OATEY ALL PURPOSE CEMENT (4 & 8 OZ.)

Section 1
IDENTITY OF MATERIAL

TRADE NAME........ CEMENT 001 - OATEY ALL PURPOSE CEMENT (4 & 8 OZ. SIZES)
PRODUCT NUMBERS.... 30818 4 oz., 30821 8 oz.
FORMULA........... PVC Resin in Solvent Solution
CHEMICAL FAMILY.... PVC Organisol
SYNONYMS......... PVC Plastic Pipe Cement

Section 2
HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>%</th>
<th>CAS NUMBER</th>
<th>SEC 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC Resin (non-hazardous)</td>
<td>12-17%</td>
<td>552-68-22-8</td>
<td>No</td>
</tr>
<tr>
<td>Tetrahydrofuran</td>
<td>40-55%</td>
<td>109-99-9</td>
<td>No</td>
</tr>
<tr>
<td>Acetone</td>
<td>25-35%</td>
<td>67-64-1</td>
<td>Yes</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>&lt;2.5%</td>
<td>78-93-3</td>
<td>Yes</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>11-16%</td>
<td>108-94-1</td>
<td>No</td>
</tr>
<tr>
<td>Pumice Silica (non-hazardous)</td>
<td>1-2%</td>
<td>7631-86-9</td>
<td></td>
</tr>
</tbody>
</table>

Section 3
KNOWN HAZARDS UNDER 29 CFR 1910.1200

<table>
<thead>
<tr>
<th>HAZARDS</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustible Liquid</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Flammable Liquid</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Pyrophoric Material</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Explosive Material</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Unstable Material</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Water Reactive Material</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Oxidizer</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Organic Peroxide</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Corrosive Material</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Compressed Gas</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Ac</td>
<td>Ac, press gas, NTP</td>
<td>YES</td>
</tr>
</tbody>
</table>

Section 4
REGULATION

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>TLV (TWA)</th>
<th>PEL (Transitional Limits)</th>
<th>STEL</th>
<th>Hazard Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofuran</td>
<td>750 ppm, 900 mg/cu m</td>
<td>200 ppm, 590 mg/cu m</td>
<td>250 ppm, 735 mg/cu m</td>
<td>N/A</td>
</tr>
<tr>
<td>Acetone</td>
<td>1800 mg/cu m</td>
<td>1000 ppm, 2400 mg/cu m</td>
<td>1000 ppm, 2400 mg/cu m</td>
<td>N/A</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>25 ppm, 100 mg/cu m (skin)</td>
<td>50 ppm, 200 mg/cu m</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>1800 mg/cu m</td>
<td>200 ppm, 590 mg/cu m</td>
<td>300 ppm, 885 mg/cu m</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 5
REGULATED IDENTIFICATION

DOT PROPER SHIPPING NAME.... CEMENT
DOT HAZARD CLASS.............. Flammable Liquid
SHIPPING ID NUMBER............ NA 1133 (Gallons Only)
EPA HAZARDOUS WASTE ID NUMBER... D-001
EPA HAZARDOUS WASTE CLASS..... Ignitable Waste/Toxic Waste

Section 6
EFFECTS OF EXPOSURE

ENTRY ROUTE...... INHALS - YES INGEST - YES SKIN - YES EYE - YES

INHALATION........ May cause irritation of mucous membranes, nose & throat, headache, dizziness, nausea, numbness of the extremities and narcosis in high concentrations. Has caused CNS depression & liver damage in animals, & high concentrations have caused retardation of fetal development in rats.

SKIN.................. Chronic contact may lead to irritation & dermatitis. May possibly be absorbed through the skin.

EYE................. Vapors or direct contact may cause irritation.

INGESTION......... May be aspirated into the lungs or cause systemic effects described under inhalation.

TARGET ORGANS... Eye, Skin, Kidney, Lung, Liver, Central Nervous System

WARNING:............

(Continued on reverse side)
OATEY ALL PURPOSE CEMENT (4 & 8 oz.)

SECTION 7  EMERGENCY AND FIRST AID PROCEDURES - 303/623-5716 COLLECT

SKIN......... If irritation arises, wash thoroughly with soap and water. Seek medical attention if irritation persists.
EYES........ If fumes cause irritation, move to fresh air and irrigate eyes with water for 15 minutes. If irritation persists, seek medical attention. If eye is struck with wise, seek medical attention.
INHALATION... Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
Keep victim quiet and warm. Call a poison control center or physician immediately.
INGESTION.... Drink water and call a poison control center or physician immediately. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

SECTION 8  PHYSICAL AND CHEMICAL PROPERTIES

NFPA HAZARD SIGNAL....... HEALTH 1 STABILITY 0 FLAMMABILITY 3 SPECIAL NONE
BOILING POINT........ 151 Degrees F / 66 C
MELTING POINT........ N/A
VAPOR PRESSURE........ 145 mmHg @ 20 Degrees psi
VAPOR DENSITY (AIR = 1)... 2.5
VOLATILE COMPONENTS.... 84-88%
SOLUBILITY IN WATER..... Negligible
PH.................... N/A
SPECIFIC GRAVITY....... 0.90 +/- 0.02
EVAPORATION RATE..... (95%AC = 1) = 5.5 - 8.0
APPEARANCE............. Milky Liquid
ODOR.................. Ether-Like
WILL DISSOLVE IN....... Tetrhydrofuran
MATERIAL IS............. Liquid

SECTION 9  FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY............... LEL = 1.8 % VolumeUEL = 11.8 % Volume
FLASHPOINT AND METHOD USED.... 0 - 5 Degrees F / PMCC
STABILITY.................. Stable CONDITIONS TO AVOID: Heat, sparks and open flame. HAZARDOUS DECOMP. PITS.
Carbon monoxide/ carbon dioxide/hydrogen chloride/smoke.
HAZARDOUS POLYMERIZATION... Will Not Occur. CONDITIONS TO AVOID: None
INCOMPATIBILITY/MIX. TO AVOID... Acids, oxidizing materials, alkalis, chlorinated inorganics (potassium, calcium and sodium hypochlorite), copper or copper alloys.
SPECIAL FIRE FIGHTING PROCEDURE... FOR SMALL FIRES: Use dry chemical, CO2, water or foam extinguisher. FOR LARGE FIRES: Evacuate area and call Fire Department immediately.

SECTION 10  SPILL AND DISPOSAL INFORMATION

SPILL OR LEAK PROCEDURES... Ventilate area, stop leak if it can be done without risk. Take up with sand, earth, or other non-combustible absorbing material.
WASTE DISPOSAL............ Dispose of according to local, state, and Federal regulations.

SECTION 11  SAVE USAGE DATA

PROTECTIVE EQUIPMENT TYPES... EYES: Safety glasses with side shields. RESPIRATORY: NIOSH-approved cannister respirator in absence of adequate ventilation. GLOVES: Rubber gloves OTHER: Eye wash and safety shower should be available.
VENTILATION................ GENERAL MECHANICAL: Exhaust ventilation capable of maintaining emissions at the point of use below PEL. LOCAL EXHAUST: Open doors & windows. If used in enclosed area, use exhaust fans.
PRECAUTIONS.................. HANDLING & STORAGE: Keep away from heat, sparks and flames; store in cool, dry place. OTHER: 

SECTION 12  MANUFACTURER OR SUPPLIER DATA

FIRM NAME & MAILING ADDRESS... OATEY COMPANY 4700 West 160th Street, P.O. Box 35906 Cleveland, Ohio 44135
OATEY PHONE NUMBER......... (216) 267-7100
EMERGENCY PHONE NUMBER...... For Emergency First Aid call (303) 623-5716 COLLECT For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300

SECTION 13  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, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.
MATERIAL SAFETY DATA SHEET

OATEY REGULAR CLEAR PVC SOLVENT CEMENT

4700 W. 180th Street
P.O. Box 35906
Cleveland, Ohio 44135
Emergency Tel No: (903) 629-3716 Collect

--- Revision Date...06/21/93
Date of Issue......05/18/94

Section 1

IDENTITY OF MATERIAL

TRADE NAME....... CEMENT - 002 OATEY REGULAR CLEAR PVC SOLVENT CEMENT
PRODUCT NUMBERS... 31012-5/8 oz. tube/31012-4 oz. 31013-8 oz. 31014-16 oz./31015-32 oz./31016-Gal.
FORMULA....... PVC Resin in Solvent Solution
CHEMICAL FAMILY... PVC Organosol
SYNONYMS....... PVC Plastic Pipe Cement

Section 2

HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>%</th>
<th>CAS NUMBER</th>
<th>SEC 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC Resin (non-hazardous)</td>
<td>10-14%</td>
<td>9002-86-2</td>
<td>No</td>
</tr>
<tr>
<td>Tetrahydrofuran</td>
<td>25-40%</td>
<td>109-99-9</td>
<td>No</td>
</tr>
<tr>
<td>Acetone</td>
<td>&lt;1%</td>
<td>67-64-1</td>
<td>Yes</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>40-55%</td>
<td>78-93-3</td>
<td>Yes</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>5-10%</td>
<td>108-94-1</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 3

KNOWN HAZARDS UNDER 29 CFR 1910.1200

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<tr>
<th>HAZARDS</th>
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<td>X</td>
<td></td>
</tr>
<tr>
<td>Pyrophoric Material</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Explosive Material</td>
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<td></td>
</tr>
<tr>
<td>Unstable Material</td>
<td>X</td>
<td></td>
</tr>
<tr>
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<td>X</td>
<td></td>
</tr>
<tr>
<td>Oxidizer</td>
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<td>X</td>
<td></td>
</tr>
<tr>
<td>Corrosive Material</td>
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<td>Compressed Gas</td>
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<tr>
<td>Irritant</td>
<td>X</td>
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<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dr. Open MTF/1ARC/OSHA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 4

REGULATION

<table>
<thead>
<tr>
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<th>STEL</th>
<th>Hazard Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofuran</td>
<td>200 ppm, 590 mg/cu m</td>
<td>200 ppm, 590 mg/cu m</td>
<td>250 ppm 735 mg/cu m</td>
<td>N/A</td>
</tr>
<tr>
<td>Acetone</td>
<td>750 ppm, 1800 mg/cu m</td>
<td>1000 ppm, 2400 mg/cu m</td>
<td>1000 ppm, 2400 mg/cu m</td>
<td>N/A</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>25 ppm, 100 mg/cu m (skin)</td>
<td>50 ppm, 200 mg/cu m</td>
<td>100 ppm, 400mg/cu m</td>
<td>N/A</td>
</tr>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>200 ppm, 590 mg/cu m</td>
<td>200 ppm, 590 mg/cu m</td>
<td>300 ppm, 885 mg/cu m</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 5

REGULATED IDENTIFICATION

DOT PROPER SHIPPING NAME....... CONSUMER COMMODITY ORM-D (For gallons: Adhesive, contains tetrahydrofuran, methyl ethyl ketone) 3, UN 113, PG II;

DOT HAZARD CLASS ............... Flammable Liquid

SHIPPING ID NUMBER.............. NA 1133 (Gallons Only)

EPA HAZARDOUS WASTE ID NUMBER... D-001

EPA HAZARD WASTE CLASS........... Ignitable Waste/Toxic Waste

Section 6

EFFECTS OF EXPOSURE

ENTRY ROUTE....... INHALATION/YES INGEST/YES SKIN/YES EYE/YES

INHALATION....... May cause irritation of mucous membranes, nose & throat, headache, dizziness, nausea, numbness of the extremities and narcosis in high concentrations. Has caused CNS depression & liver damage in animals, & high concentration may cause retardation of fetal development in rats.

SKIN............. Chronic contact may lead to irritation & dermatitis. Chronic exposure to vapors of high concentration may cause dermatitis. May possibly be absorbed through the skin.

EYE............. Vapors or direct contact may cause irritation.

INGESTION....... May be aspirated into the lungs or cause systemic effects described under inhalation.

TARGET ORGANS.. Eye, Skin, Kidney, Lung, Liver, Central Nervous System

WARNING....... (Continued on reverse side)
SECTION 7
EMERGENCY AND FIRST AID PROCEDURES - 303/623-5716 COLLECT

SKIN........... If irritation arises, wash thoroughly with soap and water. Seek medical attention if irritation persists.
EYES......... If fumes cause irritation, move to fresh air and irrigate eyes with water for 15 minutes. If irritation persists, seek medical attention. If eye is struck with wire, seek medical attention.
INHALATION... Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Call a poison control center or physician immediately.
INGESTION.... Drink water and call a poison control center or physician immediately. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

SECTION 8
PHYSICAL AND CHEMICAL PROPERTIES

NTPA HAZARD SIGNAL....... HEALTH 1  STABILITY 0  FLAMMABILITY 3  SPECIAL  NONE
BOILING POINT............ 151 Degrees F / 66 C
MELTING POINT............. N/A
VAPOR PRESSURE........... 145 mmHg @ 20 Degrees psi
VAPOR DENSITY (AIR = 1)... 2.5
VOLATILE COMPONENTS...... 98 +/- 2%
SOLUBILITY IN WATER....... Negligible
PH......................... N/A
SPECIFIC GRAVITY........... 0.90 +/- 0.015
EVAPORATION RATE......... (BUAC = 1) = 5.5 - 8.0
APPEARANCE................. Clear Liquid
ODOR....................... Ether-Like
WILL DISSOLVE IN......... Tetrachloroethane
MATERIAL IS.............. Liquid

SECTION 9
FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY................ LEL = 1.8  UEL = 11.8  % Volume
FLASHPOINT AND METHOD USED..... 0 - 5 Degrees F / FMOC
STABILITY..................... Stable CONDITIONS TO AVOID: Heat, sparks and open flame. HAZARDOUS DECOMP. POTS:
HAZARDOUS POLYMERIZATION...... Will Not Occur. CONDITIONS TO AVOID: None
INCOMPATIBILITY/MAT. TO AVOID.... Acids, oxidizing materials, alcohols, chlorinated inorganics (potassium, calcium and sodium hypochlorite), copper or copper alloys.
SPECIAL FIRE FIGHTING PROCEDURE... FOR SMALL FIRES: Use dry chemical, CO2, water or foam extinguisher. FOR LARGE FIRES:
Evacuate area and call Fire Department immediately.

SECTION 10
SPILL AND DISPOSAL INFORMATION

SPILL OR LEAK PROCEDURES... Ventilate area, stop leak if it can be done without risk. Take up with sand, earth, or other non-combustible absorbing material.
WASTE DISPOSAL............. Dispose of according to local, state, and Federal regulations.

SECTION 11
SAVE USAGE DATA

PROTECTIVE EQUIPMENT TYPES... EYES: Safety glasses with side shields. RESPIRATORY: NIOSH-approved canister respirator in absence of adequate ventilation. GLOVES: Rubber gloves. OTHER: Eye wash and safety shower should be available.
VENTILATION................... GENERAL MECHANICAL: Exhaust ventilation capable of maintaining emissions at the point of use below PEL. LOCAL EXHAUST: Open doors & windows. If used in enclosed area, use exhaust fans.
PRECAUTIONS................... HANDLING & STORAGE: Keep away from heat, sparks and flames; store in cool, dry area OTHER:
Containers, even empties will retain residue and vapors.

SECTION 12
MANUFACTURER OR SUPPLIER DATA

PBM NAME & MAILING ADDRESS... OATEY COMPANY 4700 West 160th Street/P.O. Box 35906 Cleveland, Ohio 44135
OATEY PHONE NUMBER........... (216) 267-7100
EMERGENCY PHONE NUMBER........ For Emergency First Aid call (303) 623-5716 (COLLECT) For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300

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