MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name **N-FLASH LAP SEALANT**

Version # 09

Revision date 24-February-2011

Chemical name Synthetic Rubber/Resin in Solvent(s)

Chemical description Liquid

CAS # Mixture

Manufacturer information

CETCO
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Hoffman Estates, IL 60192 US
safety.data@amcol.com
http://www.cetco.com/
General Information (800) 527-9948
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2. Hazards Identification

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact.

Eyes Contact with liquid or mist will irritate the eyes. Symptoms include itching, burning, redness and tearing. Dust or powder may irritate eye tissue, Substance causes slight eye irritation, Symptoms include itching, burning, redness and tearing.

Skin Substance may cause slight skin irritation. A single exposure is not likely to result in the product being absorbed through the skin in harmful amounts. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Non-irritating to the skin and Substance does not generally irritate and is only mildly irritating to the skin.

Inhalation No hazard in normal industrial use. Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Inhalation of dusts may cause respiratory irritation. Repeated or prolonged inhalation may cause toxic effects. For additional information on inhalation hazards, see Section 11 of this safety data sheet. Inhalation of dusts may cause respiratory irritation. For additional information on inhalation hazards, see Section 11 of this safety data sheet.

Ingestion Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Harmful: may cause lung damage if swallowed. No significant adverse effects are expected upon ingestion of the product. Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

Chronic effects Edema. Liver injury may occur. Jaundice. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Shortness of breath. May cause delayed lung damage.

Signs and symptoms Edema. Proteinuria. Jaundice. Liver enlargement. Narcosis. Behavioral changes. Decrease in motor functions. Cough. Discomfort in the chest. Shortness of breath. Symptoms may be delayed.

3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
Solvent naphtha (petroleum), light aliphatic	64742-89-8	15 - 40
KAOLIN	1332-58-7	10 - 30
STODDARD SOLVENT	8052-41-3	10 - 30
SILICA, AMORPHOUS, FUMED	7631-86-9	7 - 13
ALUMINUM OXIDE	1344-28-1	5 - 10
CARBON BLACK	1333-86-4	1 - 5

SILICA, CRYSTALLINE, QUARTZ	14808-60-7	0.1 - 1
TITANIUM DIOXIDE	13463-67-7	0.1 - 1

Non-hazardous components	**CAS #**	**Percent**
OIL, MINERAL	8012-95-1	5 - 10

4. First Aid Measures

First aid procedures

Eye contact — Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately.

Skin contact — Remove and isolate contaminated clothing and shoes. Launder contaminated clothing before reuse. Wash off with soap and plenty of water. Get medical attention if irritation develops or persists.

Inhalation — If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention. If not breathing, give artificial respiration or give oxygen by trained personnel.

Ingestion — If ingestion of a large amount does occur, seek medical attention. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position.

Notes to physician — This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately. In case of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician.

General advice — In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Keep victim warm. In case of shortness of breath, give oxygen. Keep victim under observation. Call a physician if symptoms develop or persist.

5. Fire Fighting Measures

Flammable properties — Containers may explode when heated. Vapors form flammable or explosive mixtures with air at room temperature. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media — Carbon dioxide (CO_2). Alcohol foam. Dry chemical.

Unsuitable extinguishing media — Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Protective equipment for firefighters — Structural firefighters protective clothing will only provide limited protection.

Fire fighting equipment/instructions — Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Move containers from fire area if you can do it without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. ALWAYS stay away from tanks engulfed in flame. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Cool containers with flooding quantities of water until well after fire is out. In the event of fire, wear self-contained breathing apparatus. Some of these materials, if spilled, may evaporate leaving a flammable residue.

Specific methods — In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

Hazardous combustion products — Fire may produce irritating, corrosive and/or toxic gases.

6. Accidental Release Measures

Environmental precautions — Do not contaminate water. Do not flush into surface water or sanitary sewer system. Runoff from fire control or dilution water may cause pollution.

Methods for containment Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area).

Methods for cleaning up Large Spills: Should not be released into the environment. Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Use clean non-sparking tools to collect absorbed material. Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

Never return spills in original containers for re-use.

7. Handling and Storage

Handling Vapors may form explosive mixtures with air. Use non-sparking tools when opening or closing containers. Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. "Empty" containers retain product residue (liquid or vapor) and can be dangerous.

Storage Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children. Keep this material away from food, drink and animal feed.

Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat.

8. Exposure Controls / Personal Protection

Occupational exposure limits

Canada - British Columbia

Components	Type	Value	Form
ALUMINUM OXIDE (1344-28-1)	TWA	10.0000 mg/m3	Total dust.
		3.0000 mg/m3	Respirable fraction.
CARBON BLACK (1333-86-4)	TWA	3.5000 mg/m3	
KAOLIN (1332-58-7)	TWA	2.0000 mg/m3	Respirable.
OIL, MINERAL (8012-95-1)	TWA	1.0000 mg/m3	Mist.
SILICA, CRYSTALLINE, QUARTZ (14808-60-7)	TWA	0.0250 mg/m3	Respirable fraction.
STODDARD SOLVENT (8052-41-3)	STEL	580.0000 mg/m3	
	TWA	290.0000 mg/m3	
TITANIUM DIOXIDE (13463-67-7)	TWA	10.0000 mg/m3	Total dust.
		3.0000 mg/m3	Respirable fraction.

Canada - Ontario

Components	Type	Value	Form
ALUMINUM OXIDE (1344-28-1)	TWA	10.0000 mg/m3	Total dust.
		10.0000 mg/m3	Dust.
CARBON BLACK (1333-86-4)	TWA	3.5000 mg/m3	
KAOLIN (1332-58-7)	TWA	2.0000 mg/m3	Respirable.
OIL, MINERAL (8012-95-1)	STEL	10.0000 mg/m3	Mist.
	TWA	5.0000 mg/m3	Mist.
SILICA, CRYSTALLINE, QUARTZ (14808-60-7)	TWA	0.1000 mg/m3	Respirable fraction.
STODDARD SOLVENT (8052-41-3)	TWA	525.0000 mg/m3	
TITANIUM DIOXIDE (13463-67-7)	TWA	10.0000 mg/m3	Total dust.

Canada - Quebec

Components	Type	Value	Form
ALUMINUM OXIDE (1344-28-1)	TWA	10.0000 mg/m3	Total dust.
CARBON BLACK (1333-86-4)	TWA	3.5000 mg/m3	
KAOLIN (1332-58-7)	TWA	5.0000 mg/m3	Respirable dust.
SILICA, CRYSTALLINE, QUARTZ (14808-60-7)	TWA	0.1000 mg/m3	Respirable dust.
STODDARD SOLVENT (8052-41-3)	TWA	100.0000 ppm	
		525.0000 mg/m3	
TITANIUM DIOXIDE (13463-67-7)	TWA	10.0000 mg/m3	Total dust.

Engineering controls Provide adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal protective equipment

Eye / face protection Wear chemical goggles and face shield.

Skin protection	Wear appropriate chemical resistant gloves. Wear suitable protective equipment. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Launder contaminated clothing before reuse.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use an organic vapor respirator for concentrations exceeding the Occupational Exposure Limit.

9. Physical & Chemical Properties

Appearance	Not available.
Color	Black.
Odor	Not available.
Odor threshold	Not available.
Physical state	Not available.
Form	Paste.
pH	Not available.
Melting point/Freezing point	Not available.
Boiling point	240.8 - 285.8 °F (115.5 - 140.5 °C)
Flash point	60.8 °F (15.5 °C) Setaflash
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	> 0.9 %
Vapor pressure	10.2 mm Hg
Vapor density	> 1 where Air = 1
Specific gravity	0.988 @ 77F
Relative density	8.227 lb/gal
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	3.39 lb/gal

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions. Risk of ignition.
Conditions to avoid	Heat, flames and sparks. Vapour/air-mixtures are explosive at intense warming.
Incompatible materials	Strong acids, alkalies and oxidizing agents.
Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide. Phenolic fumes may be released upon decomposition.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data

Product	**Test Results**
N-FLASH LAP SEALANT (Mixture)	Acute Dermal LD50 Rabbit: 6593 mg/kg
	Acute Dermal LD50 Rat: 26316 mg/kg estimated
Components	**Test Results**
KAOLIN (1332-58-7)	Acute Dermal LD50 Rat: >= 5000 mg/kg
	Acute Oral LD50 Rat: >= 5000 mg/kg
ALUMINUM OXIDE (1344-28-1)	Acute Oral LD50 Rat: 5000 mg/kg
TITANIUM DIOXIDE (13463-67-7)	Acute Oral LD50 Rat: 10000 mg/kg

Components	Test Results
SILICA, CRYSTALLINE, QUARTZ (14808-60-7)	Acute Oral LD50 Rat: 500 mg/kg
Solvent naphtha (petroleum), light aliphatic (64742-89-8)	Acute Dermal LD50 Rabbit: 3000 mg/kg
	Acute Oral LD50 Rat: 5000 mg/kg
SILICA, AMORPHOUS, FUMED (7631-86-9)	Acute Dermal LD50 Rabbit: 2000 mg/kg
	Acute Oral LD50 Mouse: >= 15000 mg/kg
	Acute Oral LD50 Rat: 5000 mg/kg

Local effects Irritating to eyes and skin. Harmful by inhalation and in contact with skin. Toxic by inhalation, in contact with skin and if swallowed. Liver toxicity. Very toxic by inhalation, in contact with skin and if swallowed. Vapors may cause dizziness or suffocation.

Chronic effects Danger of serious damage to health by prolonged exposure. Prolonged or repeated exposure may cause lung injury. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.

Subchronic effects Kidney injury may occur.

Carcinogenicity Suspect cancer hazard.

IARC Monographs. Overall Evaluation of Carcinogenicity

CARBON BLACK (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
SILICA, AMORPHOUS, FUMED (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	1 Carcinogenic to humans.
TITANIUM DIOXIDE (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

Reproductive effects Possible reproductive hazard. Potential embryo-fetal toxicity and teratogenicity.

Teratogenicity Avoid exposure to women during early pregnancy.

12. Ecological Information

Ecotoxicological data

Components	Test Results
TITANIUM DIOXIDE (13463-67-7)	EC50 Water flea (Daphnia magna): >= 1000 mg/l 48.00 hours
	LC50 Mummichog (Fundulus heteroclitus): >= 1000 mg/l 96.00 hours
Solvent naphtha (petroleum), light aliphatic (64742-89-8)	IC50 Algae: 4700 mg/L 72.00 Hours
SILICA, AMORPHOUS, FUMED (7631-86-9)	EC50 Daphnia: 7600 mg/L 48.00 Hours
	IC50 Algae: 440 mg/L 72.00 Hours
	LC50 Fish: 5000 mg/L 96.00 Hours

Ecotoxicity Components of this product are hazardous to aquatic life.

Environmental effects No data available for this product.

Persistence and degradability Not available.

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations. Do not allow this material to drain into sewers/water supplies.

14. Transport Information

TDG

Proper shipping name	ADHESIVES containing flammable liquid
Hazard class	3
UN number	UN1133
Packing group	II

TDG

15. Regulatory Information

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status Controlled

WHMIS classification B2 - Flammable/Combustible
D2A - Other Toxic Effects-VERY TOXIC
D2B - Other Toxic Effects-TOXIC

WHMIS labeling

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

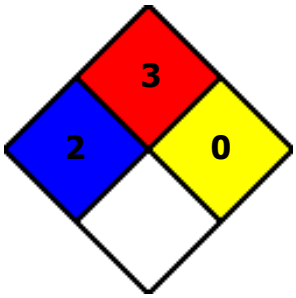
16. Other Information

Recommended restrictions Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Further information This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS ratings

NFPA ratings



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