



# 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 demander cette fiche signalétique (MSDS) à la langue française-canadienne.  
Los Datos de Seguridad del Producto pueden obtenerse en Español si lo requiere.

<b>Product Name:</b>	DAP® BEATS THE NAIL® Subfloor & Deck Construction Adhesive	<b>Revision Date:</b>	08/30/2007
<b>Product UPC Number:</b>	070798254282, 070798254176	<b>Supercedes:</b>	05/31/2000
<b>Product Use/Class:</b>	Subfloor & Deck Construction Adhesive	<b>MSDS Number:</b>	00010303002
<b>Manufacturer:</b>	DAP Inc. 2400 Boston Street Suite 200 Baltimore, MD 21224-4723 888-327-8477 (non-emergency matters)		

## Section 2 - Hazards Identification

**Emergency Overview:** A tan paste product with a strong solvent odor. DANGER! Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Vapors may ignite explosively. Keep away from heat, sparks and flame. Do not breathe vapors. 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.

**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. Inhalation causes irritation to the respiratory tract (nose, mouth, throat, mucous membranes). Aspiration into lungs may cause pulmonary edema and chemical pneumonitis. 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.

**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. 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:**

CAS No.	Chemical Name	ACGIH	OSHA	IARC	NTP
13463-67-7	Titanium dioxide	Not Listed.	Not Listed.	Possible carcinogen.	Not Listed.

Section 3 - Composition / Information On Ingredients		
Chemical Name	CASRN	Wt%
Calcium Carbonate	471-34-1	10-30
Kaolin	1332-58-7	10-30
n-Hexane	110-54-3	7-13
Toluene	108-88-3	5-10
2-Methylpentane	107-83-5	5-10
3-Methylpentane	96-14-0	3-7
Magnesite	546-93-0	1-5
Methylcyclopentane	96-37-7	1-5
Isoheptane	591-76-4	0.5-1.5
Titanium dioxide	13463-67-7	0.1-1.0

## Section 4 - First Aid Measures

**First Aid - Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**First Aid - Skin Contact:** Wash off immediately with soap and plenty of water.

**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:** 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. Closed containers may burst if exposed to extreme heat or fire. Vapors may form explosive mixtures with air. Vapors can flow along surfaces to a distant ignition source and flash back.

**Special Firefighting Procedures:** Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

## Section 6 - Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Wear proper protective equipment as specified in Section 8. Immediately eliminate sources of ignition. Dike to prevent entering any sewer or waterway. Absorb with suitable chemical absorbent.

## Section 7 - Handling And Storage

**Handling:** KEEP OUT OF REACH OF CHILDREN! Vapors are heavier than air and will collect in low areas. Check all low areas (basements, sumps, etc.) for vapor before entering. Avoid breathing vapors. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Use in well ventilated area. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Turn off stoves, heaters, electric motors or other sources of ignition during use and until all vapors are gone. Vapors may travel long distances to a source of ignition and flash back.

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. Close container after each use. Keep tightly closed in a dry and cool place. 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
Kaolin	1332-58-7	2 MGM3	N.E.	N.E.	15 MGM3	N.E.	N.E.	No
n-Hexane	110-54-3	50 PPM	N.E.	N.E.	500 PPM	N.E.	N.E.	Yes
Toluene	108-88-3	50 PPM	N.E.	N.E.	200 PPM	N.E.	300 PPM	Yes
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
Magnesite	546-93-0	10 MGM3	N.E.	N.E.	5 MGM3	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
Titanium dioxide	13463-67-7	10 MGM3	N.E.	N.E.	15 MGM3	N.E.	N.E.	No

**Exposure Notes:** None.

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

**Engineering Controls:** Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits. 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.

**Skin Protection:** Solvent-resistant gloves.

**Eye Protection:** Goggles or safety glasses with side shields.

**Other protective equipment:** Safety shower and eyewash station should be located in immediate work area. 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

<b>Boiling Range:</b>	130 F – 180 F	<b>Vapor Density:</b>	Heavier Than Air
<b>Odor:</b>	Strong Solvent	<b>Odor Threshold:</b>	Not Established
<b>Color:</b>	Tan	<b>Evaporation Rate:</b>	Faster Than n-Butyl Acetate
<b>Solubility in H2O:</b>	Neqligible	<b>Specific Gravity:</b>	1.1
<b>Freeze Point:</b>	Not Established	<b>pH:</b>	Between 7.0 and 12.9
<b>Vapor Pressure:</b>	100 mm Hg @ 68 F	<b>Viscosity:</b>	170,000 - 250,000 cPs
<b>Physical State:</b>	Paste	<b>Flammability:</b>	Flammable
<b>Flash Point, F:</b>	75 Degrees F	<b>Method:</b>	(Seta Closed Cup)
<b>Lower Explosive Limit, %:</b>	Not Established	<b>Upper Explosive Limit, %:</b>	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 oxidizers, alkali metals and alkaline earth metals may cause fires or explosions.

**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
108-88-3	Toluene	-----	Rat:49 gm/m3/4H

**Significant Data with Possible Relevance to Humans:** None.

## Section 12 - Ecological Information

**Ecological Information:** Ecological injuries are not known or expected under normal use.

## 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. After recovery of solvent dispose of by special waste incineration in compliance with the Environment Protection Act 1990 (Process Guidance Note IPR5/1). 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

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

### 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
Toluene	108-88-3

### 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:

Chemical Name	CAS Number
Isoheptane	591-76-4

### 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
Butadiene-styrene copolymer	TSRN 618608-5037P

Hydrocarbons, C9 unsaturated, polymerize

|TSRN 618608-5036P

**Pennsylvania Right-to-Know:**

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

Chemical Name	CAS Number
Butadiene-styrene copolymer	Proprietary
Hydrocarbons, C9 unsaturated, polymerize	Proprietary

**California Proposition 65:**

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

<b>Section 16 - Other Information</b>
---------------------------------------

**HMIS Ratings:**

Health: 2	Flammability: 3	Reactivity: 0	Personal Protection: X
-----------	-----------------	---------------	------------------------

**Volatile Organic Compounds (VOC), less water less exempts: g/L: 427.4 lb/gal: 3.6 wt:wt%: 38.7**

**Volatile Organic Compounds (VOC), less water less exempts, less LVP-VOCs: wt:wt%: 38.7**

**REASON FOR REVISION:** Periodic Update

<b>Legend:</b>	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>