Material Safety Data Sheet

SURE-SEAL HP-250 PRIMER **MSDS No. 302070**

Date of Preparation:05/31/05 Revision: 007

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: SURE-SEAL HP-250 PRIMER
Chemical Formula: Mixture
General Use: Primer for EPDM Membrane
Manufacturer: Carlisle SynTec Incorporated, 1285 Ritner Highway, Carlisle, PA, 17013, Phone: 800-479-6832,
24-Hour Emergency Phone Number: CHEMTREC (USA): 800-424-9300

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt *or* % vol
Toluene	108-88-3	75-85
Heptane	142-82-5	4-8
Hydrocarbon Tackifying Resin	68131-87-3	>3

Hazardous Ingredients:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Toluene	200 ppm	150 ppm	50 ppm	None estab.	100 ppm	150 ppm	500 ppm
Heptane	500 ppm	None estab.	400 ppm	500 ppm	85 ppm	None estab.	750 ppm

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance/Odor: Thin, green liquid with hydrocarbon odor.

WARNING: Flammable

HMIS	
H	1
F	4
R	0
PPE†	

†Sec. 8

Potential Health Effects

Primary Entry Routes: Eye contact, ingestion, inhalation, skin absorption, skin contact.
Target Organs: Kidney and liver.
Acute Effects
Inhalation: May cause nose and/or throat irritation on short-term exposure to vapor. Aspiration into lungs can cause chemical pneumonitis, which can be fatal. Overexposure may result in headache, dizziness, fatigue, nausea and loss of consciousness.
Eye: May cause eye irritation on short-term exposure to liquid or vapor.
Skin: May cause skin irritation on short-term exposure to liquid or vapor. Solvents may be absorbed through the skin in toxic amounts.
Ingestion: May cause irritation of gastrointestinal tract.
Carcinogenicity: IARC, NTP, and OSHA do not list this product as a carcinogen.
Medical Conditions Aggravated by Long-Term Exposure: May cause more significant skin irritation in people with pre-existing skin conditions. Respiratory symptoms associated with pre-existing lung disorders and pre-existing heart disorders may be aggravated by exposure to this material.
Chronic Effects: Chronic exposure may cause reversible kidney and liver injury. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Repeated exposure to Toluene has been associated with high frequency hearing loss based on animal tests.

Section 4 - First Aid Measures

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention immediately.
Eye Contact: Immediately flush eyes with running water for at least 15 minutes. Get medical attention.
Skin Contact: Immediately flush skin with running water and remove contaminated clothing. Wash exposed area with soap and water. Get medical attention.
Ingestion: DO NOT induce vomiting. Get medical attention immediately.

Note to Physicians: This material contains Toluene and Heptane.
Special Precautions/Procedures: Whenever possible, remove the worker from the source of contamination.

Section 5 - Fire-Fighting Measures

Flash Point: 4.40°C (40°F)
Flash Point Method: C.C.
Autoignition Temperature: 536°C (997°F)
LEL: 1.3% v/v
UEL: 7.0% v/v

NFPA

Flammability Classification: Ignition can occur when this product is exposed to heat, Division 2 sparks, or flame.
Extinguishing Media: In case of fire, use dry chemical, carbon dioxide, or foam. Water may not be effective as an extinguishing agent. Water fog or spray may be used to provide a smothering effect on fire and to cool fire-exposed containers and surrounding combustibles. Do not use a solid stream of water because it can scatter and spread the fire.
Unusual Fire or Explosion Hazards: Extremely flammable. Store and use away from all sources of heat, flame, or sparks. Do not smoke while applying. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point and flash back. All containers should be grounded when material is transferred.
Hazardous Combustion Products: Toxic gases or vapors, such as carbon monoxide or carbon dioxide, may be released in a fire.
Fire-Fighting Instructions: This product contains solvents that are dangerous fire and explosion hazards when exposed to heat or flame.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) and full protective clothing along with a full face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.
Spill /Leak Procedures: Remove all sources of ignition. Avoid breathing vapors. Use self-contained breathing apparatus in enclosed area. Ventilate area. Contain and remove with inert absorbent materials and non-sparking tools. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Use away from all sources of heat, flame, or sparks. Do not smoke while using. Handling equipment must be grounded to prevent sparking. Handle with non-sparking tools. Wash with soap and water before eating or drinking. Launder contaminated clothing. KEEP OUT OF REACH OF CHILDREN.
Storage Requirements: Keep containers cool, dry, and store away from all sources of heat, flame, and sparks. Keep containers tightly closed and store with adequate ventilation. Do not pressurize, cut, weld, or grind the containers or empty containers, which may contain residual product and solvent vapors that may ignite explosively.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Do not use in enclosed areas without proper explosion-proof ventilation. General and local exhaust ventilation must be sufficient to control vapor concentrations and keep the vapor concentration below 100 ppm.
Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
Respiratory Protection: A NIOSH approved respirator must be used if vapor concentration is 100 ppm or above.
Protective Clothing/Equipment: Hycron7, Neoprene, Nitrile, or equivalent solvent permeation resistant gloves required. Protective glasses or goggles recommended. Industrial boots to protect feet from cleaner contact. Impervious clothing is recommended to protect skin from cleaner contact. Protective skin creams or emollients useful.
Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance and Odor: Thin green liquid with hydrocarbon odor
Odor Threshold: Not available
Vapor Pressure: 36.7 mm Hg at 30°C
Vapor Density (Air=1): 3.14
Specific Gravity (H_2O=1, at 4 °C): 0.89
pH: Not available.

Water Solubility: Negligible
Boiling Point: 110.4°C
Freezing/Melting Point: -95.0°C
% Volatile by Weight: 80-90
Evaporation Rate (nBuAc=1): 2.1

Section 10 - Stability and Reactivity

Stability: Stable under normal conditions.
Polymerization: Will not occur.
Chemical Incompatibilities: Strong oxidizing agents, acids, bases, amines.
Conditions to Avoid: Heat, sparks, and flames; ignition sources.
Hazardous Decomposition Products: Toxic gases or vapors, such as carbon monoxide or carbon dioxide may be released in a fire.

Section 11- Toxicological Information

Toxicity Data:

This product has not been tested. No data available.

Section 12 - Ecological Information

Ecotoxicity: No data available
Environmental Fate: No data available
Environmental Degradation: No data available
Soil Absorption/Mobility: No data available

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Adhesives, 3
Shipping Symbols: Flammable
Hazard Class: 3
ID No.: UN 1133
Packing Group: II
Label: Red caution label required.
Special Provisions (172.102): 139, B52, IB2, T4, TP1, TP8

Packaging Authorizations
a) Exceptions: 173.150
b) Non-bulk Packaging: 173.173
c) Bulk Packaging: 173.242

Quantity Limitations
a) Passenger, Aircraft, or Railcar: 5 L
b) Cargo Aircraft Only: 60 L

Vessel Stowage Requirements
a) Vessel Stowage: B
b) Other: --

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number (40 CFR 261.33): Toluene, CAS #108-88-3, RCRA Code U220

RCRA Hazardous Waste Classification (40 CFR 261.31): Not classified

CERCLA Hazardous Substance (40 CFR 302.4): Toluene, CAS #108-88-3, RQ 1000 lb

CERCLA Reportable Quantity (RQ): Materials with a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 313 Components (40 CFR 372.65): Toluene, CAS #108-88-3, 75-85%

SARA Toxic Release Chemicals: Toluene, CAS #108-88-3, Concentration: 1.0%, Reporting Threshold: Standard

OSHA Regulations:

Clean Water Act Hazardous Substances: Toluene, CAS #108-88-3, RQ 1000 lb

Clean Air Act SOCMI Chemicals: Toluene, CAS #108-88-3

Clean Air Act Hazardous Air Pollutants: Toluene, CAS #108-88-3, HAP Code XOV

OSHA, IARC, NTP Carcinogens: None listed.

State Regulations:

California Proposition 65 Chemicals: Toluene, CAS #108-88-3, Code D

Delaware Air Quality Management List: Toluene, CAS #108-88-3, DRQ: 1000, State: Y

Florida Toxic Substances List:
Heptane, CAS #142-82-5
Toluene, CAS #108-88-3

Massachusetts Hazardous Substances List:
Heptane, CAS #142-82-5, Codes: 2, 4, 5, 6
Toluene, CAS #108-88-3, Codes: 2, 4, 5, 6, F7, F8, F9

Michigan Critical Materials Register:
Toluene, CAS #108-88-3, Report Code: --, Class: --

Minnesota Hazardous Substances List:
Heptane, CAS #142-82-5, Codes: ANO, Hazards: --, Carcinogen: No
Toluene, CAS #108-88-3, Codes: ANO, Hazards: Skin, Carcinogen: No

New Jersey RTK Hazardous Substance List:
Toluene, CAS #108-88-3, Substance #: 1866, DOT #: 1294

New York List of Hazardous Substances:
Toluene, CAS #108-88-3, RQ-Air: 1000, RQ-Land: 1, Notes: None

Pennsylvania Hazardous Substances List:
Heptane, CAS #142-82-5, Code: -- (Basic Hazard)
Toluene, CAS #108-88-3, Code: E (Environmental Hazard)

Washington Permissible Exposure Limits for Air Contaminants:

Chemical Name	CAS #	TWA (ppm)	TWA (mg)	STEL (ppm)	STEL (mg)	Ceiling (ppm)	Ceiling (mg)	Skin
Heptane	142-82-5	400	1600	500	2000	--	--	--
Toluene	108-88-3	100	375	150	560	--	--	--

Section 16 - Other Information

Prepared By: Research & Development
Revision Notes: Converted to new 16-Part format.

Additional Hazard Rating Systems:

Disclaimer: The information contained in this document is based upon data that was supplied to Carlisle by other companies and organizations. No warranty of merchantability or fitness for a particular purpose is expressed or implied regarding the accuracy or completeness of the data and/or information in this material safety data sheet.

ATTN: Lou

MATERIAL SAFETY DATA SHEET

Business Hours: 8:00 a.m - 5:00 p.m. CARLISLE SYNTEC INCORPORATED For Transportation Emergencies Call
Emergency Telephone Number:717/245-7000 1285 RITNER HIGHWAY Chemtrec: 800/424-9300
P.O. BOX 7000
CARLISLE, PA. 17013

MSDS Date: 09/01/04 MSDS Rev # 015 Supercedes All Previous Publications

SECTION I

PRODUCT NAME AND SYNONYMS: **SURE-SEAL® 90-8-30A BONDING ADHESIVE**

CHEMICAL FAMILY: Polychloroprene Adhesive
PRODUCT USE: Contact Bonding Adhesive
FORMULA: Mixture

SECTION II(A) HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	%	PEL (ppm) TWA	PEL (ppm) STEL	PEL (ppm) CEILING	SKIN DESIGNATION	LD_{50} OF INGREDIENT (SPECIFY SPECIES & ROUTE) (mg/kg)	LC_{50} OF INGREDIENT (SPECIFY SPECIES) (ppm/4H)
Acetone	67-64-1	9.0-10.0	750	1000	None	N/A	orl-mus: 3,000	rat: 1,600 LCLo
Heptane	142-82-5	27.9-30.9	400	500	None	N/A	ivn-mus: 222	hmn: TCLo:1000/6M
Toluene	108-88-3	37.1-41.1	100*	150	200	N/A	orl-rat: 5,000	mus: 7,528
Xylene	1330-20-7	1.6-1.8	100	150	200	N/A	orl-rat: 4,300	rat: 5,000
Magnesium Oxide	1309-48-4	0.7	10mg/m³ (as dust)			N/A	itr-ham: 480mg/kg/ 30W: TDLo	hmn: 400mg/kg TCLo

* Skin 50 ppm

N/A = Not Applicable W = Weeks H = Hours M = Minutes

SECTION II(B) ADDITIONAL INGREDIENTS (>3%)

Ingredients: Polychloroprene - CAS # 9010-98-4
Phenolic Resin - CAS # 26022-00-4

SECTION III PHYSICAL DATA

Physical State	Odor And Appearance	VOC (grams/liter)	Odor Threshold (ppm)	Vapor Pressure (mm Hg)
Liquid	Yellowish liquid with strong hydrocarbon odor.	660	Not Available	6.7-400

Vapor Density (AIR=1)	Evaporation Rate (nBuAc=1)	Boiling Point (°C)	Freezing Point (°C)	pH
2.0 - 3.7	0.6 - 8.3	56°C - 139°C	-48°C	Not Applicable

Specific Gravity	Coeff Water/Oil Dist	Solubility In Water	Volatiles By Wt (%)	Corrosivity
0.85	Not Available	Negligible	78.3-81.3	N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability: Yes X No - **If Yes, Under Which Conditions?** Ignition can occur when this product is exposed to heat, sparks, or flame.
Division 2

Flashpoint (°C) And Method	Autoignition Temp (°C)	Lower Flammable Limit (% By Vol)	Upper Flammable Limit (% By Vol)
-20 (-4°F) Closed Cup	223 (433.4°F)	1.1	12.8

Hazardous Combustion Products: Toxic gases or vapors, such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released in a fire.

EXPLOSION DATA:

Sensitivity To Impact: There is no evidence to show that this product is sensitive to physical shock.

Sensitivity To Static Discharge: As with most hydrocarbon solvents, vapors may ignite when exposed to static discharge.

Extinguishing Media: In case of fire, use dry chemical, carbon dioxide, or foam. Water may not be effective as an extinguishing agent. Water fog or spray may be used to provide a smothering effect on fire and to cool fire-exposed containers and surrounding combustibles. Do not use a solid stream of water because it can scatter and spread the fire.

Special Fire Fighting Procedures: This product contains solvents that are dangerous fire and explosion hazards when exposed to heat or flame. Fire fighters should wear self-contained breathing apparatus and full protective clothing with a full face piece operated in the positive pressure demand mode.

Unusual Fire And Explosion Hazards: Extremely flammable. Store and use away from all sources of heat, flame, or sparks. Do not smoke while applying. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at location distant from material handling point and flash back. All containers should be grounded when material is transferred.

SECTION V - REACTIVITY DATA

Chemical Stability: Stable **Hazardous Polymerization:** Will not occur.

Conditions To Avoid: Heat, sparks, and flames; ignition sources.

Incompatibility (Materials To Avoid) Strong oxidizing agents, acids, bases.

Hazardous Decomposition Products: Toxic gases or vapors such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released in a fire.

SECTION VI - TOXICOLOGICAL PROPERTIES

Route Of Entry: Skin Contact X Skin Absorption X Eye Contact X Inhalation X Ingestion X

Effects Of Acute Exposure To Product: Skin, eye, nose and throat irritation on short term exposure to liquid or vapor. Overexposure may result in headache, dizziness, fatigue, nausea, possible unconsciousness, even asphyxiation. Solvents may be absorbed through the skin in toxic amounts. Ingestion can cause gastrointestinal irritation. Aspiration into lungs can cause chemical pneumonitis which can be fatal.

Effects Of Chronic Exposure: Moderate irritation of skin, eyes, and mucous membranes of upper respiratory tract on prolonged/repeated contact. Dermatitis and defatting of the skin. Chronic exposure may cause reversible liver and kidney injury. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Repeated exposure to Toluene has been associated with high frequency hearing loss based on animal tests.

Exposure Limits	Irritancy Of Product	Sensitizations To Product	Carcinogenicity
OSHA PEL-TWA Toluene 100 ppm	Skin, eye, nose, and throat irritation at or above PEL of 100 ppm.	May cause skin sensitization in some people.	No evidence

Teratogenicity	Reproductive Toxicity	Mutagencity	Synergistic Products	Tumorigenicity
Some evidence in animal exposure to Toluene.	Some evidence in animal exposure to Toluene.	Some evidence in animal exposure to Toluene.	None known	No evidence

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

Gloves: Hycron or permeation resistant gloves recommended.

Respirator: A NIOSH approved respirator must be used if vapor concentration is 100 ppm or above.

Eye: Glasses or goggles recommended.

Footwear: Industrial shoes to protect feet from adhesive contact.

Clothing: Long sleeves, long trousers to protect skin from adhesive contact.

Other: Protective skin creams or emollients useful.

Engineering Controls (EG., Ventilation, Enclosed Process): Do not use in enclosed areas without proper explosion-proof ventilation. General and local exhaust ventilation must be sufficient to control vapor concentrations and keep the PEL below 100 ppm.

Leak Or Spill Procedure: Remove all sources of ignition. Avoid breathing vapors. Use self-contained breathing apparatus in enclosed area. Ventilate area. Contain and remove with inert absorbent materials and non-sparking tools.

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

Handling Procedures And Equipment: Use away from all sources of heat, flame, or sparks. Do not smoke while using. Handling equipment must be grounded to prevent sparking. Handle with non-sparking tools. Wash with soap and water before eating or drinking. Launder contaminated clothing. KEEP OUT OF REACH OF CHILDREN.

Storage Requirements: Keep containers cool, dry, and store away from all sources of heat, flame, and sparks, Keep containers tightly closed and store with adequate ventilation. Do not pressurize, cut, weld, or grind the containers or empty containers which may contain residual product and solvent vapors that may ignite explosively.

Special Shipping Information: A red Flammable Liquid label is required. DOT Classification: Adhesives, 3, UN 1133, PGII.

SECTION VIII - FIRST AID MEASURES

Specific Measures: Whenever possible, remove the worker from the source of contamination.

Eye Contact - Immediately flush eyes with running water for at least 15 minutes. Get medical attention.

Skin Contact - Immediately flush skin with running water and remove contaminated clothing. Wash exposed area with soap and water. Get medical attention.

Inhalation - Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention immediately.

Ingestion - Do not induce vomiting. Get medical attention immediately.

Respiratory symptoms associated with pre-existing lung disorders, skin allergies, and pre-existing heart disorders may be aggravated by exposure to this material.

SECTION IX - ADDITIONAL REGULATORY INFORMATION

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning And Community Right-To-Know Act of 1986 and of 40 CFR 372:

TOLUENE, CAS# 108-88-3, 37.1-41.1%
XYLENE, CAS# 1330-20-7, 1.6-1.8%
ACETONE, CAS# 67-64-1, 9.0-10.0%

California Proposition 65

This product contains the following chemical(s) known to the state of California to cause birth defects or other reproductive harm: TOLUENE

SECTION X - PREPARATION INFORMATION

Prepared By: Research and Development