

MATERIAL SAFETY DATA SHEET

COGHLAN'S LTD.

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name Coghlan's Ltd	Technical Service Phone Number 1-888-264-4526	Chemical Emergency (Transportation): Chemtrec (US) 1-800-424-9300; (International) 1-703-527-3887			
Street Address 121 Irene Street	City Winnipeg	State MB	Postal Code R3T 4C7	Last Update 05/01/2012	
Product Name AirStop	Product Number 8880				

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	ACGIH		OSHA	
		TLV ppm	STEL ppm	PEL ppm	STEL ppm
PVC Resin (Non-Hazardous)	9002-86-2	10 mg/m3	NE	15 mg/m3	NE
Tetrahydrofuran	109-99-9	50, skin	100	200	NE
Cyclohexanone	108-94-1	20, skin	50	50	NE
Acetone	67-64-1	500	750	1000	NE
- All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.					
OSHA Hazard Classification: Flammable, irritant, organ effects					

NE = None Established

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: Clear liquid with ether-like odor. Extremely flammable liquid and vapor. May cause irritation to skin, eye, respiratory tract and other mucous membranes. Vapors may cause flash fire.
Potential Health Effects: Routes of exposure include; inhalation, skin absorption, skin contact, eye contact and ingestion.
Eyes: Can cause irritation and permanent eye injury. Symptoms include stinging, tearing, redness and swelling of eyes.
Skin: May cause mild skin irritation. Prolonged or repeated contact may dry the skin and cause dermatitis. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.
Ingestion: If ingestion occurs seek medical attention immediately. May cause irritation of nose, throat and can lead to liver and kidney damage. May be fatal if swallowed.
Inhalation: May cause irritation to the nose, throat, mucous membranes and other tissues of the respiratory system. Symptoms include dizziness, drowsiness, fatigue, headache, nausea, coughing and shortness of breath. Overexposure may cause liver and kidney damage.
HEALTH HAZARDS: Acute: Over exposure to this product can be irritating to the eyes, skin and mucous membranes, and can also cause central-nervous system effects (dizziness, nausea and headaches). Ingestion of this product, or inhalation of high concentrations of this product's vapors, may be fatal.
Chronic: Prolonged or repeated skin exposures can lead to dermatitis. May cause conjunctivitis with prolonged or repeated eye exposure. May cause liver, kidney and reproductive damage.
Medical Conditions Aggravated by Exposure: Pre-existing disorders of the following organs may be aggravated by exposure to this material: skin, lung, liver, kidney.

SECTION 4 – FIRST AID MEASURES

Eyes: Immediately move individual away from exposure into fresh air. Flush eye gently with water for at least 15 minutes while holding eyelids apart. Seek immediate medical attention.
Skin: Remove contaminated clothing. Wash exposed area with soap and water. Seek medical attention if irritation develops. Launder clothing before reuse.
Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center. Do not induce vomiting.
Inhalation: Move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen; seek medical attention immediately.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: -2°F / -18°C; TCC
Explosive limits: Upper (UEL)- 12.8% Lower (LEL)- 1.8%

Conditions of Flammability: Extremely flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat and all sources of ignition including sparks, flames, lighted cigarettes and pilot lights.

Suitable Extinguishing Media: Use foam, carbon dioxide (CO₂), dry chemical.

Unsuitable Extinguishing Media: Water spray or stream.

Special Fire Fighting Procedures: Incipient fire responders should wear eye protection. Firefighters must wear self-contained breathing apparatus and full protective equipment.

Unusual Fire and Explosion Hazards: Class IB Flammable Liquid. Keep away from sources of heat, sparks or flame. Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point.

Hazardous Combustion Products: If ignited, may form carbon dioxide and carbon monoxide, various hydrocarbon vapors and toxic gases.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: Eliminate all ignition sources (flares, flames including pilot lights electrical sparks). Use personal protective equipment. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Ventilate area with natural or explosion-proof, forced air ventilation. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean metal containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal in accordance with U.S. Federal, State, or local procedures.

SECTION 7 – HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mist. Keep container closed and upright when not in use. Do not store near heat, sparks, or open flames. If transferring this material to other containers, ground all containers to avoid static electricity buildup and discharge which may ignite flammable vapors.

Storage Precautions: Do not store near heat, sparks or open flames. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Empty containers retain product residue and can be hazardous. Follow all MSDS precautions in handling empty containers. KEEP OUT OF REACH OF CHILDREN.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: In confined or poorly ventilated areas, use NIOSH/MSHA approved air respirators. Use only protection authorized in 29 CFR 1910.134 or applicable State regulations.

Eye Protection: Splash goggles or safety glasses.

Hand Protection: Wear rubber gloves

Other Protection: Wear protective clothing appropriate for task (coveralls, apron, Tyvek suit)

Specific Engineering Controls (such as ventilation, enclosed process): Use in well ventilated area. Provide ventilation capable of maintaining emissions at the point of use below recommended exposure limits. Mechanical exhaust (explosion proof) may be required. Emergency eye-wash / safety showers are needed where there is the possibility that an employee's eyes may be exposed to this material, the employer should provide an eye-wash fountain / safety shower within the work area for emergency use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid	Color: Clear	% Volatile by Weight: 80 - 90%
pH (concentrate): n/a	Vapor Density [air =1]: >2.0	Evaporation Rate (BUAC = 1): > 1.0
Odor: Ether-like	Vapor Pressure: 190 mm Hg @ 20°C	Specific Gravity: 0.900
Boiling Point: 133°F / 56°C	Solubility in Water: Negligible	Melting/Freezing Point: -108°F / -163°C
Auto-Ignition Temperature: 610°F / 321°C	VOC Content: ≤ 510 g/L; when applied as directed, per SCAQMD Rule 1168, Test Method 316A	

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will not occur.

Incompatibility (Conditions to Avoid): Heat, sparks, open flames and oxidizers, acids and bases.

Reactive Conditions to avoid: Avoid heat, sparks, flames and other sources of ignition.

Hazardous Decomposition Products: None in normal use. When ignited, this product gives off oxides of carbon, hydrogen chloride and smoke.

SECTION 11 – TOXICOLOGICAL INFORMATION

Sensitization: None of the components of this product are known to cause sensitization.

Suspected Cancer Agent: None of the components of this product are listed as an IARC, NTP or OSHA carcinogen. Tetrahydrofuran – The National Toxicology Program has reported that exposures of mice and rats to THF vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health are unclear at this time, and may be related to “species specific” effects. Elevated incidences of tumors in humans have not been reported for THF. ACGIH has classified Cyclohexanone and Tetrahydrofuran as “A3”, Confirmed Animal Carcinogens with Unknown Relevance to Humans.

Reproductive Toxicity: This product is not reported to produce reproductive effects in humans. Reproductive toxicity data is available for Acetone, Cyclohexanone and Tetrahydrofuran; obtained through clinical studies on test animals exposed to relatively high doses.

Mutagenicity: This product is not reported to produce mutagenic effects in humans. Human mutation data is available for Cyclohexanone; obtained through clinical studies on specific human tissues exposed to relatively high doses. Animal mutation data is available for Acetone and Tetrahydrofuran; obtained through clinical studies on specific animal tissues or micro-organisms exposed to relatively high doses.

Medical Conditions Aggravated By Exposure: Pre-existing disorders of the following organs may be aggravated by exposure to this material: skin, lung, liver, kidney.

Tetrahydrofuran:	Oral rat LD50: 1,650 mg/kg Inhalation rat LC50: 21,000 ppm / 3 hours
Cyclohexanone:	Oral rat LD50: 1,620 mg/kg Skin rabbit LD50: 1 mL/kg Inhalation rat LC50: 8,000 ppm / 4 hours
Acetone:	Oral rat LD50: 5,800 mg/kg Inhalation rat LC50: 50,100 mg/m ³ / 8 hours

SECTION 12 – ECOLOGICAL INFORMATION

This product is not expected to be toxic to aquatic organisms.

Tetrahydrofuran:	96 hour LC50 fathead minnow: 2160 mg/l
Cyclohexanone:	96 hour LC50 values for fish is over 100 mg/l
Acetone:	96 hour LC50 values for fish is over 100 mg/l

SECTION 13 – DISPOSAL CONSIDERATIONS

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

Waste Classification: RCRA classified hazardous waste.

SECTION 14 – TRANSPORTATION INFORMATION

Proper Shipping Name:	Adhesives
Hazard Class:	3
Secondary Risk:	None
Identification Number:	UN 1133
Packing Group:	PG II
Label Required:	Class 3 Flammable Liquid
Marine Pollutant:	NO

EXCEPTION for Ground Shipping: DOT Limited Quantity – Up to 5L per inner packaging, 30kg gross weight per package.

Consumer Commodity: Products packaged less than 1L may qualify under DOT as ‘ORM-D’.

SECTION 15 – REGULATORY INFORMATION

SARA Reporting Requirements: This product contains the following chemicals subject to Sections 302 and 313 of Title III of the Superfund Amendments and Reauthorization Act:	CHEMICAL NAME	SARA 302 (40 CFR 355, Appendix A)	SARA 313 (40 CFR 372.65)
	Tetrahydrofuran	No	No
	Cyclohexanone	No	No
	Acetone	No	No

U.S. CERCLA Reportable Quantity: Tetrahydrofuran = 1000 lbs.; Cyclohexanone = 5000 lbs.; Acetone = 5000 lbs.

California Proposition 65: This product may contain trace levels of chemicals known to the State of California to cause cancer. Exposure to these chemicals above the State of California ‘No Significant Risk Level’ is unlikely under normal use conditions.

TSCA Inventory: The components of this product are listed on the TSCA Inventory.

Canadian WHIMS Classification: Class B2: Flammable Liquid.

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

SECTION 16 – OTHER INFORMATION

NFPA and HMIS:

NFPA Hazard Signal: Health: 2 Flammability: 3 Reactivity: 1 Special: None

HMIS Hazard Signal: Health: 2 Flammability: 3 Reactivity: 1 PPE: G

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