

Material Safety Data Sheet

Section 1: PRODUCT AND COMPANY INFORMATION

Product Name(s): HyperStick 2000 (HyperStick)

Product Identifiers: HyperStick 2000

Manufacturer:
Lafarge North America Inc.
12950 Worldgate Drive, Suite 500
Herndon, VA 20170

Information Telephone Number:
703-480-3600 (9am to 5pm EST)

Emergency Telephone Number:
1-800-451-8346 (3E Hotline)

Product Use: HyperStick 2000 is used as an anti-stripping agent for hot mix asphalt aggregate compositions.




Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Percent (By Weight)	CAS Number	OSHA PEL – TWA (mg/m ³)	ACGIH TLV-TWA (mg/m ³)	LD ₅₀ (rat, oral)	LC ₅₀ (inhalation, rat)
Alkoxylated Fatty Amines	15-20	Proprietary*	NA	NA	>500 mg/kg	NA
Polyamine	15-20	Proprietary*	NA	NA	4000 mg/kg	NA
Glycol	10-15	Proprietary*	NA	NA	NA	NA
Alkoxylated Fatty Polyamines	< 2	Proprietary*	NA	NA	1200 mg/kg	220 ppm at 1 hour**

Note: * HMIRC filed CBI #5912, on March 23, 2004.

** Based on data for a similar material

Section 3: HAZARD IDENTIFICATION

WARNING		
	<p>Irritant –May cause skin, eye, and inhalation irritation. Hot product can cause burns.</p> <p>May cause allergic skin reaction and sensitization.</p> <p>Use proper engineering controls, work practices, and personal protective equipment.</p> <p>Read MSDS for details.</p>	 Eye Protection  Gloves

Emergency Overview: HyperStick is a clear amber colored liquid that has a faint odor of ammonia. Hot product will cause severe thermal burns. If burned by hot product, cool affected area immediately with cool water. Seek medical attention. Prolonged or repeated skin contact can cause sensitization and drying of the skin which may produce irritation and dermatitis.

Potential Health Effects: Risk of injury depends on duration and level of exposure.

Eye Contact: Hot product will cause severe thermal burns. Eye contact with HyperStick can cause eye irritation, redness, and itching. Eye exposures require immediate first aid to prevent damage to the eye.

Section 3: HAZARD IDENTIFICATION (continued)

Skin Contact: Hot product will cause severe thermal burns. Repeated or prolonged contact to HyperStick may cause sensitization, dry skin, discomfort, irritation, and dermatitis.

Inhalation: Hot HyperStick may release irritating fumes or vapors such as smoke, carbon dioxide, carbon monoxide and unburned hydrocarbons. Exposure to fumes or vapors may cause irritation of the nose and throat, and symptoms such as headache, dizziness, loss of coordination, and drowsiness.

Carcinogenicity: HyperStick and its components are not listed as a carcinogen by IARC or NTP.

Ingestion: Do not ingest HyperStick. Hot product will cause thermal burns. Ingestion may result in irritation, nausea, vomiting, diarrhea and restlessness.

Medical Conditions

Aggravated by Exposure: Individuals with preexisting skin conditions can be aggravated by exposure.

Section 4: FIRST AID MEASURES

Eye Contact: For contact with hot product, flush with large amounts of cool water for at least 15 minutes. Immediately call a physician. For contact with cold product, rinse eyes thoroughly with water for at least 15 minutes, including under lids. Seek medical attention for burns and severe irritation.

Skin Contact: Wash with cool water and a pH neutral soap or a mild skin detergent. Do not use solvents or thinners to remove product from skin. Seek medical attention for burns, rash, irritation, and dermatitis.

For contact with hot product, immerse or flush skin with cold water for at least 15 minutes. Call a physician.

Inhalation: Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Ingestion: Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control center immediately.

Section 5: FIREFIGHTING MEASURES

Flashpoint & Method:	> 311°F (155°C) Open Cup	Firefighting Equipment:	A SCBA is recommended to limit exposures to combustion products when fighting any fire.
General Hazard:	Combustible at high temperatures. Avoid breathing fumes.		
Combustion Products:	Toxic gases produced in fire, such as CO, CO ₂ and nitrogen oxides.	Extinguishing Media:	Use appropriate extinguishing media for the size of the fire.
Upper/Lower Flammable Limit:	NA.	Auto-Ignition Temperature:	NA.
Specific Hazards:	Product may release ammonia and or amines at high temperatures. Shut off fuel to fire if possible to do so without hazard. Cool containing vessels with water spray in order to prevent pressure buildup or explosion. Avoid flushing spilled product into sewers, streams or other bodies of water.		

Section 6: ACCIDENTAL RELEASE MEASURES

General: Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For small spills, soak up released HyperStick with inert absorbent material, remove with shovels and place spilled material into a container. Contain large spills with inert materials. Transfer liquids and solid material to suitable containers for recovery or disposal. Do not allow spills and cleaning runoff to enter drains, sewers, groundwater, drainage ditches or surface waters. Wear appropriate protective equipment as described in Section 8.

Waste Disposal Method: Dispose of HyperStick according to Federal, State, Provincial and Local regulations.

Section 7: HANDLING AND STORAGE

General: Handle with care and use appropriate control measures. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled and in a cool well-ventilated area.

Usage: Avoid contact with skin, eyes and clothing. Use additional precautions when handling hot material. Maintain employee exposure levels below established regulatory limits. Do not allow hot product to contact skin. Ensure adequate ventilation. Use all appropriate engineering controls and Personal Protective Equipment (PPE) described in Section 8 below.

Storage: Keep containers tightly closed. Do not expose to strong oxidizers. Consult appropriate Federal, State, Provincial and Local authorities before reusing, recycling or disposing of empty containers or waste residues of this product.

Clothing: Remove and launder clothing that is soiled with HyperStick. Thoroughly wash hands and exposed skin after exposure to HyperStick.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use local exhaust or general dilution ventilation when using at elevated temperatures or during activities that generate vapors or mists, to maintain levels below exposure limits. Ensure that an emergency eye wash station and safety shower is located near the work area.

Personal Protective Equipment (PPE):

Respiratory Protection: Under ordinary conditions no respiratory protection is required. Wear a NIOSH approved respirator that is properly fitted and is in good condition when exposed to vapors above exposure limits.

Eye Protection: Wear ANSI approved glasses, safety goggles, or face shield when handling HyperStick to prevent contact with eyes.

Skin Protection: Wear chemical resistant gloves to prevent skin contact and insulated gloves when handling hot product. Do not rely on barrier creams, in place of impervious gloves. Remove and launder clothing that is soiled with HyperStick. Thoroughly wash hands and other exposed skin after exposure to HyperStick.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid.	Evaporation Rate:	< 1.0
Appearance:	Clear amber color.	pH (in water):	7-9.
Odor:	Slight ammonia odor.	Boiling Point:	NA.
Vapor Pressure:	NA.	Freezing Point:	NA.
Vapor Density:	NA.	Viscosity:	290-390 Cps. (60°C Brookfield)
Specific Gravity:	0.98 g/cc	Solubility in Water:	Insoluble

Section 10: STABILITY AND REACTIVITY

Stability:	Stable. Avoid contact with incompatible materials.
Incompatibility:	HyperStick is incompatible with strong acids or bases, copper, nickel, cobalt and oxidizing agents such as nitrates, chlorates and peroxides.
Hazardous Polymerization:	None.
Hazardous Decomposition:	When heated may liberate carbon monoxide, carbon dioxide, ammonia and amines.

Section 11 and 12: TOXICOLOGICAL AND ECOLOGICAL INFORMATION

For questions regarding toxicological and ecological information refer to contact information in Section 1.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of waste and containers in compliance with applicable Federal, State, Provincial and Local regulations.

Section 14: TRANSPORT INFORMATION

This product is classified as a Hazardous Material under U.S. DOT and Canadian TDG regulations.

Section 15: REGULATORY INFORMATION

OSHA/MSHA Hazard Communication:	This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.
CERCLA/SUPERFUND:	This product is not listed as a CERCLA hazardous substance.
EPCRA SARA Title III:	This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered to be an acute health hazard (irritation).
EPRCA SARA Section 313:	This product contains none of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
RCRA:	If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.
TSCA:	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
California Proposition 65:	This product and/or its components are not listed in California's Proposition 65.
WHMIS/DSL:	This product is classified as D2B and are subject to WHMIS requirements.



Section 16: OTHER INFORMATION
Abbreviations:

>	Greater than	NA	Not Applicable
ACGIH	American Conference of Governmental Industrial Hygienists	NFPA	National Fire Protection Association
CAS No	Chemical Abstract Service number	NIOSH	National Institute for Occupational Safety and Health
CBI	Confidential Business Information	NTP	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	OSHA	Occupational Safety and Health Administration
		PEL	Permissible Exposure Limit
CFR	Code for Federal Regulations	pH	Negative log of hydrogen ion
CL	Ceiling Limit	PPE	Personal Protective Equipment
DOT	U.S. Department of Transportation	R	Respirable Particulate
EST	Eastern Standard Time	RCRA	Resource Conservation and Recovery Act
HEPA	High-Efficiency Particulate Air	SARA	Superfund Amendments and Reauthorization Act
HMIRC	Hazardous Materials Information Review Commission	SCBA	Self-Contained Breathing Apparatus
HMIS	Hazardous Materials Identification System	T	Total Particulate
IARC	International Agency for Research on Cancer	TDG	Transportation of Dangerous Goods
LC ₅₀	Lethal Concentration	TLV	Threshold Limit Value
LD ₅₀	Lethal Dose	TWA	Time Weighted Average (8 hour)
mg/m ³	Milligrams per cubic meter	WHMIS	Workplace Hazardous Materials Information System
MSHA	Mine Safety and Health Administration		

This MSDS (Sections 1-16) was revised on March 1, 2008.

An electronic version of this MSDS is available at: www.lafarge-na.com under the Products section.

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