

# Material Safety Data Sheet

## 24 Hour Emergency Phone Numbers:

Medical: 1-800-327-3874  
1-513-558-5111

Transportation:  
1-800-535-5053  
1-352-323-3500

.....  
 \*NOTE: 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.  
 Esta hoja de datos de la seguridad de los materiales está disponible en francés canadiense y en español a su solicitud.  
 Los Datos de Seguridad del Producto pueden obtenerse en Espanol si lo requiere.

**Product Name:** DYNAFLEX 230 CLEAR

**Product UPC Number:** 18304 18305 18355

**Product Use/Class:** Latex Caulk

**Manufacturer:** DAP Inc.  
 2400 Boston Street Suite 200  
 Baltimore, MD 21224-4723  
 888-327-8477 (non-emergency matters)

**Revision Date:** 05/31/2005

**Supercedes:** 03/10/2003

**MSDS Number:** 00010020001

## Section 2 - Composition / Information On Ingredients

Chemical Name	CASRN	WT%	ACGIH TWA	ACGIH STEL	ACGIH CEIL	OSHA TWA	OSHA STEL	OSHA CEIL	Skin
Ethylene glycol	107-21-1	1-5	N.E.	N.E.	100 MGM3	N.E.	N.E.	N.E.	No
Amorphous silica	112945-52-5	1-5	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Gamma-aminopropyltriethoxysila	919-30-2	0.1-1.0	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Ammonia	7664-41-7	0.1-1.0	25 PPM	35 PPM	N.E.	50 PPM	N.E.	N.E.	No
Formaldehyde	50-00-0	<0.06	N.E.	N.E.	0.3 PPM	0.75 PPM	2 PPM	N.E.	No
Acetaldehyde	75-07-0	<0.004	N.E.	N.E.	25 PPM	200 PPM	N.E.	N.E.	No
Acrylamide	79-06-1	<0.003	0.03 MGM3	N.E.	N.E.	0.3 MGM3	N.E.	N.E.	Yes
Ethyl acrylate	140-88-5	<0.0002	5 PPM	15 PPM	N.E.	25 PPM	N.E.	N.E.	Yes

### Exposure Notes:

50-00-0 Formaldehyde is a specially regulated substance for which an OSHA chemical-specific exposure standard exists. Detailed information regarding this substance may be found in 29 CFR 1910.1048. Medical surveillance information regarding this substance may be found in Appendix C to 29 CFR 1910.1048.

**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 3 - Hazards Identification

**Emergency Overview:** A clear paste with a very slight ammonia odor. WARNING! Harmful if swallowed or absorbed through the skin. May cause eye, skin, nose, throat and respiratory tract irritation. This product contains ethylene glycol.

Refer to other MSDS sections for other detailed information.

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

**Effects Of Overexposure - Skin Contact:** Harmful if absorbed through the skin. May cause skin irritation.

**Effects Of Overexposure - Inhalation:** Harmful if inhaled. Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Prolonged, repeated, or high exposures may cause weakness and depression of the central nervous system.

**Effects Of Overexposure - Ingestion:** Harmful if swallowed. If ingested, may cause vomiting, diarrhea, and depressed respiration. Ingestion of ethylene glycol can cause gastrointestinal irritation, nausea, vomiting, diarrhea and if ingested in sufficient quantities, death.

**Effects Of Overexposure - Chronic Hazards:** Prolonged and repeated skin contact may cause irritation and possibly dermatitis. Repeated or prolonged exposure may cause respiratory system damage.

Overexposure may cause kidney, cardiovascular, skin and liver damage.

Formaldehyde vapor is a known animal carcinogen according to OSHA and NTP and is considered possibly carcinogenic to humans by inhalation. The International Agency for Research on Cancer considers formaldehyde to be a human carcinogen.

Ethylene Glycol may cause kidney and liver damage upon prolonged and repeated overexposures. Studies have shown that repeated inhalation of ethylene glycol has produced adverse cardiovascular changes in laboratory animals. Ethylene glycol has been shown to cause birth defects in laboratory animals.

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

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

### Section 4 - First Aid Measures

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

**First Aid - Skin Contact:** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing.

**First Aid - Inhalation:** If inhaled, remove to fresh air. If breathing is difficult, leave the area to obtain fresh air. If continued breathing difficulty is experienced, 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

**Flash Point, F:** Greater than 200  
**Method:** (Seta Closed Cup)

**Lower Explosive Limit, %:** Not Established  
**Upper Explosive Limit, %:** Not Established

**Extinguishing Media:** Carbon Dioxide, Dry Chemical, Foam, Water Fog

**Unusual Fire And Explosion Hazards:** No special protective measures against fire required.

**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. Use absorbent material or scrape up dried material and place in container.

## Section 7 - Handling And Storage

**Handling:** KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Do not breathe vapors. Use only with adequate ventilation. Wash thoroughly after handling. Avoid breathing vapor and contact with eyes, skin and clothing. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions.

**Storage:** Close container after each use. Store containers away from excessive heat and freezing. Store away from caustics and oxidizers. Do not store at temperatures above 120 degrees F.

## Section 8 - Exposure Controls / Personal Protection

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

**Engineering Controls:** Good general ventilation should be sufficient to control airborne levels. Ensure adequate ventilation, especially in confined areas. Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits.

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. 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:** Rubber gloves.

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

**Other protective equipment:** Not required under normal use.

**Hygienic Practices:** Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

## Section 9 - Physical And Chemical Properties

<b>Boiling Range:</b>	210 - 220 F	<b>Vapor Density:</b>	Heavier Than Air
<b>Odor:</b>	Very Slight Ammonia	<b>Odor Threshold:</b>	Not Established
<b>Appearance:</b>	Clear	<b>Evaporation Rate:</b>	Slower Than n-Butyl Acetate
<b>Solubility in H2O:</b>	Not Established	<b>Specific Gravity:</b>	1.064
<b>Freeze Point:</b>	Not Established	<b>pH:</b>	Between 7.0 and 12.0
<b>Vapor Pressure:</b>	Not Established	<b>Viscosity:</b>	Not Established
<b>Physical State:</b>	Paste		

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:** Incompatible with strong bases 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	WT%
107-21-1	Ethylene glycol	Rat:4700 mg/kg	Rat:10876 mg/kg	1-5
112945-52-5	Amorphous silica	Rat:3160 mg/kg	-----	1-5
7664-41-7	Ammonia	-----	Rat:2000 ppm/4H	0.1-1.0
50-00-0	Formaldehyde	-----	Rat:203 mg/m3	<0.06
75-07-0	Acetaldehyde	-----	Rat:13300 ppm/4H	<0.004
79-06-1	Acrylamide	Oral Rat:124 mg/kg	-----	<0.003
140-88-5	Ethyl acrylate	-----	Rat:1414 ppm/4H	<0.0002

**Carcinogenicity:**

CAS No.	Chemical Name	ACGIH	OSHA	IARC	NTP	WT%
50-00-0	Formaldehyde	Suspected human carcinogen.	Potential cancer hazard.	Human carcinogen.	Anticipated carcinogen.	<0.06
75-07-0	Acetaldehyde	Confirmed animal carcinogen with unknown relevance to humans.	-----	Possible carcinogen.	Anticipated carcinogen.	<0.004
79-06-1	Acrylamide	Confirmed animal carcinogen with unknown relevance to humans.	-----	Probable carcinogen.	Anticipated carcinogen.	<0.003
140-88-5	Ethyl acrylate	-----	-----	Possible carcinogen.	-----	<0.0002

**Significant Data with Possible Relevance to Humans:** This product contains trace amounts of free formaldehyde. OSHA and NTP identify formaldehyde as a potential carcinogen. IARC identifies formaldehyde as a human carcinogen. Formaldehyde has been shown to cause mutations in a variety of in-vitro test systems, the

significance of which to humans is unknown. In a two-year inhalation study, rats showed carcinogenic effects in the respiratory system at 15 ppm of formaldehyde. There should be minimal risk when used with ventilation adequate to keep the atmospheric concentration of formaldehyde below the recommended exposure limits. Maintain adequate ventilation to prevent exposure above current OSHA / ACGIH exposure limits. Workplace monitoring of the air to define formaldehyde exposure levels may be necessary.

## Section 12 - Ecological Information

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

## Section 13 - Disposal Information

**Disposal Information:** 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):** None

## Section 14 - Transportation Information

<b>DOT Proper Shipping Name:</b>	Not Regulated	<b>Packing Group:</b>	N.A.
<b>DOT Technical Name:</b>	N.A.	<b>Hazard Subclass:</b>	N.A.
<b>DOT Hazard Class:</b>	N.A.	<b>DOT UN/NA Number:</b>	N.A.

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

### 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	WT%
Ethylene glycol	107-21-1	1-5

### 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

## U.S. State Regulations

### 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	WT%
Proprietary Acrylic Polymer	Proprietary	30-60
Water	7732-18-5	30-60
White mineral oil	8042-47-5	7-13

### Pennsylvania Right-to-Know:

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

Chemical Name	CAS Number	WT%
Proprietary Acrylic Polymer	Proprietary	30-60
Water	7732-18-5	30-60
White mineral oil	8042-47-5	7-13

### California Proposition 65:

Warning: The following ingredients present in the product are known to the State of California to cause cancer:

Chemical Name	CAS Number	Definition	Date Listed	WT%
Formaldehyde	50-00-0	Carcinogenic.	Listed: January 1, 1988	<0.06
Acetaldehyde	75-07-0	Carcinogenic.	Listed: April 1, 1988	<0.004
Acrylamide	79-06-1	Carcinogenic.	Listed: January 1, 1990	<0.003
Ethyl acrylate	140-88-5	Carcinogenic.	Listed: July 1, 1989	<0.0002

Warning: The following ingredients present in the product are known to the State of California to cause birth defects or other reproductive harm:

None

## Section 16 - Other Information

### HMIS Ratings:

Health: 1                      Flammability: 0                      Reactivity: 0                      Personal Protection: X

**VOLATILE ORGANIC COMPOUNDS, GR/LTR:** 48.4                      **LB/GAL:** 0.4                      **WT%:** 2.615

**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

STEL – Short Term Exposure Limit

CEIL – Ceiling Exposure Limit

LD50 – Lethal Dose 50

LC50 – Lethal Concentration 50

F – Degree Fahrenheit

C – Degree Celsius

MSDS – Material Safety Data Sheet

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>