Tuthill Vacuum & Blower SystemsH.M.I.S.4840 W. Kearney St.HEALTH 2 *Springfield, MO 65803FLAMMABILITY 3Phone:(417)865-8715DOT Emergency(800) 424-9300These ratings should be used as part of a fully implemented H.M.I.S. program.

MATERIAL SAFETY DATA SHEET

Data Sheet D250-72

SECTION 1 - PRODUCT INFORMATION

DATE OF PREPARATION	10/07/03
TRADE NAME	KINSEAL VACUUM SEALANT
MANUFACTURER CODE I.D.	SAS9120

SECTION 2 - HAZARDOUS INGREDIENTS/COMPOSITION INFORMATION

			ALLOWABL	E SARA VP	
INGREDIENT	% BY WGT	CAS NO.	EXPOSURE	LEVEL 313 mm Hg @	20 DEG.C
			PPM	MG/CU.M	SKIN
TOLUENE	45	108-88-3	TLV-TWA 50	188 SKIN X	22
			OSHA-PEL 200	752	
			OSHA-STEL 500	1880	10 MIN
			OSHA-CEIL 300	1128	
			LFL 1.7	UFL 7.1	
PROPYLENE (GLYCOL	108-65-6	NONE ESTABLISHE	ED 2	
METHYL ETHE	ER ACETATE				
DI-SEC-OCTYI	L 5	117-81-7	NONE ESTABLISHE	ED X	
PHTHALATE					
LFL	= LOWER FLA	MMABILITY	LIMIT PERCENT		
UFL	= UPPER FLA	MMABILITY	LIMIT PERCENT		
SKIN	= SKIN ABSOF	RPTION MU	ST BE CONSIDERED AS	A ROUTE OF EXPOSI	JRE
C-CEILING	= ALLOW. EXF	POSURE LE	VEL SHOULD NOT BE EX	XCEEDED FOR ANY T	IME PERIOD
MFR	= MANUFACT	URER RECO	DMMENDED EXPOSURE	LIMIT	
STEL	= SHORT TER	M EXPOSU	RE LIMIT		
X-SARA 313 = CHEMICAL IS SUBJECT TO REPORTING REQUIREMENTS OF SECTION 313					
	OF TITLE III O	F S.A.R 40 (CFR PART 372		

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF SHORT TERM OVEREXPOSURE

SWALLOWING

Can cause gastrointestinal irritation, nausea, and vomiting. Aspiration of material into lung may cause chemical pneumonitis which can be fatal.

INHALATION

May cause nose or throat irritation. High concentrations may cause acute central nervous system depression characterized by headaches, dizziness, nausea and confusion.

EYE

May cause eye irritation.

SKIN

May cause severe skin irritation.

EFFECTS OF REPEATED OVEREXPOSURE

Repeated overexposure to toluene may cause liver damage. Reports have associated prolonged and repeated occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH.

Toluene has been found to cause kidney, lung and spleen damage in laboratory animals. The supplier reports that both NTP and IARC have determined that there is sufficient evidence of carcinogenicity of Di(2-Ethylhexyl)Phthalate (DEHP) in experimental animals, DEHP administered in the diet produced an increased incidence of hepatocellular carcinomas in female rats and male and female mice. DEHP also caused fetotoxicity, teratogenicity, and testis damage in rodents.(IARC Group 2B, NTP Group 2).

SECTION 4 - FIRST-AID MEASURES

SWALLOWING

If swallowed do not induce vomiting. Call poison control center, hospital emergency room or physician immediately.

INHALATION

Remove to fresh air immediately. If breathing has stopped, give artificial respiration. Keep warm and quiet. Get medical attention immediately.

EYE

Flush with large amounts of water, lifting upper and lower lids occasionally. Continue for at least 15 minutes. Get medical attention.

SKIN

Remove contaminated clothing. Wash affected area with soap and water. Obtain medical attention if irritation persists.

NOTES TO PHYSICIAN

Any treatment that might be required for overexposure should be directed at the control of symptoms and the clinical conditions.

SECTION 5 - FIRE-FIGHTING MEASURES

NFPA FLAMMABILITY CLASSIFICATION FLASHPOINT FLAMMABLE LIQUID - CLASS IB 50 DEG.F, (10 DEG.C,) SFCC

EXTINGUISHING MEDIA

Use NFPA Class B Fire extinguishers (carbon dioxide, all purpose dry chemical or alcohol foam) designed to extinguish flammable liquid fires. Polymer foam is preferred for large fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS

During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. WARNING! FLAMMABLE.

SPECIAL FIRE FIGHTING PROCEDURES

Water may be ineffective, but may be used to cool exposed containers to prevent pressure buildup and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Keep spectators away. Eliminate all ignition sources (flames, hot surfaces, and sources of electrical, static or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

WASTE DISPOSAL

Dispose in accordance with federal, state and local regulations.

RCRA CLASSIFICATION

This product, if discarded directly, would be classified a hazardous waste based on its ignitability characteristic, i.e. has a flash point of 140 deg. F.(60 deg.c) or less. The proper RCRA classification would be D001.

ENVIRONMENTAL HAZARDS

None known

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Do not store above 115 deg.F (46 deg.C) store large quantities in compliance with OSHA 29CFR1910.106.

OTHER PRECAUTIONS

Do not take internally. Close container after each use.

Empty containers must not be washed and re-used for any purpose.

Containers should be grounded and bonded to the receiving container.

Do not weld, braze or cut on empty container.

Never use pressure to empty. Drum is not a pressure vessel.

SECTION 8 - EXPOSURE CONTROLS

RESPIRATORY PROTECTION

Proper selection of respiratory protection depends upon many factors including duration/level of exposure and conditions of use. In general exposure to organic chemicals such as those contained in this product may not require the use of respiratory protection if used in well ventilated areas. In restricted ventilation areas a NIOSH approved chemical cartridge respirator may be required. Under certain conditions, such as spraying, a mechanical prefilter may also be required. In confined areas use a NIOSH/ MSHA approved air supplied respirator. If the TLV's listed in Section II are exceeded use a properly fitted NIOSH/MSHA approved respirator with an appropriate protection factor. Refer to OSHA 29 CFR 1910.134 "Respiratory Protection", and "Respiratory Protection A Manual And Guideline, American Industrial Hygiene Assoc."

VENTILATION

Provide local exhaust ventilation in sufficient volume and pattern so as to maintain exposures below nuisance dust limits and permissible exposure limits which may be listed in Section II. Refer to Industrial Ventilation -A Manual for Recommended Practice - American Conference Of Governmental Industrial Hygienists.

HAND PROTECTION

Solvent impermeable gloves are required for repeated or prolonged contact.

EYE PROTECTION

Wear safety spectacles.

OTHER PROTECTIVE EQUIPMENT

Not likely to be needed.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE 176 DEG.F. (80 DEG.C.) TO 235 DEG.F. (113 DEG.C.) VAPOR DENSITY % VOLATILE BY VOLUME 57 Heavier than air. EVAPORATION RATE Slower than diethyl ether. VOC 4.19 LB/GAL LESS WATER & NPRS* 503 G/L LESS WATER CALCULATED WGT LB/GAL 8.2 VOC 9.84 LB/GAL SOLIDS 1181 G/L SOLIDS CALCULATED SPECIFIC GRAVITY 1.0 All Physical data determined at 68 DEG. F. (20 DEG. c.) 760 mm Hg * Negligibly Photochemically

All Physical data determined at 68 DEG. F. (20 DEG. c.) 760 mm Hg * Negligibly Photochemically Reactive Materials

SECTION 10 - STABILITY AND REACTIVITY

STABILITY Normally stable. CONDITIONS TO AVOID Avoid excessive heat (>115 F (46 C) and sources of ignition. INCOMPATABILITY (MATERIALS TO AVOID) Strong acids or alkaline materials. HAZARDOUS DECOMPOSITION PRODUCTS Burning, including when heated by welding or cutting, will produce smoke, carbon monoxide and carbon dioxide. HAZARDOUS POLYMERIZATION Will not occur CONDITIONS TO AVOID None known SECTION 11 - TOXICOLOGICAL INFORMATION No information available.

SECTION 12 - ECOLOGICAL INFORMATION No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS See Section 6.

SECTION 14 - TRANSPORT INFORMATION

MODE PKG GRP ITEM: SAS9120 DESC/SIZE:	PROPER SHIPPING NAME	CLASS I.D.#
IATA (AIR)	FLAMMABLE LIQUID NOS CONTAINS TOLUENE NAERG: 128	3 UN1993 II
DOT (HM-181) (DOMESTIC SURFACE)	FLAMMABLE LIQUID NOS CONTAINS TOLUENE	3 UN1993 II

NOTE! The assignment of Proper Shipping Names is in part a function of the size of the product container and the transport mode. For example, the Proper Shipping Name for a bulk container can differ significantly from the Proper Shipping Name for the same product packaged in a non-bulk container. This can also be true for products shipped via different modes of transportation (i.e. ground, air, ocean). The descriptions provided above are intended to provide some guidance. However, these descriptions may not apply to your package size or mode of shipment. The U.S. Code of Federal Regulations, 49 CFR - Transportation, regulations, and the policies established by some transporters, require that the shipper properly classify and assign a Proper shipping Name, and label, mark and package the material properly. Therefore, the user of this information is cautioned to consult with applicable regulations, and with qualified advisors prior to the repackaging and or reshipment of this or other any product which contain this product.

SECTION 15 - REGULATORY INFORMATION

All ingredients n this product are listed on the Canadian Domestic Substance List.

WARNING: This product contains TOLUENE; DI-SEC-OCTYL PHTHALATE; chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

INGREDIENT	CAS NO.	DETAIL INVENTORY LIST INFORMATION
TOLUENE	108-88-3	TSCA(8a CAIR) TSCA(8a PAIR) TSCA(8d) DSL
PROPYLENE GLYCOL METHYL ETHER ACETATE	108-65-6	TSCA(8a PAIR) TSCA(8d) TSCA(8d term) DSL
DI-SEC-OCTYL	117-81-7	TSCA(12b) PHTHALATE TSCA(4) TSCA(8a PAIR) TSCA(8d) DSL

DETAIL INVENTORY LIST DESCRIPTION

TSCA	Toxic Substances Control Act
12 b	Notices of Export
4	Test Rules
8a CAIR	Comprehensive Assessment Information Rules
8a PAIR	Preliminary Assesment Information Rules
8d	Health and Safety Reporting Rules
8d term	Health and Safety Reporting Rules termination
DSL	Canadian Domestic Substance List

SECTION 16 - OTHER INFORMATION

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. WHILE THE INFORMATION IS BELIEVED TO BE RELIABLE, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SINCE THE USE OF THIS INFORMATION AND THE CONDITIONS AND USE OF THIS PRODUCT ARE CONTROLLED BY THE USER, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCT.

The Corporate Safety and Environmental Affairs Department is responsible for the preparation of this Material Safety Data Sheet.

KINNEY VACUUM

PAM