MATERIAL SAFETY DATA SHEET

DAP, INC.
P.O. BOX 277
DAYTON, OH 45401-0277

MSDS NO: DAP / 30201
INTERNAL ID: 30201
DAP WELDWOOD PLASTIC RESIN
GLUE
REVISION: 3
DATE: JUNE 22, 1993

--- PAGE 1 ---

SECTION I. MATERIAL IDENTIFICATION

TRADE/MATERIAL NAME: DAP WELDWOOD PLASTIC RESIN
GLUE
DESCRIPTION: UREA FORMALDEHYDE RESIN POWDER
CAS: MIXTURE
PREVIOUS MSDS REVISION DATE: JUNE 29, 1990

DOT INFORMATION FOR DOMESTIC GROUND TRANSPORT:
SHIPPING NAME (49 CFR 172.101): NONE (NOT REGULATED BY D.O.T.)
D.O.T. HAZARD CLASS (49 CFR 172.101): NONE
D.O.T. ID NO. (49 CFR 172.101): NONE
D.O.T. LABEL REQUIRED (49 CFR 172.101): NONE
D.O.T. PACKAGING GROUP (49 CFR 172.101): NONE
EPA HAZARD CLASS - IF DISCARDED (40 CFR 261): NONE

MANUFACTURER: DAP INC.
P.O. BOX 277
DAYTON, OH 45401-0277
PHONE: 24 HOUR EMERGENCY:
INFO TRAC 1-800-535-5053
DAP INC. 1-800-543-3840
GENERAL INFORMATION:
DAP INC. 1-800-543-3840

SECTION II. INGREDIENTS AND HAZARDS

INGREDIENT NAME: CAS NUMBER: PERCENT: EXPOSURE LIMITS:
UREA-FORMALDEHYDE POLYMER 9011-05-6 94-99 OSHA PEL: 15MG/M³ (TOTAL DUST)
OSHA PEL: 5MG/M³ (RESPIRABLE DUST)
+FORMALDEHYDE 50-00-0 <2 OSHA PEL: 0.75PPM
CEILING PEL: 2PPM
ACGIH TLV: 1PPM
ACGIH STEL: 2PPM
OSHA PEL: .5MG/M³
ACGIH TLV: .5MG/M³
BARIUM CHLORIDE 10361-37-2 <4

REMAING INGREDIENTS ARE NOT REGULATED BY OSHA AND ARE CONSIDERED TRADE SECRETS.

IF PRESENT, CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313 ARE INDICATED WITH A "*" PRECEDING THE CHEMICAL NAME ABOVE.

*AS BARIUM COMPOUNDS.

MSDS 30201 CONTINUES ON PAGE 2 --- PAGE 1
SECTION III. PHYSICAL DATA

APPEARANCE & ODOR: FREE FLOWING, AMBER POWDER WITH A SLIGHT FORMALDEHYDE ODOR

BOILING POINT: NOT AVAILABLE
VAPOR PRESSURE: NOT AVAILABLE
WATER SOLUBILITY (%): SLIGHT
VAPOR DENSITY (AIR=1): NOT APPLICABLE

EVAPORATION RATE: NOT APPLICABLE
SPECIFIC GRAVITY (H2O=1): 0.5-0.6
MELTING POINT: 194 - 200 F
% VOLATILE BY VOLUME: <2

VOC LESS WATER LESS EXEMPT SOLVENT (GRAMS/LITER): NEGLIGIBLE
VOC MATERIAL (GRAMS/LITER): NEGLIGIBLE

SECTION IV. FIRE AND EXPLOSION DATA

FLASH POINT (METHOD): >200F
LIMITS: LEL %: NE
UEL %: NE

EXTINGUISHING MEDIA: FOAM, WATER, DRY CHEMICALS, CO2, FOG

UNUSUAL FIRE OR EXPLOSION HAZARDS: POSSIBLE DUST EXPLOSION IF DISPERSED IN AIR IN LARGE QUANTITIES.

SPECIAL FIRE-FIGHTING PROCEDURES: WEAR SELF-CONTAINED, POSITIVE PRESSURE BREATHING APPARATUS AND FULL FIRE-FIGHTING PROTECTIVE CLOTHING.

SECTION V. REACTIVITY DATA

MATERIAL IS STABLE AT ROOM TEMPERATURE. HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

CHEMICAL INCOMPATIBILITIES: STRONG OXIDIZERS AND CAUSTICS

CONDITIONS TO AVOID: EXCESSIVE HEAT, CONTACT WITH WATER (IN EMERGENCY SITUATIONS)

HAZARDOUS DECOMPOSITION PRODUCTS: NORMAL COMBUSTION PRODUCTS, I.E. COX, NOX, FORMALDEHYDE AND AMMONIA.

SECTION VI. HEALTH HAZARD INFORMATION

THIS PRODUCT CONTAINS MATERIAL CONSIDERED A KNOWN ANIMAL CARCINOGEN BY NTP AND IARC*.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY CONTACT: ASTHMA AND ASTHMA-LIKE CONDITIONS MAY WORSEN FROM EXPOSURE.

PRIMARY ENTRY ROUTE(S): SKIN CONTACT, EYE CONTACT, INHALATION

ACUTE EFFECTS: RESIN IS A STRONG SENSITIZER. MAY CAUSE SKIN OR EYE IRRITATION CHARACTERIZED BY REDNESS, DRYING OR CRACKING OF SKIN. INHALATION OF DUST OR VAPOR IRRITATES UPPER RESPIRATORY TRACT CAUSING COUGHING, GAGGING AND IRRITATION OF MUCOUS MEMBRANES.

CHRONIC EFFECT(S): REPEATED EXPOSURE MAY CAUSE SKIN SENSITIZATION AND DERMATITIS. SEE FOOT NOTE BELOW FOR ADDITIONAL INFORMATION.
HEALTH HAZARD INFORMATION CONTINUED FROM PAGE 2

SIGNS & SYMPTOMS OF OVEREXPOSURE:

EYE CONTACT: CAN CAUSE SEVERE IRRITATION.

SKIN CONTACT: REPEATED CONTACT CAN CAUSE SENSITIZATION AND DERMATITIS DUE TO FORMALDEHYDE.

INHALATION: DUST MAY CAUSE IRRITATION. MAY AGGRAVATE COLD, ALLERGIES, ASTHMA, EMPHYSEMA AND PSORIASIS.

FORMALDEHYDE VAPORS ARE CARCINOGENIC (SEE FOOT NOTE BELOW).

INGESTION: MAY CAUSE STOMACH AND INTESTINAL IRRITATION, VOMITING, DIARRHEA, SWEATING, WEAKNESS, AND HEADACHE. INGESTION OF OVER ABOUT 1 GRAM/DAY OF BARIUM CHLORIDE MAY RAISE BLOOD PRESSURE AND AFFECT HEART ACTION.

FIRST AID:

EYE CONTACT: FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. CONTACT A PHYSICIAN IMMEDIATELY.

SKIN CONTACT: WASH WITH SOAP AND WATER WHILE REMOVING CONTAMINATED CLOTHING. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

INHALATION: REMOVE TO FRESH AIR. CONTACT A PHYSICIAN IMMEDIATELY.

INGESTION: GIVE LARGE QUANTITIES OF WATER IF CONSCIOUS, INDUCE VOMITING. CONTACT A PHYSICIAN OR REGIONAL POISON CONTROL CENTER IMMEDIATELY.

*FORMALDEHYDE VAPOR IS A KNOWN ANIMAL CARCINOGEN (NTP & IARC) AND IS CONSIDERED POSSIBLY CARCINOGENIC TO HUMANS BY INHALATION. RISK TO ONE'S HEALTH DEPENDS ON LEVEL AND DURATION OF EXPOSURE. EXPOSURE SHOULD BE MINIMIZED OR AVOIDED AND RECOMMENDED PERSONAL PROTECTION MEASURES SHOULD BE FOLLOWED.

SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

SPILL / LEAK PROCEDURES: PROVIDE VENTILATION. VACUUM UP AND REUSE EXCESS POWDER. PLACE REMAINING POWDER INTO CONTAINERS. REPORTABLE QUANTITY FOR FORMALDEHYDE IS 100 POUNDS.

WASTE MANAGEMENT / DISPOSAL: DISPOSE OF ACCORDING TO FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT REUSE EMPTY CONTAINER.
SECTION VIII. SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT:

GOGGLES: SAFETY GLASSES
GLOVES: IMPERVIOUS GLOVES

RESPIRATOR: IF 8-HOUR EXPOSURE LIMIT OR VALUE IS EXCEEDED FOR ANY COMPONENT, USE AN APPROVED NIOSH/OSHA RESPIRATOR. CONSULT YOUR SAFETY EQUIPMENT SUPPLIER AND THE OSHA REGULATION, 29 CFR 1910.134 FOR RESPIRATOR REQUIREMENTS.

WORKPLACE CONSIDERATIONS:

VENTILATION: PROVIDE SUFFICIENT MECHANICAL VENTILATION (LOCAL OR GENERAL EXHAUST) TO MAINTAIN EXPOSURE BELOW PEL AND TLV.

SAFETY STATIONS:

PROVIDE EYEWASH AND IMPERVIOUS APRON IF BODY CONTACT WITH PRODUCT MAY OCCUR. BARRIER CREAMS MAY BE USED.

CONTAMINATED EQUIPMENT:

WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION IX. SPECIAL PRECAUTIONS

STORAGE SEGREGATION: STORE AWAY FROM CAUSTICS AND OXIDIZERS.

SPECIAL HANDLING / STORAGE: KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. KEEP OUT OF REACH OF CHILDREN. KEEP CONTAINERS FROM EXCESSIVE HEAT AND FREEZING. MINIMIZE GENERATING DUST. CLEAN UP ANY DUST ACCUMULATIONS. REMOVE SOURCE OF IGNITION.

WARNING: THIS PRODUCT CONTAINS FORMALDEHYDE, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

DOT CLASS: NONE
UN REGISTER: NONE

THIS DATA IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE IF THEY ARE APPROPRIATE.

END OF MSDS 30201