

M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : 2146 MC CONTACT ADHESIVE
 UPC NUMBER : 04652, 04654, 04662, 04664

PRODUCT USE/CLASS : Contact Adhesive

MANUFACTURER: DAP INC. 2400 Boston Street Baltimore MD 21224	24 HOUR EMERGENCY: TRANSPORTATION: 1-800-535-5053 MEDICAL : 1-800-327-3874
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PREPARE DATE : 08/27/1999 REVISION NO. : 4 REVISION DATE: 08/27/1999	GENERAL INFORMATION: DAP INC.: 1-800-543-3840
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SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % RANGE
01	Methylene chloride	75-09-2	75.0-80.0 %

EXPOSURE LIMITS						
	ACGIH		OSHA		COMPANY	
ITEM	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	SKIN
01	50 ppm	N.E.	25 ppm	125 ppm	N.E.	NO

(See Section 16 for abbreviation legend)

Remaining ingredients are not considered hazardous per the OSHA Hazard Communication Standard.

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

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! Vapor harmful. Harmful or fatal if swallowed. Vapor may be fatal if too much is inhaled. Do not use in poorly ventilated areas. Harmful if inhaled.

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SECTION 3 - HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation. Liquid may cause temporary corneal injury. Vapor may cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May irritate skin. Liquid methylene chloride is painful and irritating if confined to the skin by gloves or clothing. Prolonged or repeated contact may cause defatting, irritation, and dermatitis. Absorption of liquid through intact skin is possible if contact with liquid is prolonged.

EFFECTS OF OVEREXPOSURE - INHALATION: Vapor harmful if inhaled. Vapor may irritate nose and upper respiratory tract. Vapor inhalation may affect the brain or nervous system causing dizziness, headache or nausea. Exposure to vapors at concentrations below the OSHA PEL may elevate the level of carbon monoxide in the blood. In conjunction with smoking (or other sources of carbon monoxide), excessive inhalation of methylene chloride vapors may elevate levels of carbon monoxide in the blood to a level which may cause stress to the cardiovascular system. Inhalation is the major route of exposure. Methylene chloride depresses the central nervous system. Concentrations between 900 ppm - 1000 ppm may cause dizziness. Nausea, headache, and vomiting may occur at concentrations above 2000 ppm. At 7000 ppm, numbness and tingling in arms and legs, and a rapid heartbeat may occur. Loss of consciousness and DEATH may occur at levels above 9,000 ppm if exposure is prolonged.

EFFECTS OF OVEREXPOSURE - INGESTION: This material may be harmful or fatal if swallowed. If ingested, this product may cause vomiting, diarrhea, and depressed respiration. May cause irritation to the gastrointestinal tract, vomiting which can lead to chemical pneumonitis if vomit is aspirated into the lungs. Absorption of aspirated vomit may cause central nervous system depression and liver damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Reports have associated permanent brain and nervous system damage with prolonged and repeated occupational overexposure to solvents. Methylene chloride is considered a known animal carcinogen by IARC and NTP. It has also been shown to cause liver and lung damage in laboratory animals. Risk to one's health depends on level and duration of exposure.

Exposure to methylene chloride may reduce the blood's oxygen carrying capacity causing cardiovascular stress.

Chronic overexposure to methylene chloride may cause toxic effects in the liver and kidneys, and may damage the lungs.

The toxic effects of methylene chloride are magnified by the presence of alcohol, carbon monoxide, performing heavy labor, and by smoking.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY CONTACT: Respiratory ailment may be aggravated.

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SECTION 3 - HAZARDS IDENTIFICATION

Persons with angina or heart disease should not be exposed to methylene chloride vapors.

Methylene chloride may elicit an allergic reaction with erythema, hives, respiratory difficulties, or other symptoms.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT INHALATION

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SECTION 4 - FIRST AID MEASURES

EYE CONTACT: Flush with large quantities of water until irritation subsides. Contact a physician.

SKIN CONTACT: Wash immediately with soap and water. Contact a physician if irritation persists.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. Contact a physician immediately.

INGESTION: DO NOT INDUCE VOMITING. If irritation or complications arise, contact a physician or Regional Poison Control Center immediately.

COMMENTS: The International Agency for Research on Cancer (IARC) has concluded that there is sufficient evidence for the carcinogenicity of methylene chloride in laboratory animals (inadequate evidence in humans) and thus classifies methylene chloride as a class 2B carcinogen.

NOTE TO PHYSICIAN: Adrenalin should never be given to persons who have been overexposed to methylene chloride.

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SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: >200 F

LOWER EXPLOSIVE LIMIT: 12.0 %

SETAFLASH CLOSED CUP)

UPPER EXPLOSIVE LIMIT: 19.0 %

AUTOIGNITION TEMPERATURE: N.E.

EXTINGUISHING MEDIA: CO2 DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: Although methylene chloride has no flash point or fire point when tested by conventional methods, vapor concentrated in a confined or poorly ventilated area can be ignited upon contact with high energy spark, flame, or high intensity source of heat. This can occur at airborne vapor concentrations ranging from 12% to 19% by weight.

SECTION 5 - FIRE FIGHTING MEASURES

SPECIAL FIREFIGHTING PROCEDURES: Full protective equipment, including self-contained breathing apparatus, is recommended to protect from combustion products. Cool exposed containers with water.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Dike spill area. Immediately eliminate sources of ignition. Use absorbent material or scrape up dried material and place into containers.

SECTION 7 - HANDLING AND STORAGE

HANDLING INFORMATION: KEEP OUT OF REACH OF CHILDREN. Avoid skin and eye contact. Avoid breathing vapors. Use only in a well ventilated area.

STORAGE INFORMATION: Store away from caustics and oxidizers. Keep away from heat, spark, and flame. Keep containers tightly closed when not in use. Keep containers from excessive heat and freezing. Do not store at temperatures above 90 degrees F. and keep out of direct sunlight.

The boiling point of this product is approximately 104 F. Consequently, at temperatures close to or in excess of 104 F., extreme pressure may build up in containers of this product. Containers should be allowed to "equilibrate" to a temperature below 75 F. prior to opening.

Relieve internal pressure when received and at least weekly thereafter by SLOWLY loosening closure. Retighten immediately. When venting the container this way, great care should be taken to prevent rapid discharge of vapors and product from a pressurized container. Wear safety glasses and other personal protective equipment while venting the container.

Failure to follow these instructions may result in violent rupture of container.

OTHER PRECAUTIONS: Prevent prolonged or repeated breathing of vapors and mists. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Do not take internally.

This product is highly volatile. In confined or poorly ventilated areas, vapors may easily accumulate in a dangerous level resulting in lethargy, and possibly unconscious and eventually DEATH.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Any proposed use of this product in elevated temperature processes or in spray applications should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

RESPIRATORY PROTECTION: Wear an approved NIOSH/OSHA respirator. Consult your safety equipment supplier and the OSHA regulation, 29 CFR 1910.134 for respirator requirements. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

NOTE: ACCORDING TO NIOSH. AIR PURIFYING CANISTER RESPIRATORS SHOULD NOT BE USED TO PROTECT AGAINST OVEREXPOSURE TO METHYLENE CHLORIDE VAPORS.

Methylene chloride has an odor threshold of approximately 200 ppm to 300 ppm. Toxic effects such as a reduction in the blood's ability to transport oxygen may occur at a level below the odor threshold. Consequently, individuals working with this product may not be aware of overexposure and the associated toxic affects. Monitoring of ambient airborne concentrations of methylene chloride may be necessary to assure maximum worker safety.

NIOSH recommends treating methylene chloride as a potential human carcinogen and reducing exposure to the lowest feasible limit.

EYE PROTECTION: Goggles or safety glasses with side shields.

SKIN PROTECTION: Solvent impervious gloves.

OTHER PROTECTIVE EQUIPMENT: Provide eyewash and solvent impervious apron if body contact may occur.

HYGIENIC PRACTICES: Remove contaminated clothing and wash before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE	: 104	VAPOR DENSITY	: Is heavier than air
ODOR	: Chloroform-like	ODOR THRESHOLD	: 200-300 ppm
APPEARANCE	: Tan/Green	EVAPORATION RATE:	Is faster than Butyl A
SOLUBILITY IN H2O	: 1.3% by wt. @ 20 F.		
SPECIFIC GRAVITY	: 1.2087		
VAPOR PRESSURE	: 350 mm Hg @ 68F		
PHYSICAL STATE	: Liquid	VISCOSITY	: 400-600 Centipoises

(See Section 16 for abbreviation legend)

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SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat and freezing, contact with reactive metals such as aluminum and galvanized metals.

INCOMPATIBILITY: Strong oxidizers and caustics, aluminum and galvanized metals, and other reactive metals such as zinc, potassium, magnesium, and sodium.

HAZARDOUS DECOMPOSITION PRODUCTS: Normal decomposition products, i.e. CO_x, NO_x, HCL, phosphene, and chlorine.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

Methylene chloride is classified as a 2B carcinogenic by IARC.

SECTION 12 - ECOLOGICAL INFORMATION

No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE MANAGEMENT/DISPOSAL: Dispose of according to Federal, State, and Local Standards. Discarded material should be incinerated at a permitted facility. Liquids cannot be disposed of in a landfill. Do not reuse empty container. 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 261): F002

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Dichloromethane solution

DOT HAZARD CLASS: 6.1

DOT UN/NA NUMBER: UN 1593 PACKING GROUP: III RESP. GUIDE PAGE: 160

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

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SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

SARA SECTION 313:

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

CHEMICAL NAME	CAS NUMBER	WT/WT % RANGE
Methylene Chloride	75-09-2	75.0-80.0 %

TOXIC SUBSTANCES CONTROL ACT:

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
No information is available.	

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
Styrenated Blocked Copolymer	TSRN-618608-5186P
Synthetic Resin	TSRN-618608-5118P
Hydrocarbon Resin	TSRN-618608-5117P
Antioxidant	TSRN-618608-5187P

PENNSYLVANIA RIGHT-TO-KNOW:

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

CHEMICAL NAME	CAS NUMBER
Styrenated Block Copolymer	proprietary
Synthetic Resin	proprietary
Hydrocarbon Resin	proprietary

CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer:

CHEMICAL NAME	CAS NUMBER
Methylene chloride	75-09-2

SECTION 15 - REGULATORY INFORMATION

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 3 FLAMMABILITY: 1 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 04/10/1997

VOC less water, less exempt solvent: 10-15 gm/l
VOC material: 2-7 gm/l

LEGEND: ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
N.A. - NOT APPLICABLE
N.E. - NOT ESTABLISHED
PEL - PERMISSIBLE EXPOSURE LIMIT
NTP - NATIONAL TOXICOLOGY PROGRAM
SARA - SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
STEL - SHORT TERM EXPOSURE LIMIT
TLV - THRESHOLD LIMIT VALUE(8 HR. TIME WEIGHTED AVERAGE OR TWA)
VOC - VOLATILE ORGANIC COMPOUND
NJRTK - NEW JERSEY RIGHT TO KNOW LAW
N.D. - NOT DETERMINED

MSDS# 30508

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 the recommendations in specific context of the intended use and determine if they are appropriate.

< End OF MSDS >