



MATERIAL SAFETY DATA SHEET

HMIS

H = 2

F = 2

R = 0

PPE = See Section 8

VOC: 250 grams per liter or less

Section I

Manufacturer: Siplast, an Icopal Group Company
 (800) 643-1591 or (800) 922-8800

Address: 1000 E. Rochelle Blvd., Irving, TX 75062-3940

Emergency Phone No.: CHEMTREC, (800) 424-9300 (U.S.), (703) 527-3887 (outside of U.S.)

Product Class: Petroleum Hydrocarbon Adhesive

Trade Name: PA-311 LS

Section II - Ingredients

Ingredient	Percent	OSHA PEL TWA	ACGIH TLV TWA
Asphalt, Oxidized CAS #64742-93-4	50 - 70	5 mg/m ³	0.5 mg/m ³
Asphalt Fumes CAS #8052-42-4	<1	5 mg/m ³	0.5 mg/m ³
Limestone CAS #1317-65-3	5 - 15	15 mg/m ³	10 mg/m ³
Cellulose CAS #9004-34-6	<5	10 mg/m ³	15 mg/m ³
Fullers Earth CAS #8031-18-3	<5	No Data	5 mg/m ³
Emulsifiers CAS #61789-77-3	<1	No Data	No Data
Light Aromatic Solvent CAS # 64742-95-6	10-30	No Data	No Data
1,2,4-Trimethyl benzene CAS #95-63-6	5-8	No Data	25 ppm
Xylene CAS #1330-20-7	<1	100 ppm	100 ppm

Section III - Physical Data

Appearance & Odor: Black asphalt mastic, hydrocarbon solvent odor.

Vapor Pressure: 2.09 mmHg@68°F

Vapor Density (Air = 1): 4+

Specific Gravity (H₂O=1, at 4°C): 0.9 - 1.0

Solubility in H₂O: Negligible

Solvent Boiling Point: 300 - 350°F

Evaporation Rate: (Butyl Acetate = 1) 0.30

% Volatile: 25% vol.

VOC lb/gal: 1.90

Section IV - Fire and Explosion Data

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description information.

DOT Shipping Name: Tars, Liquid

DOT Hazard Class: 3

DOT Category: UN1999

DOT Packing Group: III

Hazardous Label: Flammable Liquid

Flash Point: 108°F

Flash Point Method: PMCC

Autoignition Temperature: No Data

LEL %: 0.5 UEL %: 6.0

Flammability Classification: Class II Combustible Liquid

Extinguishing Media: Extinguish with dry chemical, CO₂, foam, and water fog. Solid streams of water may be ineffective. Cool affected containers with flooding quantities of water. Apply water from as great a distance as possible. Water or foam may cause frothing. Keep run-off water out of sewers and water sources. Minimize breathing of gases, vapor, fumes, or decomposition products. Use self-contained breathing apparatus for enclosed or confined spaces or as otherwise needed.

Unusual Fire or Explosion Hazards: Flammable - Do not store near strong oxidants or open flame. Smoke from fire may be hazardous.

Hazardous Combustion Products: Under fire conditions - May form toxic materials: carbon dioxide and monoxide, oxides of sulfur, H₂S, and other decomposition products, in the case of incomplete combustion.

Fire-Fighting Instructions:

Special Fire-Fighting Procedures: Use air supplied rescue equipment. Cool exposed containers with water.

Section V - Health Hazard Data

WARNING! Flammable liquid and vapor. Keep away from heat, sparks, and flame. Keep container closed when not in use. Use only with adequate ventilation. May cause skin irritation, wash thoroughly after handling.

Primary Entry Routes: Inhalation of fumes, skin contact, eye contact.

Target Organs: Eyes, skin, respiratory system, central nervous system, and kidneys.

Effects of Overexposure:

SKIN: Irritation and dermatitis.

EYES: Exposure to the mists, vapors, or fumes may cause irritation.

INHALATION: Breathing of the mists, vapors, or fumes may cause irritation of respiratory tract, dizziness, headaches, and nausea.

INGESTION: May cause gastrointestinal disturbances, irritation, nausea, vomiting, and diarrhea.

Chronic Effects: Absorption from prolonged or repeated skin contact may cause systemic toxicity.

Carcinogenicity: There is inadequate evidence that bitumens alone are carcinogenic to humans. There is sufficient evidence for the carcinogenicity of extracts of steam-refined bitumens, air-refined bitumens, and pooled mixtures of steam- and air-refined bitumens in experimental animals. There is inadequate evidence for the carcinogenicity of undiluted air-refined bitumens in experimental animals. There is limited evidence for the carcinogenicity of undiluted steam-refined bitumens and for cracking-residue bitumens in experimental animals. (bitumens) IARC-3

Emergency and First Aid Procedures:

SKIN: DO NOT try to dissolve with solvents or thinners, wash with soap and water.

EYES: Flush with large amounts of water for at least 15 minutes. Seek Medical Attention.

INHALATION: Move to fresh air. Use artificial respiration if necessary. Seek Medical Attention.

INGESTION: **Do Not Induce Vomiting**, because of danger of aspiration into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration into lungs and monitor fore breathing difficulty. **Seek Medical Attention.**

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section VI - Reactivity Data

Stability: Stable X Unstable _____

Conditions to Avoid: Do not store near open flames.

Chemical Incompatibilities: Do not store near strong oxidants.

Hazardous Decomposition Products: Under fire conditions - May form toxic materials: carbon dioxide and monoxide, oxides of sulfur, H₂S, and other decomposition products, in the case of incomplete combustion.

Hazardous Polymerization:

May occur _____ Will not occur X

Section VII - Spill or Leak Procedures

Steps to be Taken: Shut off sources of ignition. Shut off leak, if possible without risk.

Small Spills: Allow material to cool, and then scrape up material for disposal.

Large Spills: Dike ahead of spill to contain, and then take up with sand or other non-combustible, absorbent material. Dispose in accordance with local, state, and federal regulations.

Waste Disposal Method: Local, state, and federal disposal regulations must be followed.

Container Cleaning and Disposal: "Empty" Container Warning: "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section VIII - Special Protection Information

Engineering Controls:

Ventilation: General mechanical with local exhaust; sufficient to maintain exposure levels below recommended ACGIH TLVs and OSHA PELs.

Protection Clothing/Equipment:

Gloves: Use chemical resistant gloves to avoid prolonged or repeated skin contact.

Goggles: Chemical-type goggles or face shield.

Respiratory: Self-contained, positive-pressure breathing apparatus when used in confined or enclosed space or when exposure limits are exceeded or hydrogen sulfide is unknown or exceeds 20 ppm. Organic vapor respirators can be used with good ventilation when organic vapors are less than 1000 ppm or ten (100) times permissible exposure limit, whichever is less. For emergency or non-routine operations (cleaning spills or storage tanks), wear a SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.*

If respirators are used, OSHA requires a written respiratory protection program that includes: procedures for selecting respirators, medical evaluations, fit testing, use in routine and emergency situations, cleaning, disinfecting, storing, inspecting and maintaining respirators, breathing air quality, quantity and flow, training in respiratory hazards, and evaluation of effectiveness of respiratory program.

Contaminated Clothing: Launder or dry clean contaminated clothing before reuse.

Hygiene: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, and smoking.

Section IX - Special Precautions

Handling Precautions:

Stay up wind to avoid vapors. Do not store near open flames. Ground lines and equipment used during transfer.

Storage Requirements:

Do not store near strong oxidants and void water contamination.

Section IX - Other

Regulator Information:

EPA Regulations:

SARA 311/312 CODES (40 CFR 370 /29 CFR 1910.1200):

Fire: Yes

Pressure: No

Reactivity: No

Immediate (acute): Yes

Delayed (chronic): Yes

TSCA (40 CFR 710): All components of this product are listed on the TSCA Inventory.

State Regulations: The following chemicals are specifically listed by individual states, for details on each state's regulatory requirements you should contact the appropriate agency in that state:

Compound	CAS Number	States
Asphalt Fumes	8052-42-4	CA, CA65, MA, TX, FL, IL, PA
Asphalt, Oxidized	64742-93-4	
Limestone	1317-65-3	CA2, MA, PA, TX
Cellulose	9004-34-6	CA2, MA, IL, PA, TX
Fullers Earth	8031-18-3	
Emulsifiers	61789-77-3	
Light Aromatic Solvent	64742-95-6	
1,2,4,-Trimethyl benzene	95-63-6	MA, TX, FL, PA
Xylene	1330-20-7	CA, MA, NY NJ, TX, FL, IL, PA

- CA - California State Superfund Hazardous Substance
- CA1 - California OSHA Directors List of Hazardous Substances
- CA2 - California OSHA Workplace Airborne Contaminants
- CA65 - California Proposition 65 Carcinogens or Reproductive Toxins
- MA - Massachusetts Substance List
- TX - Texas Air Contaminants with Health Effects Screening Level
- FL - Florida Toxic Substance List
- IL - Toxic Substance Disclosure to Employees List
- PA - Pennsylvania Hazardous Substance List
- NY - New York Hazardous Substance Bulk Storage List
- NJ - New Jersey Right to Know Hazardous Substance

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