



MATERIAL SAFETY DATA SHEET

FILE NO.: P2V1
MSDS DATE: 11/30/2009
MSDS No.: P2113009

Product: P2

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: P2 Permanent PermaTack
PRODUCT CODES: P2QT1, P2GL1, P2GL5
COMPANY NAME: SmartAdhesives LLC
ADDRESS: San Francisco, CA 94129

EMERGENCY PHONE: Chemtrec: 1-800-424-9300

PRODUCT USE: Permanent Pressure Sensitive Adhesive
ISSUE DATE: 11-30-2009

SECTION 2: INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT:	C.A.S. No.	% by Wt.
Vinyl Acetate (monomer)	108-05-4	0.1 - < 0.5%

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Normal physical form - liquid

IMMEDIATE HEALTH AND ENVIRONMENTAL HAZARDS

While this material is not considered as hazardous under OSHA regulations, the MSDS contains valuable information concerning the safe handling and proper use of the product.

No known physical hazards. Contains trace amounts of vinyl acetate monomer remaining from production process.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: May cause slight irritation.

SKIN CONTACT: May cause allergic skin reaction.

INHALATION: No known acute toxic respiratory tract effects.

INGESTION: Not expected to be ingested under normal conditions of use. No known ingestion hazards.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE

Not established.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

None.

FURTHER INFORMATION:

This material contains trace amounts of vinyl acetate monomer. Vinyl acetate is metabolized into acetaldehyde, which has an IARC 2B classification, and thus vinyl acetate is also listed in category 2B.

CARCINOGENICITY

Vinyl Acetate (monomer)

OSHA: NO

NTP: NO

IARC: 2B

SECTION 4: FIRST AID MEASURES

EYES:	Immediately flush eyes with plenty of water for at least 15 minutes. If symptoms occur, seek medical advice.
SKIN:	Wash skin with mild soap and plenty of warm water. If symptoms occur, seek medical advice.
INGESTION:	Do not induce vomiting unless directed to do so by medical personnel. If conscious, drink two glasses of water. Never give anything by mouth to an unconscious person. If symptoms occur, seek medical attention.
INHALATION:	Move to fresh air. No special measures required.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY: Combustible Liquid Class IIIB

FLAMMABLE LIMITS UPPER: not applicable
(% BY VOLUME) LOWER: not applicable

FLASH POINT: not applicable
AUTOIGNITION TEMP: not applicable

NFPA HAZARD CLASSIFICATION

HEALTH: 1 **FLAMMABILITY:** 1 **REACTIVITY:** 0

HMIS HAZARD CLASSIFICATION

HEALTH: *1 **FLAMMABILITY:** 1 **REACTIVITY:** 0

EXTINGUISHING MEDIA: Use water fog, dry chemical, carbon dioxide, foam or water. Water may be used to cool adjacent tanks and structures. Avoid spreading burning liquid with water used for cooling purposes.

SPECIAL FIRE FIGHTING PROCEDURES:
Wear self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
None

HAZARDOUS DECOMPOSITION PRODUCTS:
see Section 10

SECTION 6: ACCIDENTAL RELEASE MEASURES**ACCIDENTAL RELEASE MEASURES:**

No action shall be taken involving any personal risk or without suitable training. If material is released, indicate risk of slipping. Put on appropriate personal protective equipment (see section 8). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

For small spills, absorb with liquid binding material such as diatomaceous earth, sand, silica gel, acid binder, universal binder, and sawdust. For large spills, pump into suitable containers and dispose in appropriate waste disposal container. Clean up area with plenty of water. Dispose of cleansing water and all material in accordance with Federal, State, and local regulations.

SECTION 7: HANDLING AND STORAGE

HANDLING: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face with soap and water before eating, drinking and smoking.

Spilled material increases risk of slipping. No special precautions against fire and explosion are required. Containers of this material may be hazardous when emptied due to product residues, including vapors.

STORAGE: Do not store below 32° F (0° C). Keep from freezing. Store in cool, dry, ventilated area in accordance with local regulations.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

VENTILATION : Use with adequate ventilation.

RESPIRATORY PROTECTION: Not normally required.

EYE PROTECTION: Avoid contact with eyes. Use safety glasses with side shields or indirect vented goggles.

SKIN PROTECTION: Any liquid tight vinyl or rubber gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

If splashing might occur, wear protective clothing such as an apron, lab coat, coveralls or other appropriate clothing to cover skin. Facilities storing or utilizing this material should be equipped with eye wash fountains

EXPOSURE GUIDELINES:

	<u>Organization</u>	<u>Type</u>	<u>Limit</u>
Vinyl Acetate (monomer)	ACGIH (TLV)	TWA	10 ppm
		STEL	15 ppm
	OSHA (PEL)		not regulated

ACGIH: American Conference of Governmental Industrial Hygienists
 OSHA: Occupational Safety and Health Administration

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

COLOR & APPEARANCE:	white liquid	VAPOR PRESSURE (mmHg):	18.6 at 70°F (21°C)
ODOR THRESHOLD:	slightly sweet	VAPOR DENSITY (AIR=1):	not available
PHYSICAL FORM:	liquid	SPECIFIC GRAVITY (H2O=1):	1.02
FLAMMABLE LIMITS		EVAPORATION RATE:	not available
LEL:	not applicable		
UEL:	not applicable		
BOILING POINT:	212°F (100°C)	SOLUBILITY IN WATER:	moderately soluble
AUTOIGNITION TEMP:	not available	VISCOSITY:	7,000 ± 200 cP
FLASH POINT:	not applicable	VOLATILE ORGANIC COMPOUNDS (VOC)	
(Pensky-Martens Closed Cup ASTM D 93)		VOC:	NA
		VOC less H2O & Exempt Solvent:	NA
pH AS SUPPLIED:	4.3		

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Material is stable.

MATERIALS AND CONDITIONS TO AVOID (STABILITY):
 Keep from freezing.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
 Carbon dioxide. Carbon monoxide. Hydrocarbons. Aldehydes. Acetic Acid.

HAZARDOUS POLYMERIZATION: Cannot occur.

SECTION 11: TOXICOLOGICAL INFORMATION**TOXICOLOGICAL INFORMATION:**

Vinyl Acetate (monomer) - Acute Toxicity
Acute oral LD50: >2,000 mg/kg (rat)

Experience with humans during manufacture and use: No information on damage to health.

SECTION 12: ECOLOGICAL INFORMATION**ECOLOGICAL INFORMATION:**

Information on Elimination: Not readily biodegradable. Polymer component is eliminated by adsorption to activated sludge. Separation by flocculation is possible.

Ecotoxicity: Carp (Cyprinus carpio) LC50 (96 hr.) >1,000 mg/L
No expected damaging effects to aquatic organisms

Sludge EC10 (0.5 hr.) <1,000 mg/L (bacteria toxicity: respiration/reproduction inhibition)
According to current knowledge, no expected adverse effects on water purification plants

Prevent material from entering surface waters and soil. Do not introduce into water purification plants unless in diluted state. No environmental problems are expected if handled and treated in accordance with standard industrial practices and local regulations. The ecological results were obtained from tests on similar products.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of product in accordance with regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. After chemical deflocculation, can be stored with domestic waste. Disposal of this product, solutions and any by-products should at all times comply with Federal, State and local regulations.

RCRA HAZARD CLASS: none

SECTION 14: TRANSPORT INFORMATION**U.S. DEPARTMENT OF TRANSPORTATION (49 CFR)**

PROPER SHIPPING NAME: Not a DOT controlled material

INTERNATIONAL AIR TRANSPORTATION (ICAO/IATA)

PROPER SHIPPING NAME: Not subject to IATA regulations

WATER TRANSPORTATION (IMO/IMDG)

PROPER SHIPPING NAME: Not subject to IMDG code

SECTION 15: REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS****TSCA (Toxic Substance Control Act)**

All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. No TSCA 12(b) Export Notification chemicals are present in this product.

311/312 HAZARD CATEGORIES:

Chronic: yes Reactivity: no Acute: no

SECTION 313: (Toxic chemicals subject to reporting requirements of that section and 40 CFR part 372 (EPCRA))

Vinyl Acetate (monomer) upper limit by wt.: 0.4%

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION, AND LIABILITY ACT):

Vinyl Acetate (monomer) 108-54-4 RQ: 5,000 lbs. upper limit by wt.: 0.4%

STATE REGULATIONS

California Prop. 65: Carcinogen: Acetaldehyde (CAS 75-07-0); 1,4-Dioxane (123-91-1); Ethylene Oxide (75-21-8)
Reproductive: Ethylene Oxide (75-21-8)

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

HMIS Rating

Health	*1
Flammability	0
Reactivity	0

NFPA Rating

Health	1
Flammability	0
Reactivity	0

PREPARATION INFORMATION:

DISCLAIMER: The material in this Material Safety Data Sheet (MSDS) is, to the best of our knowledge, accurate as of the date issued. However, neither SmartAdhesives nor any of its subsidiaries or agents assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. Compliance with all applicable federal, state, and local laws and regulations remains the responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist. Given the quantity of variables that affect use and application of our products, many of which are within the user's control and unique to each user's knowledge, SMARTADHESIVES MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE.