

Material Safety Data Sheet

Date last revised: April, 2001

I. GENERAL INFORMATION		
Chemical Name & Synonyms ACRYLIC LATEX SEALANT	Trade Name & Synonyms AC-20 FTR ACCOUSTICAL SEALANT	
Chemical Family ACRYLIC LATEX	Formula MIXTURE	
Proper DOT Shipping CAULKING COMPOUND	DOT Hazard Classification NONE	
Manufacturer PECORA CORPORATION	Manufacturer's Phone Number 215-723-6051	
Manufacturer's Address 165 Wambold Road, Harleysville, PA 19438	Chemtree Phone Number 800-424-9300	
II. INGREDIENTS		
Principal Hazardous Components MINERAL SPIRITS (CAS # 64741-41-9)	Percent < 5	Threshold Limit Value (Units) 500 PPM
HEALTH 0 FLAMMABILITY 0		REACTIVITY 1
III. PHYSICAL DATA		
Boiling Point (°F) N/A	Specific Gravity (H ₂ O = 1) 1.56	
Vapor Pressure (mm Hg.) 10 MINERAL SPIRITS	Percent Volatile by Volume (%) 15 - 20%	
Vapor Density (Air = 1) HEAVIER	Evaporation Rate (ETHER = 1) SLOWER	
Solubility in Water SOLUBLE IN WET STATE, INSOLUBLE IN CURED STATE	pH 7.0 - 7.5	
Appearance & Odor SMOOTH PASTE - SLIGHT MINERAL SPIRITS ODOR		
IV. FIRE & EXPLOSION HAZARD DATA		
Flash Point (Test Method) > 200° F. T.C.C.	Auto Ignition Temperature 540° F. MINERIAL SPIRITS	
Flammable Limits	LEL 0.8 MINERAL SPIRITS	UEL 5.0 MINERAL SPIRITS
Extinguishing Media Small Fires: WATER SPRAY, CARBON DIOXIDE, FOAM, DRY CHEMCIALS		
Special Fire Fighting Procedures: WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIGHTING FIRES INVOLVING CHEMICALS.		
Unusual Fire & Explosion Hazards: NONE KNOWN		

AC-20 + FTR SEALANT

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V. Health Hazard Data

OSHA Permissible Exposure Limit

ACGIH Threshold Limit Value

SEE SECTION II		SEE SECTION II	
Carcinogen -- NO		Carcinogen -- NO	
Symptoms of Exposure: NO KNOWN EFFECTS REPORTED IN NORMAL USE OF THIS COMPOUND. AS A PRECAUTIONARY MEASURE, PRECLUDE FROM THOSE INDIVIDUALS HAVING A HISTORY OF RESPIRATORY AILMENTS.			
Medical Conditions Aggravated By Exposure: NONE KNOWN			
Primary Route (s) of Entry: SKIN AND INALATION			
Emergency First Aid: SKIN: WASH WITH SOAP AND WATER. INHALATION: MOVE TO FRESH AIR. EYES: FLUSH WITH COPIOUS AMOUNTS OF WATER.			
VI. REACTIVITY DATA			
Stability		Unstable	Conditions to Avoid
	X	Stable	Conditions to Avoid EXCESSIVE HEAT AND FREEZING TEMPERATURES
Incompatibility		Materials to Avoid	
Hazardous		May Occur	Conditions to Avoid
Polymerization	X	Will Not Occur	Conditions to Avoid EXCESSIVE HEAT AND FREEZING TEMPERATURES
Hazardous Decomposition Products: CO, CO ₂ , AND POSSIBLY OXIDES OF NITROGEN			
VII. ENVIRONMENTAL PROTECTION PROCEDUERS			
Spill Response: SCRAPE UP AND PLACE IN CONTAINERS. WASH AREA WITH WARM, SOAPY WATER OR MINERAL SPIRITS.			
Waste Disposal Method: BURY IN SUITABLE LANDFILL WHERE PERMITTED UNDER APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS.			
VIII. SPECIAL PROTECTION INFORMATION			
Eye Protection GLASSES OR GOGGLES		Skin Protection COTTON OR PLASTIC GLOVES	
Respiratory Protection (Specific Type) ORGANIC TYPE IN CONFINED AREAS		Ventilation Recommended GENERAL ROOM VENTILATION	
Other Protection: BARRIER SKIN CREAM IF DESIRED			
IX. SPECIAL PRECAUTIONS			
Hygienic Practices In Handling & Storage: STORE IN COOL, DRY PLACE. PROTECT FROM FREEZING. WASH HANDS BEFORE EATING OR SMOKING.			
Precautions For Repair & Maintenance of Contaminated Equipment: SEE SECTION V.			
Other Precautions: NOT RECOMMENDED FOR CONTINUOUS WATER IMMERSION. AVOID INTENSE WATER CONTACT FOR 24 HOURS AFTER APPLICATION.			
KEEP OUT OF REACH OF CHILDREN!!!!			

Material Safety Data Sheet

Date last revised: April, 2001

I. GENERAL INFORMATION		
Chemical Name & Synonyms ACRYLIC LATEX SEALANT	Trade Name & Synonyms AC-20 ACRYLIC LATEX PLUS SILICONE	
Chemical Family ACRYLIC LATEX	Formula MIXTURE	
Proper DOT Shipping CAULKING COMPOUND	DOT Hazard Classification NONE	
Manufacturer PECORA CORPORATION	Manufacturer's Phone Number 215-723-6051	
Manufacturer's Address 165 Wambold Road, Harleysville, PA 19438	Chemtree Phone Number 800-424-9300	
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Extinguishing Media Small Fires: WATER SPRAY, CARBON DIOXIDE, FOAM, DRY CHEMICALS		
Special Fire Fighting Procedures: WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIGHTING FIRES INVOLVING CHEMICALS.		
Unusual Fire & Explosion Hazards: NONE KNOWN		

AC-20 + SILICONE

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ACGIH Threshold Limit Value

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Medical Conditions Aggravated By Exposure: NONE KNOWN			
Primary Route (s) of Entry: SKIN AND INALATION			
Emergency First Aid: SKIN: WASH WITH SOAP AND WATER. INHALATION: MOVE TO FRESH AIR. EYES: FLUSH WITH COPIOUS AMOUNTS OF WATER.			
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Other Precautions: NOT RECOMMENDED FOR CONTINUOUS WATER IMMERSION. AVOID INTENSE WATER CONTACT FOR 24 HOURS AFTER APPLICATION.			
KEEP OUT OF REACH OF CHILDREN!!!!			

M A T E R I A L S A F E T Y D A T A S H E E T

CWC INDUSTRIES, INC. CHEM.DIV.
2686 LISBON ROAD
CLEVELAND, OH 44104

INFORMATION TELEPHONE NO.: 216-721-4747
EMERGENCY TELEPHONE NO.: 800-255-3924

PREPARATION DATE: 05/14/99

REPLACES DATE: 11/06/98

PREPARER: GDL

SECTION I - PRODUCT IDENTIFICATION

C & W SEAL
111395
E7341

SECTION II - HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WT. PERCENT IS LESS THAN	(TLV-TWA)	OCCUPATIONAL EXPOSURE LIMITS (TLV-STEL)	(REL)	VAPOR PRESSURE mmHg 20C	KNOWN OR SUSPECTED CARCINOGEN	SEC 113
1,10-PHENANTHROLINE	66-71-7	0.1%	NO INFO	NO INFO	NO INFO	0.0	NO	NO
N-BUTYL ALCOHOL	71-36-35	0.1%	50 ppm	NO INFO	NO INFO	4.0	NO	YES
2-ETHYLHEXANOIC ACID	149-37-5	0.1%	NO INFO	NO INFO	NO INFO	0.0	NO	NO
CALCIUM NAPHTHENATE	61789-36-4	1.0%	NO INFO	NO INFO	NO INFO	0.0	NO	NO
COBALT NAPHTHENATE	61789-31-3	1.0%	0.05 MG/M3	NO INFO	0.1 MG/M3	2.6	NO	NO
ZIRCONIUM OCTOATE	22464-99-9	1.0%	5 MG/M3	10 MG/M3	NO INFO	0.0	NO	NO
MANGANESE NAPHTHENATE	61788-57-6	0.1%	5 MG/M3	NO INFO	NO INFO	0.0	NO	YES
METHYL ETHYL KETOXIMINE	96-29-7	0.1%	NO INFO	NO INFO	NO INFO	0.0	NO	NO
MINERAL SPIRITS	8032-41-3	65%	100 ppm	100 ppm	NO INFO	2.6	NO	NO

THIS PRODUCT CONTAINS ONE OR MORE MATERIALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION
113 OF THE EMERGENCY PLANNING AND THE COMMUNITY RIGHT-TO-KNOW ACTS OF 1986 AND OF 40 CFR 372.

N.A. - NOT APPLICABLE

SECTION III - PHYSICAL DATA

BOILING RANGE : 315-390 F
ODOR : TYPICAL SOLVENT
APPEARANCE : LT. AMBER LIQUID
VOLATILE BY WEIGHT: 60.5%
VOLATILE BY VOLUME: 66.8%

VAPOR DENSITY : IS HEAVIER THAN AIR
EVAPORATION RATE: IS SLOWER THAN ETHER
SOLUBILITY : NONE
PRODUCT DENSITY : 7.2 LBS./GAL. (U.S.)

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION:

FLASH POINT: 107 F
(TAGLIABUE CLOSED CUP)

LEL: 0.7 %
UEL: 6.0 %

OSHA - COMBUSTIBLE LIQUID - CLASS II
DOT - COMBUSTIBLE LIQUID NA1993

EXTINGUISHING MEDIA: CARBON DIOXIDE DRY CHEMICAL FOAM WATER FOG

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

UNUSUAL FIRE AND EXPLOSION HAZARDS: KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. WATER MAY BE USED TO COOL CLOSED CONTAINERS, NOT INVOLVED IN THE FIRE ITSELF, TO PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTOIGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT. VAPORS CONCENTRATED IN A CONFINED OR POORLY VENTILATED AREA CAN BE IGNITED UPON CONTACT WITH A HIGH ENERGY SPARK, FLAME, OR HIGH INTENSITY SOURCE OF HEAT.

SPECIAL FIREFIGHTING PROCEDURES: TREAT AS CLASS B FIRE. DO NOT USE DIRECT WATER STREAM. PRODUCT MAY FLOAT ON SURFACE. IF IGNITED WILL SPREAD FIRE RAPIDLY. FIRE FIGHTERS SHOULD WEAR NIOSH/OSHA APPROVED PRESSURE DEMAND, SELF CONTAINED BREATHING APPARATUS. WEAR FULL PROTECTIVE CLOTHING. SPILL WILL MAKE SURFACE SLIPPERY - EXERCISE DUE CAUTION. VAPORS ARE VOLATILE AND HEAVIER THAN AIR. THEY WILL TEND TO COLLECT IN LOW LYING AREAS.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVER EXPOSURE: EYES: IRRITANT, DISCOMFORT, BLURRED VISION, BURNING. SKIN: PROLONGED OR REPEATED SKIN CONTACT MAY RESULT IN IRRITATION, SENSITIZATION AND DERMITITIS. INGESTION: MAY CAUSE NAUSEA AND VOMITING. INHALATION OF FUMES MAY RESULT IN DIZZINESS, HEADACHE, BLURRED VISION OR UNCONSCIOUSNESS.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: PRE-EXISTING SENSITIVITY TO SOLVENTS CAN CAUSE A HEIGHTENED REACTION BY EXPOSURE TO THIS PRODUCT. ALLERGY AND SKIN CONDITIONS.

PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION

EMERGENCY AND FIRST AID PROCEDURES: SKIN: WASH THOROUGHLY WITH SOAP AND WATER. EYES: FLUSH WITH LARGE AMOUNTS OF COOL WATER FOR AT LEAST 15 MINUTES - CONSULT A PHYSICIAN. INHALATION: REMOVE TO FRESH AIR, ADMINISTER OXYGEN IF AVAILABLE, TO RESTORE BREATHING. IF SPONTANEOUS VOMITING OCCURS, TAKE STEPS TO PREVENT ASPIRATION INTO THE LUNGS. IF INGESTED, CONTACT NEAREST POISON CONTROL CENTER. DO NOT INDUCE VOMITING.

SECTION VI - REACTIVITY DATA

STABILITY: THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR UNDER NORMAL CONDITIONS.

HAZARDOUS DECOMPOSITION PRODUCTS: COMBUSTION MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE. SMOKE, FUMES.

CONDITIONS TO AVOID: DO NOT STORE OR USE NEAR OPEN FLAMES OR IN AREAS OF HIGH TEMPERATURE.

INCOMPATABILITY: STRONG OXIDANTS, ALKALIS. CHLORINE, HYPOCHLOROUS ACID, SODIUM HYPOCHLORITE.

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SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: IF SPILL ENTERS SEWERS OR WATERWAYS, USE BOOMS (IF AVAILABLE) TO CONTROL DISPERSION. NOTIFY LOCAL FIRE DEPARTMENT AS A SAFETY PRECAUTION. AVOID BREATHING VAPOR, ENSURE ADEQUATE VENTILATION. CONTAIN SPILL, NOTIFY APPROPRIATE COMPANY PERSONNEL. KEEP UNNECESSARY PERSONS OUT OF AREA AND AWAY FROM SPILL.

WASTE DISPOSAL METHOD: CHECK COMPANY'S POLICY ON DISPOSAL. DISPOSAL SHOULD BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: NIOSH/OSHA APPROVED RESPIRATOR TYPES, SUITABLE FOR MATERIALS IN SECTION II RECOMMENDED. APPROVED CHEMICAL/MECHANICAL FILTERS RECOMMENDED WHEN VENTILATION IS RESTRICTED.

VENTILATION: SUFFICIENT VENTILATION, IN VOLUME AND PATTERN, SHOULD BE PROVIDED TO KEEP AIR CONTAMINATION BELOW CURRENT APPLICABLE OSHA PERMISSIBLE EXPOSURE LIMIT OR ACGHI'S TLV LIMIT.

PROTECTIVE GLOVES: USE IMPERMEABLE GLOVES.

EYE PROTECTION: CHEMICAL GOGGLES WITH SIDE SHIELDS OR FACE SHIELD RECOMMENDED.

OTHER PROTECTIVE EQUIPMENT: EYEWASH STATION/SAFETY SHOWER. IMPERVIOUS BOOTS AND APRON TO MINIMIZE SKIN CONTACT. LONG SLEEVE SHIRT.

HYGENIC PRACTICES: REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE. WASH HANDS BEFORE AND AFTER USE.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: READ COMPLETE DIRECTIONS AND PRECAUTIONS BEFORE USE. NO SMOKING SIGNS SHOULD BE POSTED AND ENFORCED. KEEP CONTAINERS CLOSED WHEN NOT IN USE. STORE AWAY FROM EXCESSIVE HEAT. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. DO NOT LET PERSONNEL USE WITHOUT PROPER SAFETY HAZARD TRAINING.

OTHER PRECAUTIONS: ALL CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER OR RETURNED TO A DRUM RECONDITIONER.

SECTION X - HMIS RATINGS

HEALTH: 2

FLAMMABILITY: 2

REACTIVITY: 0

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SECTION XI - STATE REGULATIONS

CALIFORNIA PROPOSITION 65: NOT LISTED

PENNSYLVANIA RIGHT TO KNOW: REQUIRES LISTING-SKE SECTION II HAZARDOUS INGREDIENTS. THE SPECIFIC FORMULATION IS A TRADE SECRET. INFORMATION IS AVAILABLE TO HEALTH PROFESSIONALS AS SPECIFIED IN SECTION 317.3 OF THE PROGRAM.

THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. HOWEVER, SINCE THE CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS, AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY USE OF THIS MATERIAL. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LAWS AND REGULATIONS.

Primary Route of Exposure:	Inhalation
Signs and Symptoms of Exposure:	Eye contact may cause moderate eye irritation, redness, tearing and blurred vision. Prolonged or repeated skin contact may cause irritation, dermatitis and drying of the skin. Inhalation may cause respiratory system irritation and central nervous system depression (Narcosis) characterized by headache, dizziness, muscular weakness and fatigue. May cause unconsciousness if exposure is excessive. Aliphatic Petroleum Distillate LC ₅₀ : 3,400 ppm/4hr, Rat; Aliphatic Petroleum Distillate LD ₅₀ : >8 g/kg, Rat.
Medical Conditions Aggravated by Exposure:	Pre-existing lung, skin or nervous system disorders may be aggravated by exposure to this material.
Chronic Effects:	May cause kidney and liver damage. May cause brain cell and neuromuscular damage based upon animal studies. Prolonged and repeated exposure to crystalline silica

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Carcinogenicity:	containing dust can result in injury to the lungs. This condition is known as silicosis. Silicosis is characterized by shortness of breath, decreased expansion of the chest, dry cough, leading to fatigue, dyspnea, and cyanosis, loss of appetite, pleuritic pain and decreased work capacity. NTP Carcinogen. IARC Class 2A. Carbon Black is an IARC class 2B Carcinogen (Possibly Carcinogenic to Humans: Limited evidence in humans in the absence of sufficient evidence in experimental animals). Crystalline silica is listed by IARC as a Class 1 (<i>carcinogenic to humans</i>) and by NTP as a <i>known to be a human carcinogen</i> .
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SECTION 4: FIRST AID MEASURES

First Aid Procedures:	If this material contacts the eyes, hold eyelids open and flush immediately with a gentle stream of water for at least 15 minutes, preferably at an eyewash fountain. Get medical attention. In case of skin contact, clean with rubbing alcohol first, followed immediately by washing affected area with soap and water. In case of inhalation, remove to fresh uncontaminated air. Administer oxygen if breathing is labored. Give artificial respiration if breathing has stopped. Get medical attention immediately if oxygen or artificial respiration are administered. In case of accidental ingestion, do not induce vomiting. Get medical attention and advise the physician of the nature of the material.
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SECTION 5: FIRE FIGHTING PROCEDURES

Suitable Extinguishing Media:	Carbon Dioxide, dry chemical, alcohol foam or water fog. Do not use a direct stream of water. Product will float and can be reignited on the surface of the water.
Hazardous Combustion Products:	Carbon Dioxide and Carbon Monoxide, Oxides of Nitrogen, Hydrogen Chloride, various Hydrocarbons, Phenols, acrid smoke and irritating fumes.
Recommended Fire Fighting Procedures:	Wear impermeable protective clothing and self-contained breathing apparatus. Toxic fumes and vapors may be evolved.
Unusual Fire and Explosion Hazards:	Heat builds up pressure in closed containers. Cool with water stream.

SECTION 6: PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to Be Taken in Case Material is Released or Spilled:	Remove ignition sources. Absorb on inert material. Use non-sparking tools. Place in secure containers for disposal.
Precautions to Be Taken in Handling and Storing:	Keep away from heat, sparks, and open flames. Keep containers closed. Vapors of this material are heavier than air and will collect in low or confined areas. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations near containers. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground all

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transfer containers and equipment.

SECTION 7: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation:	Use in a well-ventilated location.
Respiratory Protection:	If personal exposure concentrations cannot be maintained below the appropriate exposure limits using engineering controls, a NIOSH approved organic vapor air purifying respirator may be appropriate based on employer-determined exposure levels. Air supplied or SCBA respirators may be required when the measured chemical concentration exceeds the capacity of the air purifying respirator or when personal exposure levels are unknown.
Eye Protection:	Wear safety glasses with side shields or chemical splash goggles when using this product.
Skin Protection:	Wear nitrile or polyvinyl alcohol gloves for direct handling.
Other:	Not required.
Work / Hygienic Practices:	Wash exposed skin prior to eating, drinking and smoking and at the end of each work shift. Wash contaminated clothing prior to reuse.

SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Black viscous liquid with solvent odor.		
Flash Point:	52°F	Lower Explosive Limit:	0.9%
Method Used:	TCC	Upper Explosive Limit:	6.7%
Evaporation Rate:	9.2 (Ethyl Ether=1)	Boiling Point:	240°F
pH (undiluted product):	Unknown	Melting Point:	Unknown
Solubility in Water:	Negligible	Specific Gravity:	1.1 (Water=1)
Vapor Density:	3.8 (Air=1)	Percent Volatile:	0.45
Vapor Pressure:	45 mm Hg @ 78°F		

SECTION 9: STABILITY AND REACTIVITY

Thermal Stability:	Stable
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	Avoid flames, sparks or other sources of ignition. Incompatible with acids, alkalies and strong oxidizing agents.

SECTION 10: TRANSPORTATION

Regulatory Agency:	U.S.A., DOT, IMO
Proper Shipping Name:	Adhesives, 3, UN1133, II
Hazard Classification:	3
Identification Number:	UN1133
Labels Required:	Flammable Liquid
Other Requirements:	49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, pg.

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3174, Flash point 11°C.

SECTION 11: MISCELLANEOUS INFORMATION

Additional Comments:	None
Date of Previous MSDS:	February 21, 2002
Changes Since Previous MSDS:	Carcinogenicity information in section 3; holding company name change.
Telephone Number for Additional Information:	(317) 575-7190

DISCLAIMER

The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information, is accurate, complete or representative. Firestone Building Products Company, a subsidiary of Bridgestone Americas Holding, Inc. assumes no responsibility for injury to the buyer, the buyer's employees, or any third persons, if reasonable safety procedures are not followed. Additionally, Firestone Building Products Company assumes no responsibility for injury to buyer, the buyer's employees, or any third persons caused by abnormal use of this material, even if reasonable safety procedures are followed.

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Hydro-Balance Bubble-Up	Date Prepared	Jan. 23, 2001
Product Number(s): B1, B-24	Replaces	Sep. 02, 1997
Product Use: Leak tracing compound		
Company Name: North American Research Corporation		
P.O. Box 1318		
Lewisville, TX 75067		
Telephone Numbers: (972) 492-1800, (800) 527-7520, Fax (972) 394-6755		
Emergencies: Infotrac (800) 535-5053 (24 hours, everyday)		

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200):

	CAS Registry No.	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
Ethanol	64-17-5	1000 ppm	1000 ppm	None known	< 20
Methanol	67-56-1	200 ppm	200 ppm	250 ppm	< 0.5

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION! May be irritating to the eyes and skin.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: May cause eye irritation.

SKIN CONTACT: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

INHALATION: Not expected to be an inhalation hazard during normal use. Excessive inhalation of vapors may cause, intentional or accidental, may cause dizziness, drowsiness, or disturbance of vision.

INGESTION: May be irritating to the mouth, throat, and stomach.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

May exacerbate existing dermatitis.

CARCINOGENICITY: NTP? No IARC Monographs? No OSHA Regulated? No

SECTION 4 FIRST-AID MEASURES

EYE CONTACT:

Wash eyes immediately with large amounts of water (preferably eye wash fountain), lifting the upper and lower eyelids and rotating eyeball. Continue washing for a minimum of 15 minutes. Get medical attention if irritation persists.

SKIN CONTACT:

Remove contaminated clothing. Wash contact area with soap and water. Get medical attention if irritation develops or persists. Launder clothing before reuse.

INHALATION:

Move person to fresh air. If breathing stops, administer artificial respiration. Get medical attention immediately.

INGESTION:

If patient is fully conscious, give two glasses of water and induce vomiting. Obtain medical attention without delay. If medical advice is delayed and patient has swallowed a large amount, then give 3 to 4 ounces of hard liquor, such as whiskey. For children, give proportionately less liquor, according to weight.

SECTION 5 FIRE-FIGHTING MEASURES

FLASHPOINT: 171°F METHOD: PMCC

FLAMMABLE LIMITS: LEL: Not determined UEL: Not determined

AUTOIGNITION TEMP: Not determined

FIRE EXTINGUISHING MEDIA:

Water spray, CO₂, dry chemical, or any class B extinguishing agent.

SPECIAL INFORMATION:

As in any fire, wear full protective clothing and NIOSH approved, self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Contain liquid to prevent contamination of soil, surface water or ground water. Clean up residual with non-combustible absorbent material and wash with water. Collect material in suitable and properly labeled containers.

SECTION 7 STORAGE AND HANDLING**HANDLING:**

Avoid skin and eye contact. Wash thoroughly after handling, before eating or drinking, and before using the restroom.

STORAGE:

Store in closed, properly labeled, original containers. Do not remove or deface label or tag.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE CONTROLS:**

No special ventilation requirements for normal use.

PERSONAL PROTECTION:

Wear safety glasses with side shields. Wear protective gloves if excessive contact is possible. While spray mist is not expected in normal use, use mask for inhalation protection if spray mist occurs.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Fluorescent yellow, viscous liquid. Alcohol odor.

SPECIFIC GRAVITY: 0.97

VAPOR PRESSURE: Not determined

VAPOR DENSITY: Not determined

SOLUBILITY IN WATER: Complete

pH: 6.5

BOILING POINT: 190°F (Approximate)

FREEZING POINT: 0°F

EVAPORATION RATE (Butyl Acetate = 1): Not determined

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY (Materials to Avoid): None known.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11 TOXICOLOGICAL INFORMATION

No information available.

SECTION 12 ECOLOGICAL INFORMATION

No information available.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 TRANSPORT INFORMATION

U.S. Department of Transportation:

Not regulated.

SECTION 15 REGULATORY INFORMATION

TSCA: All components of this product are listed on the TSCA inventory.

CERCLA: Methanol (67-56-1)

SARA TITLE III:

Section 311/312 Hazard Category: Acute: No Chronic: No Fire: Yes Pressure: No Reactive Hazard: No

Section 313 Reportable Ingredients: Methanol (67-56-1)

SECTION 16 OTHER INFORMATION

NFPA RATING: Health – 1, Flammability – 2, Reactivity – 0

HMIS® RATING: Health – 1, Flammability – 2, Reactivity – 0

HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA). HMIS® materials may be purchased exclusively from Labelmaster, 1-800-621-5808.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of North American Research Corporation. The data on this sheet are related only to the specific material designated herein. North American Research Corporation assumes no legal responsibility for use or reliance upon these data.

MATERIAL SAFETY DATA SHEET

MSDS 0140

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	Metacaulk 950	HMIS CODES	
		Health	1
		Flammability	0
		Reactivity	0
		PPI	B
PRODUCT CODES	66002, 66003, 66005, 66007, 66009		
CHEMICAL FAMILY:	Organic/Inorganic		
USE	Firestopping Sealant		
MANUFACTURER'S NAME	The RectorSeal Corporation	EMERGENCY TELEPHONE NO.	
	2601 Spenwick Drive	Chemtrec 24 Hours	
	Houston, Texas 77055 USA	(800) 424-9300	
DATE OF PREPARATION	August 7, 2002	TECHNICAL SERVICE TELEPHONE NO.	
		(800) 231-3345	

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS
--	1344-09-8	Sodium Silicate	
		ACGIH TLV	N/D ppm
		OSHA PEL	N/D ppm

Section 3 -- HAZARDS IDENTIFICATION

SUMMARY OF ACUTE HAZARDS
May cause skin irritation.

ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS
INHALATION
Not a respiratory irritant.

EYE CONTACT
Contact may cause eye irritation.

SKIN CONTACT
Contact may cause skin irritation.

INGESTION
Possible irritation to mucous membranes of the mouth, throat, and stomach.

SUMMARY OF CHRONIC HAZARDS
None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Persons with pre-existing skin conditions or chemical allergies may be more susceptible to contact effects of the cured elastomer.

Section 4 -- FIRST AID MEASURES

If INHALED: Not a respiratory irritant.

If on SKIN: Wash with soap and water. If irritation occurs, seek medical attention.

If in EYES: Immediately flush with large amounts of water. If irritation occurs, seek medical attention.

If SWALLOWED: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
None	N/D	N/D

EXTINGUISHING MEDIA

Foam, dry chemical, carbon dioxide or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10).

UNUSUAL FIRE AND EXPLOSION HAZARDS: Heat may build up and rupture closed containers.

Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wipe up spills to prevent footing hazard. Avoid flushing into sewers, drains, waterways and soil. Wear protective clothing during clean up.

Section 7 -- HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed and upright when not in use. To prevent freezing and possible rupture of container, do not store below 40 F.

OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues and vapors; treat as if full and observe all product precautions. Do not reuse empty containers. KEEP OUT OF REACH OF CHILDREN.

Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): None required.

VENTILATION - LOCAL EXHAUST: Acceptable

SPECIAL: N/A

MECHANICAL (GENERAL): Preferable

OTHER: N/A

PROTECTIVE GLOVES: Wear rubber gloves.

EYE PROTECTION: Safety glasses (ANSI Z-87.1 or equivalent)

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: 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:	212 F (100 C) @ 760mm Hg
SPECIFIC GRAVITY (H2O = 1):	1.89
VAPOR PRESSURE (mm Hg):	17 @ 68 F (20 C)
MELTING POINT:	N/A
VAPOR DENSITY (AIR = 1):	N/A
EVAPORATION RATE (ETHYL ACETATE = 1):	>1
APPEARANCE/ODOR:	Cream Color/Mild Odor
SOLUBILITY IN WATER:	Soluble

Section 10 -- STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY (MATERIALS TO AVOID): None known.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO2 and fragmented hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur.

=====
Section 11 -- TOXICOLOGY INFORMATION
=====-----
CHRONIC HEALTH HAZARDS

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

TOXICOLOGY DATAIngredient Name

Sodium Silicate

Oral-Rat LD50:1153 mg/kg

Inhalation-Rat:N/D
=====Section 12 -- Ecological Information

ECOLOGICAL DATA

Ingredient Name

Sodium Silicate

Food Chain Concentration Potential N/D

WATERFOWL TOXICITY N/D

BOD N/D

AQUATIC TOXICITY 2320 ppm/96 hr/mosquito fish/TLm
=====Section 13 -- DISPOSAL CONSIDERATIONS

Waste Classification: Non-regulated solid waste

Disposal Method: Approved landfill

Waste from this product is not considered hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

=====

Section 14 -- TRANSPORTATION INFORMATION

DOT: Non-Regulated

OCEAN (IMDG): Non-Regulated

AIR (IATA): Non-Regulated

WHMIS (CANADA): Non-Regulated
=====Section 15 -- REGULATORY INFORMATION

REGULATORY DATA

Ingredient Name

Sodium Silicate

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

MATERIAL SAFETY DATA SHEET

MSDS 0169

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

		HMIS CODES	
PRODUCT NAME	Metacaulk 1000	Health	1
		Flammability	0
		Reactivity	0
		PPI	B
PRODUCT CODES	66302, 66303, 66305, 66307, 66309, 66312		
CHEMICAL FAMILY:	Organic/Inorganic		
USE	Firestopping Sealant		
MANUFACTURER'S NAME	The RectorSeal Corporation	EMERGENCY TELEPHONE NO.	
	2601 Spenwick Drive	Chemtrec 24 Hours	
	Houston, Texas 77055 USA	(800) 424-9300	
DATE OF PREPARATION	August 7, 2002	TECHNICAL SERVICE TELEPHONE NO.	
		(800) 231-3345	

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS
None as defined by OSHA Hazard Communication Standard 29 CFR 1910.1200.			

Section 3 -- HAZARDS IDENTIFICATION

SUMMARY OF ACUTE HAZARDS

May cause skin irritation.

ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS

INHALATION

Not a respiratory irritant.

EYE CONTACT

Contact may cause eye irritation.

SKIN CONTACT

Contact may cause skin irritation.

INGESTION

Possible irritation to mucous membranes of the mouth, throat, and stomach.

SUMMARY OF CHRONIC HAZARDS

None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Persons with pre-existing skin conditions or chemical allergies may be more susceptible to contact effects of the cured elastomer.

Section 4 -- FIRST AID MEASURES

If INHALED:	Not a respiratory irritant.
If on SKIN:	Wash with soap and water. If irritation occurs, seek medical attention.
If in EYES:	Immediately flush with large amounts of water. If irritation occurs, seek medical attention.
If SWALLOWED:	If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
None	N/D	N/D

EXTINGUISHING MEDIA

Foam, dry chemical, carbon dioxide or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10).

UNUSUAL FIRE AND EXPLOSION HAZARDS: Heat may build up and rupture closed containers.

=====
Section 6 -- ACCIDENTAL RELEASE MEASURES
=====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wipe up spills to prevent footing hazard. Avoid flushing into sewers, drains, waterways and soil. Wear protective clothing during clean up.

=====
Section 7 -- HANDLING AND STORAGE
=====

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed and upright when not in use. To prevent freezing and possible rupture of container, do not store below 40 F.

OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues and vapors; treat as if full and observe all product precautions. Do not reuse empty containers. KEEP OUT OF REACH OF CHILDREN.

=====
Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION
=====

RESPIRATORY PROTECTION (SPECIFY TYPE): None required.

VENTILATION - LOCAL EXHAUST: Acceptable

SPECIAL: N/A

MECHANICAL (GENERAL): Preferable

OTHER: N/A

PROTECTIVE GLOVES: Wear rubber gloves.

EYE PROTECTION: Safety glasses (ANSI Z-87.1 or equivalent)

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: 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: 212 F (100 C) @ 760mm Hg

SPECIFIC GRAVITY (H₂O = 1): 1.25

VAPOR PRESSURE (mm Hg): 17 @ 68 F (20 C)

MELTING POINT: N/A

VAPOR DENSITY (AIR = 1): N/A

EVAPORATION RATE (ETHYL ACETATE = 1): >1

APPEARANCE/ODOR: Red Paste/Mild Odor

SOLUBILITY IN WATER: Soluble

=====
Section 10 -- STABILITY AND REACTIVITY
=====

STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY (MATERIALS TO AVOID): None known.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO₂ and fragmented hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur.

=====
Section 11 -- TOXICOLOGY INFORMATION
=====

CHRONIC HEALTH HAZARDSNo ingredients in this product is an IARC, NTP or OSHA listed carcinogen.

TOXICOLOGY DATA

Ingredient Name
-----None
=====Section 12 -- Ecological Information

ECOLOGICAL DATA

Ingredient Name

None

Food Chain Concentration Potential	N/A
WATERFOWL TOXICITY	N/A
BOD	N/A
AQUATIC TOXICITY	N/A

===== Section 13 -- DISPOSAL CONSIDERATIONS -----

Waste Classification: Non-regulated solid waste

Disposal Method: Approved landfill

Waste from this product is not considered hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

===== Section 14 -- TRANSPORTATION INFORMATION -----

DOT:	Non-Regulated
OCEAN (IMDG):	Non-Regulated
AIR (IATA):	Non-Regulated
WHMIS (CANADA):	Non-Regulated

===== Section 15 -- REGULATORY INFORMATION -----

REGULATORY DATA

Ingredient Name

None

SARA 313	N/A
TSCA Inventory	All components listed
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

#5 PASTE FLUX

SECTION 1

IDENTITY OF MATERIAL

Trade Name: OATEY #5 PASTE FLUX
Product Numbers: 30011, 30012, 30013, 30014, 30041, 53017
Formula: N/A
Synonyms: Flux for Copper Pipe
Firm Name & Mailing Address: OATEY CO. 4700 West 160th Street P.O. Box 35906 Cleveland, Ohio 44135, U.S.A. <http://www.oatey.com>
Oatey Phone Number: (216) 267-7100
Emergency Phone Numbers: For Emergency First Aid call 1-303-623-5716 COLLECT. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300

SECTION 2

COMPOSITION

<u>INGREDIENTS:</u>	<u>%:</u>	<u>CAS NUMBER:</u>	<u>ACGIH TLV TWA:</u>	<u>OSHA PEL TWA:</u>
Petrolatum	65 - 77%	8009-03-8	5 mg/m3 (oil mist)	5 mg/m3 (oil mist)
Zinc Chloride	20 - 25%	7646-85-7	1 mg/m3 (fume) 2 mg/m3 STEL	1 mg/m3 (fume)
Ammonium Chloride	1 - 5%	12125-02-9	10 mg/m3 (fume) 20 mg/m3 STEL	None Established

SECTION 3

EMERGENCY OVERVIEW

Yellow paste with a slight odor. Toxic. May cause burns to the eye and skin. Inhalation of fumes may cause respiratory irritation, metal fume fever, chills, nausea and vomiting. Swallowing may cause burns to the mouth or throat, vomiting, diarrhea and kidney or liver disorders. May be fatal. Symptoms may be delayed.
NFPA Hazard Signal: Health: 3 Stability: 1 Flammability: 0 Special: None
HMIS Hazard Signal: Health: 3* Stability: 1 Flammability: 0 Special: None
OSHA Hazard Classification: toxic, target organ effects
Canadian WHIMS Classification: Class E

SECTION 4

EMERGENCY AND FIRST AID PROCEDURES - CALL 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing. Wash thoroughly with soap and water. Call a physician or poison control center if irritation persists.
Eyes: Remove contact lenses if any. Rinse eyes with water for 15 minutes. Get immediate medical attention.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Call a poison control center or physician immediately.
Ingestion: DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

#5 PASTE FLUX

SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method: 540 F / 282 C
Flammability: LEL = N/A, UEL = N/A
Extinguishing: Small Fires: Use dry chemical, CO2, water, or foam extinguisher
Media: Large Fires: Evacuate area and call Fire Department immediately
Special Fire: Firefighters should wear positive pressure self-contained
Fighting: breathing apparatus and full protective clothing for fires in
Procedure: areas where chemicals are used or stored
Unusual Fire and Explosion: None known.
Hazards:
Hazardous: Hydrocarbons, hydrogen chloride, zinc fumes, tin fumes, copper
Decomposition: fumes, ammonia, smoke, carbon monoxide, carbon dioxide and
Products: nitrogen oxides.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Leak: Ventilate area. Stop leak if it can be done without risk. Personnel
cleaning up the spill should wear appropriate personal protective
Procedures: equipment. Take up spill with sand, earth or other absorbent material
and place into a clean, dry leak-proof container.

SECTION 7 HANDLING AND STORAGE

Handling: Do not get in eyes. Do not get on skin or clothing. Do not take
internally. Avoid breathing vapors or fumes. Use only with adequate
ventilation. Wash thoroughly after handling. Keep container closed when
not in use. Handle with care. Keep out of reach of children.
Storage: Store in original, labeled container.
Other: Containers, even empty will retain residue and may be harmful.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Good general ventilation (equivalent to outdoors) should be adequate
for normal use. For operations where the TLV may be exceeded,
mechanical ventilation such as local exhaust may be needed to maintain
exposure levels below applicable limits.
Respiratory Protection: For operations where the TLV may be exceeded, a NIOSH/MSHA approved
particulate respirator or supplied air respirator is recommended.
Equipment selection depends on contaminant type and concentration,
select in accordance with 29 CFR 1910.134 and good industrial hygiene
practice. For firefighting, use self-contained breathing apparatus.
Skin Protection: Wear rubber gloves.
Eye Protection: Safety glasses with sideshields or safety goggles.
Other: Eye wash and safety shower should be available.

#5 PASTE FLUX

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 638 Degrees F / 337 C
Melting Point: N/A
Vapor Pressure: N/A
Vapor Density: (Air = 1) Greater than 1
Volatile Components: 7-10%
Solubility In Water: Negligible
pH: N/A
Specific Gravity: 1.1
Evaporation Rate: N/A
Appearance: Yellow Paste
Odor: Very little odor
Will Dissolve In: Methylene Chloride
Material Is: Paste

SECTION 10

STABILITY AND REACTIVITY

Stability: Stable.
Conditions To Avoid: None.
Hazardous: Hydrocarbons, hydrogen chloride, zinc fumes, tin fumes, copper
Decomposition: fumes, ammonia, smoke, carbon monoxide, carbon dioxide and
Products: nitrogen oxides.
Incompatibility/ Strong oxidizing agents, potassium, cyanides and sulfides.
Materials To Avoid:
Hazardous: Will not occur.
Polymerization:

SECTION 11

DISPOSAL INFORMATION

Waste Disposal: Dispose of in accordance with federal, state, and local regulations.
It is the responsibility of the end-user to determine at the time of disposal of the product.

#5 PASTE FLUX

SECTION 12

TOXICOLOGICAL INFORMATION

Inhalation:	Fumes from heated product may be corrosive to mucous membranes and the respiratory system. Fumes may cause burning sensation, coughing, wheezing, shortness of breath, cyanosis, fever, chills, muscular pain, anemia, metallic taste in the mouth, headache, nausea, vomiting, sweating, diarrhea and pulmonary edema. Fumes may cause stannosis, a mild benign pneumoconiosis. Repeated inhalation of fumes may cause occupational asthma. Symptoms may be delayed.
Skin:	Contact may cause irritation, ulcerations, burns or dermatitis. Symptoms may be delayed.
Eye:	Vapors or fumes may cause redness, pain, blurred vision and corneal damage. Direct contact may cause burns and eye damage with possible blindness. Symptoms may be delayed.
Ingestion:	May cause irritation or burns to the mouth and throat, nausea, vomiting or diarrhea. Death may occur from strictures of the esophagus and pylorus. Symptoms may be delayed.
Toxicity Data:	Petrolatum: No data available Zinc Chloride: Oral rat LD50: 350 mg/kg Ammonium Chloride: Oral rat LD50: 1,650 mg/kg
Sensitization:	None of the components are known to cause sensitization.
Carcinogenicity:	None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA.
Mutagenicity:	None of the components have been found to be mutagenic.
Reproductive Toxicity:	None of the components are known to cause adverse reproductive effects.
Medical Conditions Aggravated By Exposure:	Persons with pre-existing skin, lung, kidney or liver disorders may be at increased risk from exposure to this product.

#5 PASTE FLUX

SECTION 13 TRANSPORTATION INFORMATION

DOT

Proper Shipping Name: Zinc Chloride Mixture
Hazard Class/Packing Group: 8, PG III
UN/NA Number: UN1840
Hazard Labels: Non-Corrosive

IMDG

Proper Shipping Name: Zinc Chloride Mixture
Hazard Class/Packing Group: 8, PG III
UN Number: UN1840
Label: Non-Corrosive

RCRA Hazardous Waste Number: None
EPA Hazardous Waste ID Number: None
EPA Hazard Waste Class: None

SECTION 14

REGULATIONS

Hazard Category for Section Acute Health, Chronic Health
311/312:

Section 302 Extremely This product does not contain chemicals regulated
Hazardous Substances (TPQ): under SARA Section 302.

Section 313 Toxic Chemicals: This product contains the following chemicals
subject to SARA Title III Section 313 Reporting
requirements:

<u>Chemical</u>	<u>CAS #</u>	<u>%</u>
Zinc Chloride	7646-85-7	20-25%

CERCLA 103 Reportable Spills of this product over the RQ (reportable
Quantity: quantity) must be reported to the National Response
Center. The RQ for the product, based on the RQ for
Zinc Chloride (25% maximum) of 1,000 lbs, is 4,000
lbs. Many states have more stringent release
reporting requirements. Report spills required under
federal, state and local regulations.

California Proposition 65: This product does not contain chemicals regulated
under California Proposition 65.

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

SECTION 15 DISCLAIMER

The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.

MATERIAL SAFETY DATA SHEET

MSDS Name: PRO VALUE Acrylic Latex Caulk w/silicone - White 10oz
Version Number 2
Revision Date: OCT-13-2005
Page Number: 1

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: PRO VALUE Acrylic Latex Caulk
w/silicone - White 10oz
HMIS Hazard Rating: Health: 1 Fire: 0 Reactivity: 0 PPE: B

Company Identification: HENKEL CONSUMER ADHESIVES
7405 PRODUCTION DRIVE
MENTOR OH 44060

SECTION II - INGREDIENT AND HAZARD INFORMATION

Hazardous Ingredient Name	CAS Number	Percent	TSCA
---------------------------	------------	---------	------

No OSHA hazardous ingredients known at this time.

SECTION III - PHYSICAL AND CHEMICAL PROPERTIES

Form: High viscosity caulk
Appearance/Color: WHITE
Solubility (in water): yes
pH Value, +/- .3: 8.
Boiling Range: 212.°F (100.°C)
Vapor Pressure (mmHg): 15.@ 68.°F (20.°C)
Evaporation Rate: 0.5 times Slower than n-Butyl Acetate

Vapor Density: Heavier than air

% Volatile, Weight approx. 20.%
% Volatile, Volume approx. 30.%
Specific Gravity: 1.65194
VOC (less H2O or exempt) <20 Gr/L (.7%)

NOTE:

Odor : Mild acrylic odor. **Freeze Point :** 32 Deg F

SECTION IV - FIRE FIGHTING MEASURES (Flash,UEL,LEL for solvent only)

Flammability Class N/A
Flash Point: Not Available
Explosive Range (LEL/UEL): Not Applicable

MATERIAL SAFETY DATA SHEET

MSDS Name: PRO VALUE Acrylic Latex Caulk w/silicone - White 10oz
Version Number 2
Revision Date: OCT-13-2005
Page Number: 2

EXTINGUISHING MEDIA:

Dry chemical -- Carbon Dioxide -- Foam -- Water Fog
Will not burn in wet state.

SPECIAL FIRE-FIGHTING PROCEDURES:

Water may be used to cool and protect exposed containers.
Caution should be taken because uncured material is water soluble.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Any closed container may burst when exposed to extreme heat or fire.

SECTION V - HEALTH HAZARD DATA

ROUTES OF ENTRY:

ENTRY THROUGH...Inhalation and skin most likely

CARCINOGENICITY...

NTP? N/E | IARC Monographs? N/E | OSHA? NO

EFFECTS OF OVEREXPOSURE

Inhalation: May cause nose or throat irritation.
Skin/Eye Contact: May cause irritation.
Ingestion: Swallowing large amounts may cause nausea, vomiting. (an unlikely route of entry)

FIRST AID MEASURES

Inhalation: If affected by inhalation, remove to fresh air.
Eye Contact: Flush with water for at least 15 minutes, and get prompt medical attention.
Skin Contact: Wash skin thoroughly with soap and water.
Ingestion: Drink water, and get medical attention.

N/A= Not applicable N/AV=Not available N/E, N/est=Not established

SECTION VI - STABILITY AND REACTIVITY

Stability: Product is stable under normal storage conditions
Hazardous Polymerization: Will not occur under normal conditions

INCOMPATIBILITY:

None

CONDITIONS TO AVOID:

None

HAZARDOUS DECOMPOSITION PRODUCTS:

May produce oxides of carbon and oxides of nitrogen when burned.

SECTION VII - ACCIDENTAL RELEASE AND DISPOSAL MEASURES:

MATERIAL SAFETY DATA SHEET

MSDS Name: PRO VALUE Acrylic Latex Caulk w/silicone - White 10oz
Version Number 2
Revision Date: OCT-13-2005
Page Number: 3

STEPS TO BE TAKEN IN CASE OF SPILL:

Wear appropriate protective clothing. Add dry absorbent and shovel or sweep up. Place in an appropriate container and seal.

WASTE DISPOSAL METHOD:

Dispose of in accordance with Federal, State, and Local regulations.

- - - - -
SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
-----------	-------------	------------	-----------	----------

RESPIRATORY PROTECTION:

NIOSH respirators recommended if vapors and mists are generated.

VENTILATION:

Local exhaust is recommended for safe practice.

PROTECTIVE CLOTHING:

Gloves and clothing should be worn to prevent repeated skin contact.

EYE PROTECTION:

Eye protection should be worn.

HANDLING AND STORAGE PRECAUTIONS:

Keep from freezing. Keep away from heat.

Keep containers closed when not in use.

Avoid prolonged or repeated contact with skin.

Keep out of the reach of children.

- - - - -
SECTION IX - TRANSPORT INFORMATION: (not all sizes available)

GROUND TRANSPORT (DOT) - DOMESTIC

Caulking compound, Non Regulated

AIR TRANSPORT (DOT) - DOMESTIC

Caulking compound, Non Regulated

AIR TRANSPORT (IATA) - INTERNATIONAL

Caulking compound, Non Regulated

MARINE - OCEAN TRANSPORT (IMDG)

Caulking compound, Non Regulated

- - - - -
SECTION X - REGULATORY INFORMATION:

All chemical substances are TSCA listed.

California PROP.65 Chemicals: none known

MATERIAL SAFETY DATA SHEET

MSDS Name: PRO VALUE Acrylic Latex Caulk w/silicone - White 10oz
Version Number 2
Revision Date: OCT-13-2005
Page Number: 4

DISCLAIMER:

The information contained herein is based on data available as of the date of preparation of this MSDS and which we believe to be reliable. However, no warranty is expressed or implied regarding the accuracy of the data. We shall not be responsible for the use of this information, or of any product, method, apparatus mentioned, and user must make his own investigation to determine the suitability of the information or products for his particular purpose, for the protection of the environment, and the health & safety of the users of this material.

Material Safety Data Sheet

Accumetric LLC
350 Ring Road
Elizabethtown, KY 42701
(800) 928-2677

BOSS® 370 RTV Silicone Sealant

CHEMICAL NAME: RTV SILICONE ADHESIVE SEALANT
CUSTOMER NAME: BOSS® 370 HVAC/R RTV SILICONE SEALANT

CHEMICAL FAMILY: SILICONE
FORMULA: MIXTURE

HAZARD CLASS: U.N. NUMBER: PACKING GROUP:

HAZARDOUS INGREDIENTS

NAME: METHYLTRIACTOXYLSILANE
CAS NUMBER: 004153343 PERCENT BY WEIGHT: 2.00%
ACGIH TLV: NONE ESTABLISHED
OSHA PEL: NONE ESTABLISHED
OSHA STEL: NONE ESTABLISHED

NAME: ETHYLTRIACTOXYLSILANE
CAS NUMBER: 017689779 PERCENT BY WEIGHT: 2.00%
ACGIH TLV: NONE ESTABLISHED
OSHA PEL: NONE ESTABLISHED
OSHA STEL: NONE ESTABLISHED

NAME: SILICA
CAS NUMBER: 007631869 PERCENT BY WEIGHT: 10.00%
ACGIH TLV: 10 MG/M3
OSHA PEL: NONE ESTABLISHED
OSHA STEL: NONE ESTABLISHED

NON-HAZARDOUS INGREDIENT: POLYDIMETHYLSILOXANE

PHYSICAL PROPERTIES

BOILING POINT: N/A
VAPOR PRESSURE (MM HG): <5 MM
VAPOR DENSITY (AIR=1): N/A
SOLUBILITY IN WATER: <0.1%
APPEARANCE AND ODOR: ACETIC ACID-LIKE PASTE
SPECIFIC GRAVITY (H2O=1): 1.04
MELTING POINT: N/A
VOC CONTENT: 32 GRAMS/LITER
EVAPORATION RATE (ETHER 1): <1

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT & METHOD: 212 DEG F/100 DEG C OPEN CUP
FLAMMABLE LIMITS: NOT DETERMINED
LEL%: N/D
UEL%: N/
EXTINGUISHING MEDIA: WATER, WATER FOG, CO2, DRY CHEMICAL, FOAM
SPECIAL FIRE FIGHTING PROCEDURES:
SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD
BE WORN IN FIGHTING FIRES INVOLVING CHEMICALS.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
NONE KNOWN.

REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID: AIR OR MOISTURE CAUSES POLYMERIZATION AND
ACETIC ACID VAPORS ARE FORMED.
INCOMPATIBILITY: OXIDIZING MATERIAL CAN CAUSE A REACTION.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
SILICON DIOXIDE, CARBON DIOXIDE, AND TRACES OF INCOMPLETELY BURNED
CARBON PRODUCTS.
HAZARD POLYMERIZATION: WILL NOT OCCUR
CONDITIONS TO AVOID: NONE

HEALTH HAZARD DATA

ROUTES OF ENTRY:
INHALATION: YES SKIN: YES INGESTION: YES
HEALTH HAZARDS: NONE KNOWN

CARCINOGENICITY: NTP: NO IARC MONOGRAPHS: NO
OSHA REGULATED: NO
SIGNS AND SYMPTOMS OF EXPOSURE:
INGESTION: MAY CAUSE STOMACH DISCOMFORT
SKIN CONTACT: UNCURED PRODUCT MAY IRRITATE LIPS, GUMS, TONGUE, AND SKIN.

EYE CONTACT: UNCURED PRODUCT CONTACT IRRITATE EYES.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE KNOWN
EMERGENCY AND FIRST AID PROCEDURES:
EYES: FLUSH WITH WATER FOR 15 MINUTES. OBTAIN MEDICAL ATTENTION
SKIN: WIPE OFF AND FLUSH WITH WATER
INHALATION: REMOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION
ORAL: OBTAIN MEDICAL ATTENTION

Comments:

When heated to temperatures above 150°C (300°F) in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate eyes, nose and throat. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA permissible exposure limit for formaldehyde.

PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: REMOVE PRODUCT AND USE ABSORBENT MATERIAL TO TAKE CARE OF ANY OIL-LIKE RESIDUES.

WASTE DISPOSAL METHOD:

REVIEW ALL LOCAL, STATE, AND FEDERAL REGULATIONS CONCERNING HEALTH AND POLLUTION TO DETERMINE APPROVED DISPOSAL METHOD.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORE BELOW 90 DEG. F. USE REASONABLE CARE AND CAUTION.

OTHER PRECAUTIONS:

NONE KNOWN

CONTROL MEASURES

RESPIRATORY PROTECTION:

ACID GAS/ORGANIC VAPOR TYPE

VENTILATION:

LOCAL EXHAUST: NONE ESTABLISHED

MECHANICAL: NONE

SPECIAL: N/A

OTHER: N/A

PROTECTIVE GLOVES: USE CHEMICAL WORKERS GLOVES.

EYE PROTECTION: USE PROPER EYE PROTECTION, SAFETY GLASSES AS MINIMUM.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

NONE

WORK PRACTICES:

GROSS AMOUNTS OF MATERIAL SHOULD BE REMOVED FROM THE SKIN AS SOON AS PRACTICAL, ESPECIALLY BEFORE EATING OR SMOKING.

DATE PREPARED: December 5, 2002

REVISION DATE: August 12, 2003