



MATERIAL SAFETY DATA SHEET

MSDS Number: 1100E

Section 1 PRODUCT AND COMPANY IDENTIFICATION

Trade Name: OATEY PVC REGULAR CLEAR CEMENT

Product Nos.: Clear - 31012, 31013, 31014, 31015, 31016, 31958, 31959, 31960, 31961

Product Use: Cement for PVC Plastic Pipe Formula: PVC Resin in Solvent Solution

Synonyms: PVC Plastic Pipe Cement

Firm Name & Oatey Company 4700 West 160th Street, Cleveland, Ohio 44135

Address: www.oatey.com Firm Phone No: (216) 267-7100

Emergency Phone For Emergency First Aid call 1-877-740-5015. For chemical transportation

Nos.: emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1-

703-527-3887.

Prepared by: Technical Department

Preparation Date: 10/01/2009

Section 2 HAZARDS IDENTIFICATION

Emergency Overview:

Clear

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 3 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS: Tetrahydrofuran	%wt/wt : 20 - 40%	CAS NUMBER: 109-99-9	ACGIH TLV TWA: 50 ppm(skin)	OSHA PEL TWA 200 ppm	OTHER: 25 ppm (Mfg)
Methyl Ethyl Ketone	15 - 35%	78-93-3	100 ppm STEL 200 ppm 300 ppm	200 ppm	None
Acetone	10 - 20%	67-64-1	500 ppm 500 ppm 750 ppm STEL	1000 ppm	None
PVC Resin (Non-hazardous)	10 - 18%	9002-86-2	10 mg/m3	15 mg/m3	None
Cyclohexanone	10 - 20%	108-94-1	20 ppm(skin) 50 ppm STEL	50 ppm	None

OSHA Hazard Classification: Flammable, irritant, organ effects

Section 4 FIRST AID MEASURES

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

water. Get medical attention if irritation develops. Remove dried cement with

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. If 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.

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

> 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.

FIRE FIGHTING MEASURES Section 5

Flashpoint / 14 - 23 Degrees F. (-10 to -5 Degrees C) / CCCFP

Method:

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

Extinguishing Use dry chemical, CO2, or foam to extinguish fire. Cool fire exposed container

with water. Water may be ineffective as an extinguishing agent. Media:

Firefighters should wear positive pressure self-contained breathing apparatus Special Fire

and full protective clothing for fires in areas where chemicals are used or Fighting

Procedure: stored

Unusual Fire Extremely flammable liquid. Keep away from heat and all sources of ignition And Explosion including sparks, flames, lighted cigarettes and pilot lights. Containers may Hazards:

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.

Hazardous Products:

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

Section 6 ACCIDENTAL RELEASE MEASURES

Procedures:

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

precautions in handling empty containers. Do not cut or weld on or near empty

or full containers.

EXPOSURE CONTROLS/PERSONAL PROTECTION Section 8

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 approved

Protection: 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.

Skin Rubber gloves are suitable for normal use of the product. For long exposures Protection: chemical resistant gloves may be required such as 4H(tm) or Silver Shield(tm)

to avoid prolonged skin contact.

Eye Safety glasses with side shields or safety goggles.

Protection:

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 151 Degrees F / 66 Degrees C

Melting Point: Not applicable

Vapor Pressure: 145 mmHg @ 20 Degrees C

Vapor Density: (Air = 1) 2.5

Volatile Components: 84-88%
Solubility In Water: Negligible pH: Not applicable

Specific Gravity: 0.90 +/- 0.02 @ 20 Degrees C

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

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

Material Is: Liquid

Section 10 STABILITY AND REACTIVITY

Stability: Stable.

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

Avoid:

Hazardous Combustion will produce toxic and irritating vapors including carbon

Decomposition monoxide, carbon dioxide and hydrogen chloride.

Products:

Ingestion:

Incompatibility/ Oxidizing agents, alkalis, amines, ammonia, acids, chlorine compounds, Materials To chlorinated inorganics (potassium, calcium and sodium hypochlorite) and

Avoid: 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. 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 to the

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

Toxicity Data: Acetone: Oral rat LD50: 5,800 mg/kg

Inhalation rat LC50: 50,100 mg/m3/8 hours

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

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

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

Skin rabbit LD50: 6,480 mg/kg

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

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 as "A3," Confirmed Animal

Carcinogens with Unknown Relevance to Humans.

Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, Mutagenicity:

methyl ethyl ketone and tetrahydrofuran are generally thought not to be

mutagenic.

Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal Reproductive

Toxicity: toxicity and birth defects in laboratory animals. Acetone and

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 may be at

Conditions increased risk from exposure to this product.

Aggravated By Exposure:

Section 12 ECOLOGICAL INFORMATION

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. Acetone: 96 hour LC50 for fish is greater than 100 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. Make sure VOC

that use of this product complies with local VOC emission regulations, where Information:

they exist.

VOC Level: Maximum 510 g/L per SCAQMD Test Method 316A.

Section 13 DISPOSAL CONSIDERATIONS

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

regulations.

RCRA Hazardous Waste U002, U057, U159, U213

Number:

EPA Hazardous Waste D001, D035, F003, F0005

ID Number:

UN/NA Number:

Proper Shipping Name:

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

Number:

TRANSPORT INFORMATION Section 14

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

> gal) gal) None UN1133 Consumer Commodity Adhesives

Hazard Class: ORM-D 3 Packing Group: None PGII Hazard Labels: None Flammable Liquid

IMDG

UN1133 UN Number: UN1133 Proper Shipping Name: Adhesives Adhesives

Hazard Class: Packing Group: ΙI ΙI

Label: None (Limited Quantities Class 3 (Flammable Liquid)

are expected from

labeling)

Flashpoint (deg C) -10 to -5 Degrees C -10 to -5 Degrees C

2008 North American Emercency Response Guidebook Number: 127

REGULATORY INFORMATION

Hazard Category for Acute Health, Chronic Health, Flammable Section 311/312:

Section 302 This product does not contain chemicals regulated under SARA Section 302.

Extremely Hazardous Substances (TPQ):

Section 313 Toxic This product does not contain chemicals subject to SARA Title III Section

Chemicals: 313 Reporting requirements.

Spills of this product over the RQ (reportable quantity) must be reported CERCLA 103 Reportable 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. Quantity:

Many states have more stringent release reporting requirements. Report

spills required under federal, state and local regulations.

California This product contains trace amounts of chemicals known to the State of Proposition 65: California 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. The use of proper personal protective equipment (PPE) and ventilation guidelines noted in Section 8 will

minimize exposure to these chemicals.

TSCA Inventory All of the components of this product are listed on the TSCA inventory. Class B, Division 2; Class D, Division 2, Subdivision B; Class D, Canadian WHIMS

Classification:

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:

NFPA Hazard Signal: Health: 2 Flammability: 3 Reactivity: 1 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, up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.

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