of this material are listed on the TSCA Inventory or are exempt.

16. OTHER INFORMATION

Company Policy or Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required