



SAFETY DATA SHEET

TURBO-KLEEN™

Chemically cleans & mechanically scrubs

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name

Turbo-Kleen™ A/C System Flush

Product Codes

82400, 82450, 82500, 82501

Chemical Family

Organic

Use

Cleaner and degreaser

Manufacturer's Name

The RectorSeal Corporation
2601 Spenwick Drive
Houston, Texas 77055 USA

Date of Validation

January 23, 2015

Date of Preparation

April 19, 2012

HMIS Codes

Health	1
Flammability	2
Reactivity	0
PPI	B

Emergency Telephone No.

Chemtrec 24 Hours
(800)-424-9300 USA
(703)-527-3887 International

Technical Service Telephone No.

(800)-231-3345 or (713)-263-8001

SECTION 2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA Hazards

Combustible Liquid, Target Organ Effect

Target Organs

Liver, Kidney

GHS CLASSIFICATION

Physical Hazards:

Flammable Liquid, Category 3

Health Hazards

Acute Toxicity:

Oral: Not Classified

Dermal: Not Classified

Inhalation: Not Classified

Skin Corrosion/Irritation: Not Classified

Serious Eye Damage/Eye Irritation: Not Classified

Skin Sensitization: Not Classified

Respiratory Sensitization: Not Classified
Germ Cell Mutagenicity: Not Classified
Carcinogenicity: See Section 11
Reproductive Toxicology: (Category 1B)
Target Organ Systemic Toxicity - Single Exposure: Not Classified
Target Organ Systemic Toxicity - Repeated Exposure: Not Classified

Aspiration Toxicity: Not Classified

Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements



GHS02: Flammable
GHS08: Health Hazard
Signal Word: **Danger**

Hazard Statements:

H226 Flammable liquid and vapour.
H360 May damage fertility or the unborn child.
H402 Harmful to aquatic life.

Precautionary Statements:

P201 Obtain special instructions before use.
P308 + P313 IF exposed or concerned: Get medical advice/attention.

Summary Of Acute Hazards

Overexposure may cause coughing, shortness of breath, dizziness, central nervous system depression, intoxication and collapse. It may cause irritation to the respiratory tract and to other mucous membranes.

Route Of Exposure, Signs And Symptoms

INHALATION

Overexposure may cause coughing, shortness of breath, dizziness, central nervous system depression, intoxication and collapse. It may cause irritation to the respiratory tract and to other mucous membranes.

EYE CONTACT

Severely irritating. If not removed promptly, will injure eye tissue, which can result in permanent damage.

SKIN CONTACT

Frequent or prolonged contact may irritate and cause dermatitis. Low order of toxicity.

INGESTION

Low order of toxicity. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

SUMMARY OF CHRONIC HAZARDS

Repeated or prolonged exposure may cause signs of central nervous system depression and respiratory irritation. This material has been shown to induce tumors in laboratory animals.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver, or kidneys may have increased susceptibility to excessive exposure.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient:	2-Methoxy-1-methylethyl acetate
Percentage By Weight:	90-100
CAS Number:	108-65-6
EC#:	607-195-00-7

SECTION 4 – FIRST AID MEASURES

If inhaled:	If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.
If on skin:	Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing.
If in eyes:	Immediately flush with large amounts of water for at least 15 minutes. Get prompt medical attention.
If swallowed:	If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Conditions Of Flammability

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide(CO₂).

Special Fire Fighting Procedures: Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous Combustion Products

Hazardous decomposition products formed under fire conditions: Carbon oxides.

Further Information

Use water spray to cool unopened containers.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Use absorbent materials to prevent footing hazard and to contain. Ventilate area with forced air ventilation. Avoid flushing into sewers, drains, waterways, and soil. Wear protective clothing and respiratory protection during cleanup.

SECTION 7 – HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storing: Avoid breathing high vapor concentrations. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed. Store away from heat and light.

Other Precautions: Keep away from heat and flame. Keep from contact with oxidizing materials. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Do not distill to near dryness. If peroxide formation is suspected, do not open or move container. Addition of water or appropriate reducing materials will lessen peroxide formation.

KEEP OUT OF REACH OF CHILDREN.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient	Units
2-Methoxy-1-methylethyl acetate	
WEEL TWA:	50 ppm
OSHA PEL:	N/D ppm

Respiratory Protection (Specify Type): In confined, poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air respirator.

Ventilation – Local Exhaust: Acceptable

Special: Explosion proof

Mechanical (General): Acceptable

Other: N/A

Protective Gloves: Wear rubber gloves.

Eye Protection: Safety glasses (ANSI Z-87.1 or equivalent)

Other Protective Clothing Or Equipment: Chemical resistant coveralls recommended.

Work/Hygienic Practices: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling point:	302°F (150°C) @ 760 mm Hg
Specific gravity (H ₂ O = 1):	0.969
Vapor pressure (mmHg):	4.9 mm Hg @ 68°F (20°C)
Melting point:	N/A
Vapor Density (Air = 1):	4.6
Evaporation rate (Ethyl Acetate = 1):	0.39
Appearance/Odor:	Colorless to clear/Sweet odor
Solubility in water:	Appreciable

Volatile Organic Compounds (VOC) Content (theoretical percentage by weight):	96.9% or 969 g/L
Flash point:	115°F (46°C)
Lower explosion limit:	N/D
Upper explosion limit:	N/D

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: Extended contact with air or oxygen. The potential for peroxide formation is enhanced when these solvents are used in processes such as distillation. Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Ignition may occur at temperatures below those published in the literature as autoignition or ignition temperatures.

Incompatibility (Materials To Avoid): May react with oxygen to form peroxides. However, there is no known evidence that it has nearly the peroxide forming potential as, for example, diethyl ether, etc. Dehydrating agents. Strong oxidizing agents.

Hazardous Decomposition Products: Incomplete combustion carbon monoxide, carbon dioxide and other toxic gases.

Hazardous Polymerization: Not expected to occur.

SECTION 11 – TOXICOLOGY INFORMATION

Chronic Health Hazards

No ingredient in this product is an IARC, NTP or OSHA Lister carcinogen.

Toxicology Data

Ingredient Name

Propylene glycol monomethyl ether acetat

Oral-Rat LD50:	> 10,000 mg/kg
Inhalation-Rat LC50:	6 hr: > 4345 ppm

SECTION 12 – ECOLOGICAL INFORMATION

Ecological Data

Ingredient Name: **Propylene glycol monomethyl ether acetate**

Oxygen Demand Data

BOD-5:	363 mg/g
BOD-20:	1,050 mg/g

Acute Aquatic Effects Data

96 h LC-50 (fathead minnow):	161 mg/L
48 h LC-50 (daphnid):	408 mg/L

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Classification: RCRA classified hazardous waste. Dispose of absorbed materials and liquid waste in approved, controlled incineration facility in accordance with all local, state and federal regulations.

Disposal Method: Incineration.

SECTION 14 – TRANSPORTATION INFORMATION

DOT: UN1993, Flammable liquids, n.o.s. (Propylene Glycol Ethers), Class 3, UN1993, PG III, Limited Quantities or Ltd Qty, ERG#128
 Gallons and less: Consumer Commodity ORM-D

Ocean (IMDG): Gallons and less: UN1993, Flammable liquids, n.o.s. (Propylene Glycol Ethers), Class 3, PG III, Limited Quantities or Ltd Qty, EMS-No: F-E, S-D

Air (IATA): UN1993, Flammable liquids, n.o.s. (Propylene Glycol Ethers), Class 3, PG III, Limited Quantities or Ltd Qty, ERG#128

SECTION 15 – REGULATORY INFORMATION

Regulatory Data

Ingredient Name:	Propylene glycol monomethyl ether acetate
SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

SECTION 16 – OTHER INFORMATION

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made.

Consult RectorSeal for further information: (713) 263-8001