



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name N-FLASH ADHESIVE
Version # 08
Revision date 24-February-2011
Chemical name Synthetic Rubber/Resin in Solvent(s)
Chemical description Liquid
CAS # Mixture
Manufacturer information CETCO
Building Materials Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 US
safety.data@amcol.com
http://www.cetco.com/
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact.

Eyes This product may cause slight irritation to the eyes. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

Skin Substance may cause slight skin irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation No hazard in normal industrial use. Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

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.

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

Components	CAS #	Percent
ACETONE	67-64-1	20 - 40
Toluene	108-88-3	20 - 40
Hexane	110-54-3	2.5 - 10

Composition comments This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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 may travel to a source of ignition and flash back. Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media**Suitable extinguishing media**

Dry chemical. Carbon dioxide (CO₂). Foam. Water Fog.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters**Protective equipment and precautions for firefighters**

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Hazardous combustion products

Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide, carbon dioxide and other hydrocarbon fragments.

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****ACGIH****Components**

ACETONE (67-64-1)

Type

STEL

TWA

TWA

Value

750.0000 ppm

500.0000 ppm

50.0000 ppm

Components	Type	Value
Toluene (108-88-3)	TWA	20.0000 ppm
U.S. - OSHA Components		
Components	Type	Value
ACETONE (67-64-1)	PEL	1000.0000 ppm 2400.0000 mg/m3
	STEL	1000.0000 ppm 2400.0000 mg/m3
	TWA	750.0000 ppm 1800.0000 mg/m3
Hexane (110-54-3)	PEL	1800.0000 mg/m3
	TWA	500.0000 ppm 180.0000 mg/m3
Toluene (108-88-3)	Ceiling	50.0000 ppm
	STEL	300.0000 ppm 150.0000 ppm 560.0000 mg/m3
	TWA	100.0000 ppm 375.0000 mg/m3

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	Yellow.
Odor	Not available.
Odor threshold	Not available.
Physical state	Not available.
Form	Liquid.
pH	Not available.
Melting point/Freezing point	Not available.
Boiling point	132.8 °F (56.1 °C)
Flash point	-2 °F (-18.9 °C) Setaflash
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	> 1 %
Vapor pressure	185 mm Hg
Vapor density	> 1 where Air = 1
Specific gravity	0.872 @ 77F
Relative density	7.26 lb/gal @ 77F

Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	5.5 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, alkalis 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

N-FLASH ADHESIVE (Mixture)

Test Results

Acute Dermal LD50 Rabbit: 8127 mg/kg estimated
 Acute Dermal LD50 Rat: 8326 mg/kg
 Acute Inhalation LC50 Mouse: 7674 mg/l estimated
 Acute Inhalation LC50 Rat: 285 mg/l estimated
 Acute Inhalation LC50 Rat: 31 mg/l/4h
 Acute Oral LD50 Mouse: 13636 mg/kg estimated
 Acute Oral LD50 Mouse: 23.64 g/kg estimated
 Acute Oral LD50 Rabbit: 24273 mg/kg estimated
 Acute Oral LD50 Rat: 1360 mg/kg
 Acute Oral LD50 Wistar rat: 1089 mg/kg estimated
 Acute Other LD50 Mouse: 5895 mg/kg estimated

Components

Toluene (108-88-3)

Test Results

Acute Dermal LD50 Rabbit: 8390 mg/kg
 Acute Dermal LD50 Rat: 12124 mg/kg
 Acute Inhalation LC50 Mouse: 400 mg/l 24.00 Hours
 Acute Inhalation LC50 Rat: 26700 mg/l 1.00 Hours
 Acute Inhalation LC50 Rat: 12.5 mg/l/4h
 Acute Oral LD50 Rat: 636 mg/kg
 Acute Other LD50 Rat: 1960 mg/kg

Hexane (110-54-3)

Acute Dermal LD50 Rabbit: 3000 mg/kg
 Acute Inhalation LC50 Mouse: 48000 mg/l 4.00 Hours
 Acute Inhalation LC50 Rat: 48000 mg/l/4h
 Acute Inhalation LC50 Rat: <= 48000 mg/l 4.00 Hours
 Acute Oral LD50 Rat: 25000 mg/kg
 Acute Oral LD50 Rat: 24 mg/kg
 Acute Oral LD50 Wistar rat: 49 mg/kg

ACETONE (67-64-1)

Acute Dermal LD50 Rabbit: 20 mg/kg
 Acute Inhalation LC50 Rat: 50.1 mg/l 8.00 Hours
 Acute Oral LD50 Mouse: 3000 mg/kg
 Acute Oral LD50 Mouse: 5.2 g/kg
 Acute Oral LD50 Rabbit: 5340 mg/kg
 Acute Oral LD50 Rat: 5800 mg/kg
 Acute Other LD50 Mouse: 1297 mg/kg
 Acute Other LD50 Rat: 5500 mg/kg

Sensitization

US ACGIH Threshold Limit Values: Skin designation

Hexane (CAS 110-54-3)

Can be absorbed through the skin.

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.

ACGIH Carcinogens

ACETONE (CAS 67-64-1)

A4 Not classifiable as a human carcinogen.

Toluene (CAS 108-88-3)

A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Toluene (CAS 108-88-3)

3 Not classifiable as to carcinogenicity 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

Product

N-FLASH ADHESIVE (Mixture)

Test Results

EC50 Daphnia: 29.08 mg/l 48.00 Hours estimated

LC50 Fish: 204 mg/l 96.00 Hours estimated

Components

Toluene (108-88-3)

Test Results

EC50 Daphnia: 11.3 mg/L 48.00 Hours

EC50 Water flea (Daphnia magna): 5.46 - 9.83 mg/l 48.00 hours

LC50 Coho salmon, silver salmon (Oncorhynchus kisutch): 5.5 mg/l 96.00 hours

LC50 Fish: 25 mg/L 96.00 Hours

Hexane (110-54-3)

LC50 Fathead minnow (Pimephales promelas): 2.101 - 2.981 mg/l 96.00 hours

LC50 Fish: 4.14 mg/L 96.00 Hours

ACETONE (67-64-1)

EC50 Daphnia: 12600 mg/L 48.00 Hours

EC50 Water flea (Daphnia magna): 21.6 - 23.9 mg/l 48.00 hours

LC50 Fathead minnow (Pimephales promelas): >= 100 mg/l 96.00 hours

LC50 Fish: 5540 mg/L 96.00 Hours

Ecotoxicity

In high concentrations, this product may be dangerous to aquatic life and fouling to shorelines. Components of this product are hazardous to aquatic life.

Environmental effects

Harmful to aquatic life.

Persistence and degradability

Not available.

13. Disposal Considerations

Waste codes

US RCRA Hazardous Waste U List: Reference

ACETONE (CAS 67-64-1)

U002

Toluene (CAS 108-88-3)

U220

Disposal instructions

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

14. Transport Information

DOT

Basic shipping requirements:

UN number UN1133
Proper shipping name Adhesives
Hazard class 3
Packing group II
Special precautions Substance may be transported hot.

Additional information:

Special provisions 149, B52, IB2, T4, TP1, TP8

Basic shipping requirements:

Labels required 3

Additional information:

Packaging exceptions 150
Packaging non bulk 173
Packaging bulk 242
ERG number 128

DOT

Packages less than 83 lbs

Basic shipping requirements:

UN number UN1133
Proper shipping name Adhesives
Hazard class 3
Packing group II
Special precautions Substance may be transported hot.

Additional information:

Special provisions 149, B52, IB2, T4, TP1, TP8

Basic shipping requirements:

Labels required 3

Additional information:

Packaging exceptions 150
Packaging non bulk 173
Packaging bulk 242
ERG number 128



DOT



DOT

Packages less than 83
lbs

15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Hexane (CAS 110-54-3) 1.0 %
Toluene (CAS 108-88-3) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Hexane (CAS 110-54-3) Listed.
Toluene (CAS 108-88-3) Listed.

CERCLA (Superfund) reportable quantity

ACETONE: 5000.0000
 Toluene: 1000.0000
 Hexane: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

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)

State regulations WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Toluene (CAS 108-88-3) Listed: January 1, 1991 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Toluene (CAS 108-88-3) Listed: August 7, 2009 Female reproductive toxin.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

Hexane (CAS 110-54-3) 500 LBS
 Toluene (CAS 108-88-3) 500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

ACETONE (CAS 67-64-1) Listed.
 Hexane (CAS 110-54-3) Listed.
 Toluene (CAS 108-88-3) Listed.

16. Other Information

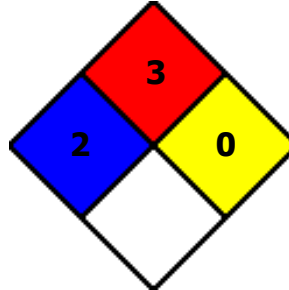
Recommended restrictions Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided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

HMIS®		
HEALTH	*	2
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION		

NFPA ratings



Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

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