

CASEWAY INDUSTRIAL PRODUCTS, INC.
1050 GREEN PINE CIRCLE
ORANGE PARK, FL 32065
TEL: (904)214-9056 FAX: (904)375-2439

EMERGENCY TELEPHONE NUMBER
CHEM-TEL: 1-800-255-3924

MATERIAL SAFETY DATA SHEET

SC 325 POLYCARBONATE CEMENT

MSDS DATE: 07/10/04

SUPERSEDES: 2/01

SHIPPING INFORMATION:

PROPER SHIPPING NAME: ADHESIVE

HAZARD CLASS OR DIVISION: 3 PACKING GROUP: II IDENTIFICATION NUMBER: UN1133

SHIPPING LABEL: FLAMMABLE LIQUID ** SEE D.O.T. 173- (LTD. QTY.)

COMPONENTS INFORMATION:

A. TETRAHYDROFURAN (THF) CAS. # 109-99-9 MAJOR
PEL (OSHA) 200 PPM, 590 mg/m³, 8 hr, TWA
TLV (ACGIH) 200 PPM, 590 mg/m³, 8HR. TWA
STEL 250 PPM, 737 mg/m³

NPCA -- HMIS RATING: HEALTH 3 FLAMMABILITY 3 REACTIVITY 1

NFPA RATING: HEALTH 2 FLAMMABILITY 3 REACTIVITY 1

THIS PRODUCT IS HAZARDOUS OR CONTAINS COMPONENTS THAT ARE HAZARDOUS ACCORDING TO THE OSHA HAZARD COMMUNICATIONS STANDARD.

CANADIAN WHMIS RATINGS: D-2B - TOXIC MATERIAL. SKIN OR EYE IRRITANT. B-2 FLAMMABLE LIQUID

B. DICHLOROMETHANE (METHYLENE CHLORIDE) CAS.# 75-09-2 MAJOR

OSHA PEL 25 PPM, TWA 125 PPM, STEL ACGIH TLV 50 PPM

(NFPA) RATINGS: HEALTH 2 FLAMMABILITY 1 REACTIVITY 0

PHYSICAL DATA:

APPEARANCE: CLEAR LIQUID

ODOR: ETHEREAL

BOILING POINT: 104⁰F 39.8⁰C

MELTING POINT: -163.3⁰F -108.8⁰C

SPECIFIC GRAVITY: 1.11

SOLUBILITY IN WATER: 2.0g/100g @ 25⁰C

VAPOR PRESSURE: 355 mmHg@ 20⁰ C

VAPOR DENSITY: 2.93

EVAPORATION RATE : N/E

FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: -20⁰C -4⁰F TCC

AUTOIGNITION TEMPERATURE: 321⁰C 610⁰F

EXTINGUISHING AGENT: USE ANSUL "PURPLE k" POTASSIUM BICARBONATE-BASE DRY CHEMICAL OR NATIONAL "AER-O-FOAM" UNIVERSAL ALCOHOL RESISTANT FOAM.

SPECIAL PROCEDURES: EVACUATE AFFECTED AREA -- STAY UP WIND AND AVOID SMOKE AND FUMES.

USE WATER SPRAY TO COOL CONTAINERS, IN ORDER TO PREVENT PRESSURE BUILD-UP. PRESSURE DEMAND, SELF-CONTAINED RESPIRATORY PROTECTION SHOULD BE PROVIDED FOR FIRE-FIGHTERS IN BUILDINGS OR CONFINED AREAS WHERE THIS PRODUCT IS STORED.

UNUSUAL HAZARDS: EXTREMELY FLAMMABLE -- CAN EXPLODE IN HIGH TEMPERATURES AND GIVE OFF HYDROCHLORIC ACID AS GAS, PLUS OTHER TOXIC AND IRRITATING VAPORS SUCH AS PHOSGENE.

REACTIVITY DATA:

STABILITY: INSTABILITY CAN FORM POTENTIALLY EXPLOSIVE PEROXIDES UPON LONG STANDING IN AIR.

INCOMPATIBILITY: STRONG OXIDIZERS -- PURE OXYGEN -- OPEN FLAMES -- WELDING ARC -- ALKALI METALS.

DECOMPOSITION: INVOLVEMENT IN FIRE OR HEAT CAN FORM HYDROGEN CHLORIDE, VERY SMALL AMOUNTS OF PHOSGENE, CHLORINE, AND PEROXIDES.

POLYMERIZATION: CAN OCCUR IN PRESENCE OF CATIONIC INITIATORS SUCH AS SELECTED: LEWIS ACIDS -- STRONG PROTON ACIDS.

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SPILL OR LEAK HANDLING DATA:

PROCEDURES: EVACUATE TO FRESH AIR AND VENTILATE AREA BEFORE REENTERING. REMOVE SOURCES OF HEAT-SPARKS-FLAME-IMPACT-FRICTION-ELECTRICITY. DIKE SPILL. USE WATER SPRAY TO DISPERSE VAPORS OR TO FLUSH LIQUID AWAY FROM FIRE EXPOSURE. PREVENT LIQUID FROM ENTERING SEWERS, WATERWAYS, OR LOW AREAS. COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. THE SUPERFUND REPORTABLE DISCHARGE IS 1000 POUNDS.

WASTE DISPOSAL: CLEAN-UP MATERIAL IS A RCRA HAZARDOUS WASTE. TREATMENT, STORAGE, TRANSPORTATION, AND DISPOSAL MUST BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. IF PERMITS ALLOW, MAY BE INCINERATED.

SPECIAL PROTECTION DATA:

RESPIRATORY PROTECTION: USE A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR FOR AIR CONCENTRATIONS OVER 50PPM.

VENTILATION: WORK IN WELL -VENTILATED AREAS. MAINTAIN EXPOSURE LEVEL BELOW 50PPM.

EYE PROTECTION: SAFETY SPECTACLES WITH SIDE SHIELDS -- CHEMICAL SPLASH GOGGLES -- FULL-LENGTH FACE SHIELD.

HAND PROTECTION: SOLVENT RESISTANT GLOVES SHOULD BE WORN, SUCH AS RUBBER.

OTHER PROTECTION: APRON -- SAFETY BOOTS -- BOOTS OVER LEATHER SHOES. EYEWASH AND SHOWER.

HEALTH HAZARD DATA:

GENERAL: THIS HEALTH HAZARD ASSESSMENT IS BAED PRIMARILY ON INFORMATION FROM THE SCIENTIFIC LITERATURE.

INGESTION: THE ACUTE ORAL LD50 IN RAT IS REPORTED TO BE IN THE RANGE 1.5-5.0g/kg. RELATIVE TO OTHER MATERIALS, A SINGLE DOSE OF THIS PRODUCT IS SLIGHTLY TOXIC BY INGESTION. SWALLOWING AN EXCESSIVE AMOUNT CAN CAUSE GASTROINTESTINAL DISTURBANCES AND CENTRAL NERVOUS SYSTEM DEPRESSION.

FIRST AID: DO NOT INDUCE VOMITING. GIVE 1 OR 2 GLASSES OF WATER TO DRINK AND REFER VICTIM TO MEDICAL PERSONNEL. **NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.**

EYE CONTACT: MAY CAUSE PAIN DISPROPORTIONATE TO THE LEVEL OF IRRITATION OF EYES TISSUES. MAY CAUSE MODERATE EYE IRRITATION, WHICH MAY BE SLOW TO HEAL.

FIRST AID: IMMEDIATELY FLUSH WITH PLENTY OF WATER. AFTER INITIAL FLUSHING, REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. IF REDNESS, ITCHING OR A BURNING SENSATION DEVELOPS, HAVE EYES EXAMINED AND TREATED BY MEDICAL PERSONNEL.

SKIN CONTACT: PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION, EVEN A BURN. REPEATED CONTACT MAY CAUSE DRYING OR FLAKING OF SKIN. MAY CAUSE MORE SEVERE RESPOSE ON COVERED SKIN (UNDER CLOTHING OR GLOVES).

FIRST AID: WASH SKIN WITH PLENTY OF WATER.

INHALATION: IN CONFINED OR POORLY VENTILATED AREAS. VAPORS CAN READILY ACCUMULATE AND CAN CAUSE UNCONSCIOUSNESS AND DEATH. EXCESSIVE EXPOSURE MAY CAUSE IRRITATION TO UPPER RESPIATORY TRACT (NOSE AND THROAT). MAY CAUSE CARBOXYHEMOGLOBINEMIA, THEREBY IMPAIRING THE BLOOD'S ABILITY TO TRANSPORT OXYGEN. MINIMAL ANESTHETIC OR NARCOTIC EFFECTSS MAY BE SEEN IN THE RANGE OF 500-1000 PPM. PROGRESSIVELY HIGHER LEVELS OVER 1000 PPM CAN CAUSE DIZZINESS, DRUNKENNESS, AND AS LOW AS 10,000 PPM, UNCONSCIOUSNESS AND DEATH. THESE HIGH LEVELS MAY ALSO CAUSE CARDIAC ARRHYTHMIAS (IRREGULAR HEARTBEATS).

FIRST AID: REMOVE VICTIM TO FRESH AIR. IF COUGH OR OTHER RESPIRATORY SYMPTOMS DEVELOP, CONSULT MEDICAL PERSONNEL. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLE MOUTH-TOMOUTH. IF BREATHING IS LABORED GIVE OXYGEN. CONSUL MEDICAL PERSONNEL.

CANCER INFORMATION: FOR HAZARD COMMUNICATION PURPOSES, UNDER OSHA STANDARD 29 CFR PART 1910.1200, THE METHYLENE CHLORIDE IS LISTED AS A POTENTIAL CARCINOGEN BY IARC AND NTP. METHYLENE CHLORIDE HAS BEEN SHOWN TO INCREASE THE INCIDENCE OF MALIGNANT TUMORS IN MICE AND BENIGN TUMORS IN RATS. STUDIES HAVE SHOWN THAT TUMORS OBSERVED IN MICE ARE UNIQUE TO THAT SPECIES. OTHER ANIMAL STUDIES, AS WELL AS SEVERAL HUMAN EPIDEMIOLOGY STUDIES, FAILED TO SHOW A TUMORIGENIC RESPONSE. METHYLENE CHLORIDE IS NOT BELIEVED TO POSE A MEASURABLE CARCINOGENIC RISK TO MAN WHEN HANDLES AS RECOMMENDED.

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HEALTH HAZARD DATA CONTINUED:

NOTE TO PHYSICIAN: CARBOXYHEMOGLOBINEMIA MAY AGGRAVATE ANY REEXISTING CONDITION SENSITIVE TO A DECREASE IN AVAILABLE OXYGEN, SUCH AS CHRONIC LUNG DISEASE, CORONARY ARTERY DISEASE OR ANEMIAS. IF BURN IS PRESENT, TREAT AS ANY THERMAL BURN AFTER DECONTAMINATION. BECAUSE RAPID ABSORPTION MAY OCCUR THROUGH THE LUNGS IF ASPIRATED AND CAUSE SYSTEMIC EFFECTS, THE DECISION OF WHETHER TO INDUCE VOMITING OR NOT SHOULD BE MADE BY A PHYSICIAN. IF LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL AND/OR ESOPHAGEAL CONTROL. DANGER FROM LUNG ASPIRATION MUST BE WEIGHED AGAINST TOXICITY WHEN CONSIDERING EMPTYING THE STOMACH. EXPOSURE MAY INCREASE "MYOCARDIAL IRRITABILITY." DO NOT ADMINISTER SYMPATHOMIMETIC DRUGS UNLESS ABSOLUTELY NECESSARY. NO SPECIFIC ANTIDOTE. TREATMENT OF EXPOSURE SHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITION OF THE PATIENT.

REGULATORY DATA:

TSCA (TOXIC SUBSTANCES CONTROL ACT) REGULATIONS, 40 CFR 710: INGREDIENTS ARE ON THE TSCA CHEMICAL SUBSTANCE INVENTORY.

CERCLA AND SARA REGULATIONS (40 CFR 355.370, AND 372): SECTION 313 SUPPLIER NOTIFICATION. THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372:
100% METHYLENE CHLORIDE (CAS: 75-09-2)

CALIFORNIA PROPOSITION 65: **WARNING:** THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE.

STATE RIGHT-TO-KNOW: THE FOLLOWING PRODUCT COMPONENTS ARE CITED ON CERTAIN STATE LIST AS MENTION. NON-LISTED COMPONENTS MAY BE SHOWN IN THE COMPOSITION SECTION OF THE MSDS.

DICHLOROMETHANE (METHYLENE CHLORIDE) CAS# 000075-09-2 LIST: NJ2 NJ3 PA1 PA2 PA3

NJ2=NEW JERSEY ENVIRONMENTAL HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%)

NJ3=NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%)

PA1=PENNSYLVANIA HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%)

PA2=PENNSYLVANIA SPECIAL HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 0.01%).

PA3=PENNSYLVANIA ENVIRONMENTAL HAZARDOUS SUBSTANCE (PRESENT AT GREATER THAN OR EQUAL TO 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

METHYLENE CHLORIDE IS A "HAZARDOUS CHEMICAL" AS DEFINED BY OSHA HAZARD COMMUNICATION STANDARD, 29CFR 1910.1200 COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA OR SUPERFUND). THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCE (S) LISTED AS "HAZARDOUS SUBSTANCES" UNDER CERCLA WHICH MAY REQUIRE REPORTING OF RELEASES:

CHEMICAL NAME: METHYLENE CHLORIDE CAS# 000075-09-2 RQ 1000 99.9%

CANADIAN REGULATIONS: WHNIS INFORMATION: THE CANADIAN WORKPLACE HAZARDOUS MATERIAL INFORMATION (WHMIS) CLASSIFICATION FOR THIS PRODUCT:

D1B – POISONOUS SUBSTANCE DEFINED BY TDG REGULATIONS

D2A – POSSIBLE, PROBABLE OR UNKNOWN HUMAN CARCINOGEN ACCORDING TO CLASSIFICATIONS BY IARC OR ACGIH

D2B – EYE OR SKIN IRRITANT: REFER ELSEWHERE IN THE MSDS FOR SPECIFIC WARNINGS AND SAFE HANDLING INFORMATION. REFER TO EMPLOYER'S WORKPLACE EDUCATION PROGRAM.

CPR STATEMENT: THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF CANADIAN CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

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REGULATORY DATA CONTINUED:

HAZARDOUS PRODUCTS ACT INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING INGREDIENTS WHICH ARE CONTROLLED PRODUCTS AND/OR ON THE INGREDIENT DISCLOSURE LIST (CANADIAN HPA SECTION 13 AND 14):

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): ALL SUBSTANCES IN THIS PRODUCT IS LISTED ON THE CANADIAN DOMESTIC SUBSTANCES LIST (DSL) OR IS NOT REQUIRE TO BE LISTED.

ABBREVIATIONS:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
D.O.T.: DEPARTMENT OF TRANSPORTATION
MG/M³: A WAY OF EXPRESSING THE CONCENTRATION OF A SUBSTANCE IN AIR: MILLIGRAMS(MG) OF SUBSTANCE PER CUBIC METER (M³) OF AIR
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL: PERMISSIBLE EXPOSURE LIMIT
PPM: PARTS PER MILLION. GENERALLY USED TO EXPRESS SMALL CONCENTRATIONS OF ONE SUBSTANCE IN A MIXTURE
STEL: SHORT-TERM EXPOSURE LIMIT
TLV: THRESHOLD LIMIT VALUE
TWA: TIME WEIGHTED AVERAGE

STATEMENT:

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. CASEWAY ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO VENDEES, USERS OR THIRD PARTIES CAUSED BY THE MATERIAL. SUCH VENDEES OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THE MATERIAL