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MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Trade Name: OATEY ABS TO PVC TRANSITION GREEN CEMENT

Product Use: Cement for joining PVC to ABS pipe.

Formula: PVC Resin in Solvent Solution

Synonyms: PVC Plastic Pipe Cement

Firm Name & OATEY CO. 4700 West 160th Street P.O. Box 35906 Cleveland,

Mailing Address: Ohio 44135, U.S.A. http://www.oatey.com

Oatey Phone Number: (216) 267-7100 or (800) 321-9532.

Emergency Phone For Emergency First Aid call 1-303-623-5716 COLLECT. For Numbers: chemical transportation emergencies ONLY, call Chemtrec at

1-800-424-9300. Outside the U.S. 1-703-527-3887.

Prepared By: Corporate Director - Safety and Environmental Compliance

Preparation Date: May 20, 2005

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:	%wt/wt:	CAS NUMBER:	ACGIH TLV TWA:	OSHA PEL TWA	A: OTHER:
Methyl Ethyl Ketone	35 - 50%	78-93-3	200 ppm	200 ppm	None
			300 ppm STEL		
Tetrahydrofuran	25 - 40%	109-99-9	50 ppm (skin)	200 ppm	25 ppm (Mfg)
			100 ppm STEL		
PVC Resin	10 - 16%	9002-86-2	10 mg/m3	15 mg/m3	None
(Non-hazardous)					
Cyclohexanone	3 - 10%	108-94-1	20 ppm(skin)	50 ppm	None
			50 ppm STEL		
Amorphous Fumed Silic	a 1 - 5%	112945-52-5	10 mg/m3	None	None
(Non-hazardous)				Established	
Green Colorant	0 - 5%	N/A	None	None	
(Non-hazardous)			Established	Established	

OSHA Hazard Classification: Flammable, irritant, organ effects

SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview:

Green liquid with an ether-like odor. Extremely flammable liquid and vapor. Vapors may cause flash fire. May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

SECTION 4 FIRST AID MEASURES

CALL 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing immediately. Wash all exposed areas with

soap and water. Get medical attention if irritation develops. Remove

dried cement with Oatey Plumber's Hand Cleaner or baby oil.

Eyes: If material gets into eyes or if fumes cause irritation, immediately

flush eyes with plenty of water until chemical is removed. I:

irritation persists, get medical attention immediately.

Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing

becomes difficult, administer oxygen. Administer artificial

respiration if breathing has stopped. Seek immediate medical attention.

Ingestion: DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything

by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center

or hospital.

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FIRE FIGHTING MEASURES SECTION 5

Flashpoint / Method: 0 - 5 Degrees F. (-18 to -15 Degrees C) / PMCC

Flammability: LEL = 1.8 % Volume, UEL = 11.8 % Volume

Extinguishing Use dry chemical, CO2, or foam to extinguish fire. Cool fire Media:

exposed container with water. Water may be ineffective as an

extinguishing agent.

Firefighters should wear positive pressure self-contained Special Fire

Fighting breathing apparatus and full protective clothing for fires in

Procedure: areas where chemicals are used or stored

Unusual Fire and Extremely flammable liquid. Keep away from heat and all sources of ignition including sparks, flames, lighted Explosion

Hazards: cigarettes and pilot lights. Containers may rupture or explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive

organic peroxide when exposed to air or light or with age. Combustion will produce toxic and irritating vapors including Hazardous

Decomposition carbon monoxide, carbon dioxide and hydrogen chloride.

Products:

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Remove all sources of ignition and ventilate area. Stop leak if it Leak can be done without risk. Personnel cleaning up the spill should Procedures:

wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other non-combusting material. Put absorbent material in covered, labeled metal containers. Prevent liquid from entering watercourses, sewers and natural waterways. Report releases to authorities as required. See Section 13 for

disposal information.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors

> or mists. Use with adequate ventilation (equivalent to outdoors). Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other

sources of ignition. No smoking in storage or use areas. Keep

containers closed when not in use.

Storage: Store in a cool, dry, well-ventilated area away from incompatible

materials. Keep containers closed when not in use.

"Empty" containers retain product residue and can be hazardous. Other:

Follow all MSDS precautions in handling empty containers. Do not cut

or weld on or near empty or full containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Open doors & windows. Provide ventilation capable of maintaining

> emissions at the point of use below recommended exposure limits. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of

solvent vapors are not exposed to electrical fixtures or hot surfaces.

Respiratory For operations where the exposure limit may be exceeded, a NIOSH Protection:

approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained

breathing apparatus.

Rubber gloves are suitable for normal use of the product. For long Skin

exposures chemical resistant gloves may be required such as Protection:

4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

Safety glasses with side shields or safety goggles.

Protection:

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Other: Eye wash and safety shower should be available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 151 Degrees F / 66 C

Melting Point: Not determined

Vapor Pressure: 145 mmHg @ 20 Degrees C

Vapor Density: (Air = 1) 2.5

Volatile Components: 86-88%
Solubility In Water: Negligible
pH: Not applicable
Specific Gravity: 0.92 +/- 0.02

Evaporation Rate: (BUAC = 1) = 5.5 - 8.0

Appearance: Green Liquid
Odor: Ether-Like
Will Dissolve In: Tetrahydrofuran

Material Is: Liquid

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable.

Conditions To Avoid: Avoid heat, sparks, flames and other sources of ignition.

Hazardous Combustion will produce toxic and irritating vapors
Decomposition including carbon monoxide, carbon dioxide and hydrogen

Products: chloride.

Incompatibility/ Oxidizing agents, alkalis, amines, ammonia, acids, chlorine Materials To Avoid: compounds, chlorinated inorganics (potassium, calcium and

sodium hypochlorite) and hydrogen peroxides. May attack

plastic, resins and rubber.

Hazardous Will not occur.

Polymerization:

SECTION 11 TOXICOLOGICAL INFORMATION

Inhalation: Vapors or mists may cause mucous membrane and respiratory

irritation, coughing, headache, dizziness, dullness, nausea, shortness of breath and vomiting. High concentrations may cause central nervous system depression, narcosis and unconsciousness.

May cause kidney, liver and lung damage.

Skin: May cause irritation with redness, itching and pain. Methyl

ethyl ketone and cyclohexanone may be absorbed through the skin

causing effects similar to those listed under inhalation.

Eye: Vapors may cause irritation. Direct contact may cause irritation

with redness, stinging and tearing of the eyes. May cause eye

damage.

Ingestion: Swallowing may cause abdominal pain, nausea, vomiting and

diarrhea. Aspiration during swallowing or vomiting can cause chemical pneumonia and lung damage. May cause kidney and liver

damage.

Chronic Prolonged or repeated overexposure cause dermatitis and damage

Toxicity: to the kidney, liver, lungs and central nervous system.

Toxicity Data: Cyclohexanone: Oral rat LD50: 1,620 mg/kg

Inhalation rat LC50: 8,000 ppm/4 hours

Skin rabbit LD50: 1 mL/kg

Tetrahydrofuran: Oral rat LD50: 1,650 mg/kg

Inhalation rat LC50: 21,000 ppm/3 hours

Methyl Ethyl Ketone: Oral rat LD50: 2,737 mg/kg

Inhalation rat LC50: 23,500 mg/m3/8 hours

Skin rabbit LD50: 6,480 mg/kg

Sensitization: None of the components are known to cause sensitization.

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SECTION 11 (Continued)

Carcinogenicity: None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to Tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health is unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. ACGIH has classified cyclohexanone (CYH) and tetrahydrofuran (THF) as "A3,"

Confirmed Animal Carcinogens with Unknown Relevance to Humans. Cyclohexanone has been positive in bacterial and mammalian

assays. Methyl ethyl ketone and tetrahydrofuran are

generally thought not to be mutagenic.

Reproductive Toxicity:

Mutagenicity:

Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Tetrahydrofuran has been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the

mother.

Medical Persons with pre-existing skin, lung, kidney or liver disorders

Conditions may be at increased risk from exposure to this product.

Aggravated By Exposure:

ECOLOGICAL INFORMATION SECTION 12

This product is not expected to be toxic to aquatic organisms. Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l. Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.

Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L. This product emits VOC's (volatile organic compounds) in its use.

VOC Information: Make sure that use of this product complies with local VOC emission

regulations, where they exist.

VOC Level: 650 g/l per SCAQMD Test Method 316A.

DISPOSAL CONSIDERATIONS SECTION 13

Waste Disposal: Dispose in accordance with current local, state and federal

regulations.

U002, U057, U159, U213 RCRA Hazardous Waste Number: EPA Hazardous Waste ID Number: D001, D035, F003, F005

EPA Hazard Waste Class: Ignitable Waste. Toxic Waste (Methyl Ethyl Ketone content)

SECTION 14 TRANSPORTATION INFORMATION

DOT Less than 1 Liter (0.3 gal) Greater than 1 Liter (0.3 gal)

Proper Shipping Name: Consumer Commodity Adhesives Hazard Class/Packing Group: 3, PGII ORM-D UN/NA Number: None UN1133

Hazard Labels: None Flammable Liquid

IMDG

Proper Shipping Name: Adhesives Adhesives Hazard Class/Packing Group: 3, II 3, II UN Number: UN1133 UN1133

Label: None (Limited Quantities Class 3 (Flammable

> are excepted Liquid)

from labeling)

2000 North American Emergency Response Guidebook Number: 127 or 128

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SECTION 15 REGULATORY INFORMATION

Hazard Category for Section Acute Health, Chronic Health, Flammable

311/312:

Section 302 Extremely This product does not contain chemicals regulated

Hazardous Substances (TPO):

under SARA Section 302.

Section 313 Toxic Chemicals: This product contains the following chemicals

subject to SARA Title III Section 313 Reporting

requirements:

Chemical CAS # % by wt

Methyl Ethyl Ketone 78-93-3 35-50%

CERCLA 103 Reportable

Quantity:

Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Tetrahydrofuran (40% maximum) of 1,000 lbs, is 2,500

lbs. Many states have more stringent release

reporting requirements. Report spills required under

federal, state and local regulations.

California Proposition 65: This product contains trace amounts of chemicals

known to the State of to cause cancer. Under normal Use conditions, exposure to these chemicals at levels above the State of California "No Significant Risk

Level" (NSRL) are unlikely. Oatey strongly

encourages the use of proper personal protective equipment (PPE) and ventilation guidelines noted in Section 8 to minimize exposure to these chemicals. All of the components of this product are listed on

TSCA Inventory: the TSCA inventory.

Canadian WHIMS Classification:

Class B, Division 2; Class D, Division 2, Subdivision B; Class D, Division 2, Subdivision A This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the

information required by the CPR.

OTHER INFORMATION SECTION 16

NFPA and HMIS:

Flammability: 3 Reactivity: 1 NFPA Hazard Signal: Health: 2 Special: None

HMIS Hazard Signal: Health: 2* Flammability: 3 Reactivity: 1 PPE: G

DISCLAIMER

The information herein has been compiled from sources believed to be reliable, upto-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.