



GHS SAFETY DATA SHEET

Date Revised: JUN 2012
Supersedes: FEB 2012

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PLASTRUCT BONDENE CEMENT (BOND-2)

MANUFACTURER: Smarter Adhesive Solutions

600 Ellis Road, Durham, NC 27703
P.O. Box 12729, Research Triangle Park, NC 27709
Tel. 919-598-2400

EMERGENCY: Transportation: CHEMTEL Tel. 800.255-3924, 813-248-0585 (International)

Medical: Tel. 800.451.8346, 760.602.8703 3E Company (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health	Environmental	Physical
Acute Toxicity: Category 4 Skin Irritation: Category 3 Skin Sensitization: NO Eye: Category 2	Acute Toxicity: None Known Chronic Toxicity: Category 3	Flammable Liquid Category 2



Signal Word: Danger **WHMIS CLASSIFICATION:** CLASS D, DIVISION 1B
CLASS D, DIVISION 2A

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapour H319: Causes serious eye irritation H320: Causes eye irritation H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH066: Repeated exposure may cause skin dryness or cracking	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P337+P313: Get medical advice/attention P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Methylene Chloride*# (Dichloromethane)	75-09-2	200-838-9	17-2119926076-39-0000	30 - 60
Methyl Acetate	79-20-9	201-185-2	17-2119926085-40-0000	30 - 45

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.
* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).
indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
Skin contact: Wash skin with soap and water. If irritation develops, get medical attention
Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
Ingestion: Do not induce vomiting. Seek medical advice immediately.

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water fog or fine spray, carbon dioxide, dry chemical or foam.	HMIS	NFPA	
Unsuitable Extinguishing Media: Dry chemical powder.	Health	2	2
Exposure Hazards: Inhalation and dermal contact.	Flammability	3	3
Combustion Products: Hydrogen chloride, trace amounts of chlorine, phosgene.	Reactivity	1	1
Protection for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing.			0-Minimal 1-Slight 2-Moderate 3-Serious 4-Severe

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Clear all personnel from area. Do not breathe vapors. Ventilate area of leak or spill. Wear protective equipment positive pressure self contained or air supplied breathing apparatus. Follow confined space entry procedures.
Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
Methods for Cleaning up: Mop or soak up immediately. Place in properly labeled metal containers.
Materials not to be used for clean up: Zinc, Aluminum or plastic containers



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SECTION 7 - HANDLING AND STORAGE

- Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing. Do not swallow. Use with adequate ventilation. Do not cut, drill, grind, weld or perform similar operations on or near empty containers. Vapors of this product are heavier than air and will collect in low areas.
- Storage:** Do not eat, drink or smoke while handling. Store in a dry place. Keep container tightly closed when not in use. Store below 80°F (27°C). Follow all precautionary information on container label, product bulletins and solvent bonding literature.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:
Methylene Chloride (dichloromethane)	50 ppm	N/E	25 ppm	125
Methyl Acetate	200 ppm	250 ppm	200 ppm	N/E

- Engineering Controls:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Lethal concentrations may exist in areas with poor ventilation.
- Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.
- Personal Protective Equipment (PPE):**
- Eye Protection:** Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
- Skin Protection:** Prevent contact with the skin as much as possible. Use protective clothing chemically resistant to this material. Remove contaminated clothing immediately, wash skin area with soap and water and launder clothing before reuse or dispose of properly.
- Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, thin liquid	Odor Threshold:	180 ppm (Methyl Acetate)
Odor:	Fruity	Evaporation Rate:	> 1.0 (BUAC = 1)
pH:	Not Applicable	Flammability:	None
Melting/Freezing Point:	-99°C (-146°F) (Methyl Acetate)	Flammability Limits:	LEL: 3.1% (Methyl Acetate)
Boiling Point:	39.8°C (104°F) Based on: Methylene Chloride	UEL: 22% (Methylene Chloride)	
Flash Point:	-10°C (14°F) (Methyl Acetate)	Vapor Pressure:	355 mmHG @ 20C (Methylene Chloride)
Specific Gravity:	1.12 @ 23°C (73.4°F)	Vapor Density:	>2.0 (Air = 1)
Solubility:	32g/100g H ₂ O (Methyl Acetate)	Other Data:	Viscosity: Water-thin
Partition Coefficient n-octanol/water:	Not Available		
Auto-ignition Temperature:	454°C (849°F) (Methyl Acetate)		
Decomposition Temperature:	Not Applicable		
VOC Content:	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤250 g/l.		

SECTION 10 - STABILITY AND REACTIVITY

- Stability:** Stable under recommended storage conditions. (See Section 7)
- Hazardous decomposition products:** Depending on temperature and air supply, may include hydrogen chloride, trace amounts of chlorine, phosgene.
- Conditions to avoid:** Avoid open flames, welding arcs, or other high temperature sources. Avoid direct sunlight.
- Incompatible Materials:** Oxidizers, strong bases, amines, metals such as zinc powders, aluminum or magnesium powders, potassium sodium.

SECTION 11 - TOXICOLOGICAL INFORMATION

- Likely Routes of Exposure:** Inhalation, Eye and Skin Contact
- Acute symptoms and effects:**
- Inhalation:** Excessive overexposure may cause irritation to nose and throat. In confined areas, vapor can accumulate and can cause unconsciousness.
- Eye Contact:** May cause moderate eye irritation which may be slow to heal. May cause slight corneal injury. Vapor may cause mild discomfort and redness.
- Skin Contact:** Prolonged contact may cause skin burns. May cause more severe response on covered skin (under clothing and gloves).
- Ingestion:** Low toxicity if small amount swallowed, however larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting.
- Chronic (long-term) effects:** IARC Classification 2B (Methylene Chloride)
- | Toxicity: | LD ₅₀ | LC ₅₀ | Target Organs |
|--------------------------------------|--|------------------------------------|---------------|
| Methylene Chloride (dichloromethane) | Oral: 1500- 2500 mg/kg (rat), Dermal: Not Determined | Inhalation 7 hrs. >10000 PPM (rat) | STOT SE3 |
| Methyl Acetate | Oral: >5000 mg/kg (oral/rabbit) | Inhalation 4 hrs. 12000 PPM (rat) | STOT SE3 |

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Category 2	Not Established	Not Established	Not Established



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SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: None Known
Mobility: In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of <250 g/l. Mobility in soil is high.
Degradability: Moderately biodegradable
Bioaccumulation: Low

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name: Adhesives
Hazard Class: 3
Secondary Risk: None

EXCEPTION for Ground Shipping

DOT Limited Quantity: UP to 5L per inner packaging, 30 kg gross weight per package.
Consumer Commodity: Depending on packaging, these quantities may qualify under DOT as "ORM-D".

Identification Number: UN 1133
Packing Group: PG II
Label Required: Class 3 Flammable Liquid
Marine Pollutant: NO

TDG INFORMATION

TDG CLASS: FLAMMABLE LIQUID 3
SHIPPING NAME: ADHESIVES
UN NUMBER/PACKING GROUP: UN 1133, PG II

SECTION 15 - REGULATORY INFORMATION

Precautionary Label Information: Harmful, Suspected Carcinogen
Symbols: Harmful, Flammable
Risk Phrases: R11: Highly flammable.
R36: Irritating to eyes.
R40: Limited evidence of a carcinogenic effect.

Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia, AICS, Korea ECL/TCCL, Japan MITI (ENCS) **CA Prop 65**

Safety Phrases: S2: Keep out of the reach of children.
S16: Keep away from sources of ignition.No smoking.
S23: Do no breath vapors.
S24:/25: Avoid contact with skin and eyes.

R66: Repeated exposure may cause skin dryness or cracking
R67: Vapors may cause drowsiness and dizziness

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29: Do not empty into drains.
S33: Take precautionary measures against static discharges.
S36/37: Wear suitable protective clothing and gloves.

SECTION 16 - OTHER INFORMATION

Specification Information:
Department issuing data sheet: IPS, Safety Health & Environmental Affairs.

All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).

E-mail address: <EHSinfo@ipscorp.com>

Training necessary: Yes, training in practices and procedures contained in product literature.

Reissue date / reason for reissue: 6/06/2012 / Updated GHS Standard Format

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.