

**MATERIAL SAFETY DATA SHEET**

Complies with guidelines set out by the  
National Occupational Health & Safety Commission  
(NOHSC) of Australia.

Identity (As used on Label and List) GAS SEALANT - COMPOUND	# CH001 & # CT002. #UTP #UTS
--	---------------------------------

**Section I**

Manufacture's Name UNASCO PTY LTD	Emergency Telephone Number NONE AVAILABLE
Address (Number, Street, State and ZIP Code) 1 AMAX AVE, GIRRAWAEN, NSW 2145, AUSTRALIA	Telephone Number for Information (TEL.): +61 (0)2 9636 1200 (FAX): +61 (0)2 9688 4831
Date Prepared APRIL 2009	Prepared by DAVID BENTLEY – PRODUCT MANAGER

**Section II – Hazardous Ingredients/Identity Information**

Ingredients	OSHA PEL	CAS Number	ACGIH TLV
Polytetrafluoroethylene	N/A	9002-84-0	N/A
Polymerized Fatty Acid	N/A	N/A	N/A
Clay	N/A	N/A	N/A
Pigment	N/A	N/A	N/A

**Section III – Physical/Chemical Characteristics**

Boiling Point N/A	Specific Gravity (H <sub>2</sub> O = 1) 1.5
Vapour Pressure (mm Hg) N/A	Melting Point N/A
Vapour Density (air = 1) N/A	Evaporation Rate (Butyl Acetate = 1) N/A
Solubility in Water INSOLUBLE	Appearance and Odour A YELLOW PASTE WITH A GREASE-LIKE ODOUR

**Section IV – Fire and Explosion Hazard Data**

Flash Point (Method Used) 300°C - 330°C (OPEN CUP)	Flammable Limits N/A	LEL	UEL
Extinguishing Media ANY STANDARD MEDIUM			
Special Fire Fighting Procedures HAZARDOUS DECOMPOSITION PRODUCTS PRODUCED ON BURNING INCLUDE OXIDES OF CARBON, OXIDES OF NITROGEN, WATER VAPOUR, SMOKE AND FUMES AND HYDROGEN FLUORIDE. FIRE FIGHTING PERSONNEL TO WEAR SELF CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. USE FOAM, CARBON DIOXIDE, DRY CHEMICAL AND WATER SPRAY TO EXTINGUISH.			
Unusual Fire and Explosion Hazards TOXIC FUMES GIVEN OFF ABOVE 260°C.			

**Section V – Reactivity Data**

Stability: Stable Unstable	Conditions to Avoid TEMPERATURES ABOVE 260°C WITHOUT ADEQUATE VENTILATION.
Incompatibility (Materials to Avoid) INCOMPATIBLE WITH REDUCING AGENTS, PERCHLORATES, STRONG MINERAL ACIDS AND PHOSPEROUS MATERIALS. DO NOT USE ON OXYGEN EQUIPMENT.	
Hazardous Polymerization: May Occur Will Not Occur	Conditions to Avoid TEMPERATURE ABOVE 260°C.

**Section VI – Health Hazard Data**

Health Hazards (Acute)				
Swallowed? MAY CAUSE GASTROINTESTINAL PAIN. CRAMPS, NAUSEA, VOMITING AND DIARRHOEA: UNCONSCIOUSNESS & DEATH FOLLOWING MASSIVE EXPOSURES.				
Eye? DIRECT CONTACT WITH EYES MAY CAUSE IRRITATION.				
Skin? BRIEF EXPOSURES ARE NOT IRRITATING.				
Inhalation? THERE IS RELEVANT DATA ON ONE INGREDIENT. <u>PTFE</u> THE MATERIAL IS NOT NORMALLY AN INHALATION HAZARD AT TEMPERATURES BELOW 260°C AS IT REMAINS AN INERT SOLID. HOWEVER, EXPOSURE TO THERMAL DEGRADATION PRODUCTS AT TEMPERATURES ABOVE 260°C OR FUMES FROM TOBACCO CONTAMINATED WITH PARTICLES OF THE PRODUCT MAY RESULT IN “POLYMER FUME FEVER” OR INFLUENZA-LIKE SYMPTOMS (CHILLS, HEADACHES, DIFFICULTY IN BREATHING AND FEVER). SYMPTOMS MAY APPEAR SEVERAL HOURS AFTER EXPOSURE BUT WILL DISAPPEAR WITHIN 24-48 HOURS. THERE ARE EXPOSURE STANDARDS FOR DECOMPOSITION PRODUCTS.				
	HF*		TWA	STEL
		ppm	mg/m <sup>3</sup>	ppm
		3	2.6	PEAK LIMITATION
*MEASURED AS AN INSPIRABLE FRACTION				
CARBONYL FLUORIDE IS THE MAIN DECOMPOSITION PRODUCT FORMED WHEN PTFE IS SUBJECTED TO EXTENDED EXPOSURE AT NORMAL SINTERING TEMPERATURES (400°C). CARBONYL FLUORIDE IS IMMEDIATELY CONVERTED TO HIGHLY CORROSIVE HYDROGEN FLUORIDE IN THE PRESENCE OF MOIST AIR.				
PEAK LIMITATION – A CEILING CONCENTRATION WHICH SHOULD NOT BE EXCEEDED OVER A MEASUREMENT PERIOD WHICH SHOULD BE AS SHORT AS POSSIBLE BUT NOT EXCEEDING 15 MINUTES.				
TLV – THRESHHOLD LIMIT VALUE.				
TWA – (THE TIME WEIGHTED AVERAGE) – AIRBORNE CONCENTRATIONS OVER AN EIGHT HOUR WORKING DAY FOR A FIVE DAY WORKING WEEK OVER AN ENTIRE WORKING LIFE				
STEL – (SHORT TERM EXPOSURE LIMIT) – THE AVERAGE AIRBORNE CONCENTRATION OVER A 15 MINUTE PERIOD WHICH SHOULD NOT BE EXCEEDED AT ANY TIME DURING A NORMAL 8 HOUR WORKING DAY. ACCORDING TO CURRENT KNOWLEDGE THESE CONCENTRATIONS SHOULD NOT IMPAIR THE HEALTH OF, NOR CAUSE UNDUE DISCOMFORT TO, HEALTHY WORKERS.				
Health Hazards (Chronic)				
NO DATA IS AVAILABLE.				
Toxicity THERE IS NO INFORMATION ON THE PRODUCT BUT THERE IS DATA ON ONE OF ITS INGREDIENTS. Polytetrafluoroethylene (PTFE): NO LD50 DATA IS AVAILABLE ON PTFE. NO TOXICITY WAS OBSERVED IN MALE/FEMALE RATS FED PTFE (UP TO 25%) FOR 90 DAYS. LOCAL SARCOMAS WERE INDUCED IN MICE AND RATS IMPLANTED SUBCUTANEOUSLY OR INTRAPERITONEAL-LY WITH PTFE. HOWEVER, THIS IS NOT CONSIDERED RELEVANT TO NORMAL INDUSTRIAL USAGE.  Polymerized Fatty Acid: SLIGHTLY TOXIC. FATAL DOSE UNKNOWN BUT PRESUMABLY LARGE. ESTIMATED FATAL DOSE: 5 – 15mg/kgs. MAY INDUCE ABORTIONS.				

**Carcinogenicity**  
PTFE:  
PTFE HAS BEEN CLASSIFIED BY THE INTERNATIONAL AGENCY FOR RESEARCH INTO CANCER AS A GROUP III AGENT. AS SUCH IT IS NOT CLASSIFIABLE AS TO ITS CARCINOGENEITY TO HUMANS.

**Emergency and First Air Procedures**  
**Swallowed:**  
NEVER GIVE ANYTHING BY MOUTH IF THE VICTIM IS UNCONSCIOUS OR CONVULSING. RINSE MOUTH WITH WATER. IF VOMITING OCCURS, HAVE VICTIM LEAN FORWARD TO REDUCE RISK OF ASPIRATION. OBTAIN MEDICAL ATTENTION IMMEDIATELY.  
**Eye:**  
RINSE AFFECTED EYE(S) THOROUGHLY WITH LUKE WARM, GENTLY RUNNING WATER, HOLDING APART THE UPPER AND LOWER EYELID(S) OCCASIONALLY, FOR AT LEAST 20 MINUTES. SEEK MEDICAL ADVICE IMMEDIATELY.  
**Skin:**  
RINSE AFFECTED AREA WITH LUKE WARM, GENTLY RUNNING WATER FOR AT LEAST 15 MINUTES. IF SKIN IRRITATION PERSISTS, SEEK MEDICAL ADVICE.  
**Inhalation:**  
REMOVE VICTIM FROM EXPOSURE – AVOID BECOMING A CASUALTY. ALLOW PATIENT TO ASSUME MOST COMFORTABLE POSITION AND KEEP WARM. KEEP AT REST UNTIL FULLY RECOVERED. IF BREATHING LABORED AND PATIENT CYANOTIC (BLUE) INSURE THAT AIRWAYS ARE CLEAR AND HAVE A QUALIFIED PERSON GIVE OXYGEN THROUGH A FACE MASK. IF BREATHING HAS STOPPED APPLY ARTIFICIAL RESPIRATION AT ONCE. IN EVENT OF CARDIAC ARRST APPLY EXTERNAL CARDIAC MASSAGE. SEEK MEDICAL ADVICE.  
**Advice to Doctor:**  
TREAT SYMPTOMATICALLY.

**Section VII – Precautions for Safe Handling and Use**

Steps to be Taken in Case Material is Released or Spilt SWEEP UP
Waste Disposal Method BURNING IS NOT RECOMMENDED. COMPLY WITH LOCAL REGUALTIONS.
Precautions to be Taken in Handling and Storing KEEP AWAY FROM FLAMES. STORE BELOW 260°C.

**Section VIII – Control Measures**

Respiratory Protection NO SPECIAL CONTROLS ARE NECESSARY IF USED WITHIN RECOMMENDED OPERATION TEMPERATURES (i.e. -260°C TO +260°C).	
Ventilation SEE ABOVE.	
Protective Gloves SEE ABOVE	Eye Protection SEE ABOVE.
Other Protective Clothing or Equipment SEE ABOVE.	Work/Hygienic Practices SEE ABOVE.