Material Safety Data Sheet

An RPM Company

24 Hour Emergency Phone Numbers:
Medical/Poison Control:
1-800-327-3874
1-513-558-5111
Transportation/National Response Center:
1-800-535-5053
1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this MSDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

Section 1 - Chemical Product / Company Information

This Material Safety Data Sheet is available in Canadian French and Hispanic American Spanish upon request.
On peut demader cette fiche signalétique (MSDS) a la langue francaise-canadienne.
Los Datos de Serguridad del Producto pueden obtenerse en Espanol si lo riquiere.

Product Name:	DAP BEATS THE NAIL General Purpose Construction Adhesive	**Revision Date:**	08/29/2007
Product UPC Number:	070798250826, 070798250840, 070798254848, 070798254985, 070798310162, 070798310209, 070798342002, 070798352001	**Supercedes:**	08/29/2002
Product Use/Class:	General Purpose Construction Adhesive	**MSDS Number:**	00077084001
Manufacturer:	**DAP Inc.** **2400 Boston Street Suite 200** **Baltimore, MD 21224-4723** **888-327-8477 (non-emergency matters)**		

Section 2 - Hazards Identification

Emergency Overview: A gray paste product with a solvent odor. DANGER! Vapors may ignite explosively. Keep away from heat, sparks and flame. Do not breathe dust, vapors or spray mist. Use only with adequate ventilation. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. Aspiration hazard if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

Refer to other MSDS sections for other detailed information.

Effects Of Overexposure - Eye Contact: Causes eye irritation. May cause eye irritation.

Effects Of Overexposure - Skin Contact: Causes skin irritation. Prolonged and repeated skin contact may cause dermatitis, drying and defatting due to the solvent properties.

Effects Of Overexposure - Inhalation: Vapor harmful. May affect the brain or nervous system causing

dizziness, headache or nausea. Vapors are harmful when inhaled. Inhalation of vapors in high concentration may cause irritation of respiratory system. Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Can cause nerve damage to arms and legs. Effects may be permanent.

Effects Of Overexposure - Ingestion: Harmful or fatal if swallowed. If ingested, may cause vomiting, diarrhea, and depressed respiration. May be harmful if swallowed. Aspiration into lungs may cause pulmonary edema and chemical pneumonitis.

Effects Of Overexposure - Chronic Hazards: NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Prolonged or repeated contact with acetone can cause defattening of the skin, which may lead to dermatitis. Overexposure or misuse of toluene can cause liver, kidney, and brain damage as well as cardiac abnormalities. There have been cases of aplastic anemia from toluene in industrial exposures (ACGIH, 1992). Increased coagulation time and reduced clotting factors have also been found, which are indicators of damage to the bone marrow (Clayton & Clayton, 1994).

n-Hexane exposure can cause nerve damage to arms and legs causing numbness of the fingers and toes, effect may be permanent. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination.

Primary Route(s) Of Entry: Skin Contact, Inhalation, Ingestion, Eye Contact

Medical Conditions which May be Aggravated by Exposure: None known.

Carcinogenicity: None Known

Section 3 - Composition / Information On Ingredients

Chemical Name	CASRN	Wt%
Calcium Carbonate	471-34-1	30-60
n-Hexane	110-54-3	5-10
Magnesite	546-93-0	5-10
2-Methylpentane	107-83-5	3-7
3-Methylpentane	96-14-0	3-7
Methylcyclopentane	96-37-7	1-5
Isoheptane	591-76-4	0.5-1.5
2,3-Dimethylbutane	79-29-8	0.1-1.0
2,4-Dimethylpentane	108-08-7	0.1-1.0
3-Methylhexane	589-34-4	0.1-1.0
2,2-Dimethylpentane	590-35-2	0.1-1.0
Cyclohexane	110-82-7	0.1-1.0
2,3-Dimethylpentane	565-59-3	0.1-1.0
3,3-Dimethylpentane	562-49-2	0.1-1.0
Neohexane	75-83-2	<0.09

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention.

First Aid - Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

First Aid - Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get medical attention immediately.

First Aid - Ingestion: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

Note to Physician: None.

COMMENTS: Call Medical Emergency at 1-800-327-3874 if any irritation or complication arises from any of the above routes of entry.

Section 5 - Fire Fighting Measures

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam

Unusual Fire And Explosion Hazards: Store away from caustics and oxidizers. Material will readily ignite at room temperature. Extremely Flammable! Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Containers may explode if exposed to extreme heat. Eliminate sources of ignition: heat, electrical equipment, sparks and flames. Vapors may form explosive mixtures with air. Vapors can flow along surfaces to a distant ignition source and flash back. Flammable liquid. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back.

Special Firefighting Procedures: Use a self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode. Cool containers and/or tanks with spray water.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear proper protective equipment as specified in Section 8. None known.

Section 7 - Handling And Storage

Handling: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Avoid breathing vapors. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Vapors may cause flash fire. Use only with adequate ventilation. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Construction and repair activities can adversely affect indoor air quality. Consult with occupants or a representative (i.e. maintenance, building manager, industrial hygienist, or safety officer) to determine ways to minimize impact.

Storage: Keep away from heat and sources of ignition. Do not store at temperatures above 120 degrees F. Store containers away from excessive heat and freezing. Keep containers closed when not in use. Store away from caustics and oxidizers.

Section 8 - Exposure Controls / Personal Protection

Chemical Name	CASRN	ACGIH TWA	ACGIH STEL	ACGIH CEIL	OSHA TWA	OSHA STEL	OSHA CEIL	Skin
Calcium Carbonate	471-34-1	10 MGM3	N.E.	N.E.	5 MGM3 (respirable fraction)	N.E.	N.E.	No
n-Hexane	110-54-3	50 PPM	N.E.	N.E.	500 PPM	N.E.	N.E.	Yes
Magnesite	546-93-0	10 MGM3	N.E.	N.E.	5 MGM3	N.E.	N.E.	No
2-Methylpentane	107-83-5	500 PPM	1000 PPM	N.E.	N.E.	N.E.	N.E.	No
3-Methylpentane	96-14-0	500 PPM	1000 PPM	N.E.	N.E.	N.E.	N.E.	No
Methylcyclopentane	96-37-7	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Isoheptane	591-76-4	400 PPM	500 PPM	N.E.	500 PPM	N.E.	N.E.	No
2,3-Dimethylbutane	79-29-8	500 PPM	1000 PPM	N.E.	N.E.	N.E.	N.E.	No
2,4-Dimethylpentane	108-08-7	400 PPM	500 PPM	N.E.	500 PPM	N.E.	N.E.	No
3-Methylhexane	589-34-4	400 PPM	500 PPM	N.E.	500 PPM	N.E.	N.E.	No

2,2-Dimethylpentane	590-35-2	400 PPM	500 PPM	N.E.	500 PPM	N.E.	N.E.	No
Cyclohexane	110-82-7	100 PPM	N.E.	N.E.	300 PPM	N.E.	N.E.	No
2,3-Dimethylpentane	565-59-3	400 PPM	500 PPM	N.E.	500 PPM	N.E.	N.E.	No
3,3-Dimethylpentane	562-49-2	400 PPM	500 PPM	N.E.	500 PPM	N.E.	N.E.	No
Neohexane	75-83-2	500 PPM	1000 PPM	N.E.	N.E.	N.E.	N.E.	No

Exposure Notes:

Precautionary Measures: Please refer to other sections and subsections of this MSDS.

Engineering Controls: Provide sufficient general and/or local exhaust ventilation to maintain exposure below recommended exposure limit. Check all low areas for presence of vapor. Vapors are heavier than air and may spread along floors. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use.

Respiratory Protection: If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Wear solvent impervious gloves.

Eye Protection: Goggles or safety glasses with side shields.

Other protective equipment: Provide eyewash and solvent impervious apron if body contact may occur.

Hygienic Practices: Remove and wash contaminated clothing before re-use.

Important: Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); these limits may vary between states.

Note: An employee's skin exposure to substances having a "YES" in the "SKIN" column in the table above shall be prevented or reduced to the extent necessary under the circumstances through the use of gloves, coveralls, goggles or other appropriate personal protective equipment, engineering controls or work practices.

Section 9 - Physical And Chemical Properties

Boiling Range:	Not Established	**Vapor Density:**	Heavier Than Air
Odor:	Solvent	**Odor Threshold:**	Not Established
Color:	Gray	**Evaporation Rate:**	Faster Than n-Butyl Acetate
Solubility in H2O:	Not Established	**Specific Gravity:**	1.4
Freeze Point:	Not Established	**pH:**	Not Established
Vapor Pressure:	125 mm Hg @ 68 F	**Viscosity:**	Not Established
Physical State:	Paste	**Flammability:**	Flammable
Flash Point, F:	80 degrees F	**Method:**	(Pensky-Martens Closed Cup)
Lower Explosive Limit, %:	Not Established	**Upper Explosive Limit, %:**	Not Established

When reported, vapor pressure of this product has been calculated theoretically based on its constituent makeup and has not been determined experimentally.

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Excessive heat and freezing.

Incompatibility: Strong acids and oxidizing agents.

Hazardous Decomposition Products: Normal decomposition products, i.e., COx, NOx.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: Not Established **Product LC50:** Not Established

CASRN	Chemical Name	LD50	LC50
471-34-1	Calcium Carbonate	Rat:6450 mg/kg	----------
110-54-3	n-Hexane	Rat:28710 mg/kg	Rat:48000 ppm/4H
110-82-7	Cyclohexane	Rat:12705 mg/kg	----------

Significant Data with Possible Relevance to Humans: None.

Section 12 - Ecological Information

Ecological Information: None known.

Section 13 - Disposal Information

Disposal Information: Do not re-use empty containers. Liquids cannot be disposed of in a landfill. Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

EPA Waste Code if Discarded (40 CFR Section 261): D001

Section 14 - Transportation Information

DOT Proper Shipping Name:	Adhesive (Consumer Commodity)	**Packing Group:**	None (III if not domestic by ground)
DOT Technical Name:	N.A.	**Hazard Subclass:**	N.A.
DOT Hazard Class:	None (3 for non-domestic / or air)	**DOT UN/NA Number:**	None (UN1133 when not domestic ground)

Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category:

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 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard, Chronic Health Hazard, Fire Hazard

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
n-Hexane	110-54-3

Toxic Substances Control Act:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product:

Chemical Name	CAS Number
Petroleum hydrocarbon resin	TSRN-1223370035031P
Cross-linked styrene-butadiene rubber	TSRN-618608-5085P

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%:

Chemical Name	CAS Number
Petroleum hydrocarbon resin	Proprietary
Cross-linked styrene-butadiene rubber	Proprietary

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

HMIS Ratings:

Health: 2 Flammability: 3 Reactivity: 1 Personal Protection: X

Volatile Organic Compounds (VOC), less water less exempts: g/L: 312.6 lb/gal: 2.6 wt:wt%: 23.0

Volatile Organic Compounds (VOC), less water less exempts, less LVP-VOCs: wt:wt%: 23.0

REASON FOR REVISION: Periodic Update

Legend:

N.A. – Not Applicable	ACGIH – American Conference of Governmental Industrial Hygienists
N.E. – Not Established	SARA – Superfund Amendments and Reauthorization Act of 1986
N.D. – Not Determined	NJRTK – New Jersey Right-to-Know Law
VOC – Volatile Organic Compound	OSHA – Occupational Safety and Health Administration
PEL – Permissible Exposure Limit	HMIS – Hazardous Materials Identification System
TLV – Threshold Limit Value	NTP – National Toxicology Program
CEIL – Ceiling Exposure Limit	STEL – Short Term Exposure Limit
LD50 – Lethal Dose 50	LC50 – Lethal Concentration 50
F – Degree Fahrenheit	MSDS – Material Safety Data Sheet
C – Degree Celsius	CASRN – The Chemical Abstracts Service Registry Number

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. **NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS.** Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

<End of MSDS>