CALIBRATION RECORD SHEET

The following data was measured on the MKS Baratron pressure sensor identified below. Calibration was performed in compliance with ISO 10012-1 (replaces MIL-STD-45662), using MKS transfer standard S/N: 92220107A which is calibrated vs. a Reference std, S/N: 53294-20 which was calibrated with a CEC Air Dead Weight Tester, traceable to the Institute of Standards and Technology. The test report numbers relative to this standard are referenced in MKS "STDNNS SET" #3a which shall be furnished upon request.

<table>
<thead>
<tr>
<th>% F/S</th>
<th>COMPUTED DC OUTPUT</th>
<th>ERROR (mv)</th>
<th>ERROR (mv)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PX</td>
<td>PR</td>
</tr>
<tr>
<td>0</td>
<td>0.000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0.500</td>
<td>-2</td>
<td>-4</td>
</tr>
<tr>
<td>20</td>
<td>1.000</td>
<td>-3</td>
<td>-4</td>
</tr>
<tr>
<td>40</td>
<td>2.000</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>60</td>
<td>3.000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>80</td>
<td>4.000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>100</td>
<td>5.000</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

AS FOUND DATA (CHECK ONE) AS LEFT DATA

TYPE: 223B-22875  
F.S. OUTPUT: 10 IN H20 = 5 VDC  
SERIAL #: 000777181  
I.D. #: 2001H5FX02

Data by: 7675  
Checked by: 7/09  
Date: 11-19-01
CE Declaration of Conformity


Standard(s) to which conformity is declared: BS EN 61326:1998*

Emissions -- Table's 3 and 4 with reference to:

CISPR 16/EN 55011, EMC/Limits and Methods of Measurement of Radio Disturbance Characteristics of ISM Radio-Frequency Equipment
IEC 1000-3-2, EMC/Limits for Harmonic Current Emission(2)
IEC 1000-3-3, EMC/Limitations of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems(2)

Immunity: Annex A -- with reference to:

IEC 61000-4-2, EMC/Electrostatic Discharge Immunity Test
IEC 61000-4-3, EMC/Radiated Radio - Frequency Electromagnetic Field Immunity Test
IEC 61000-4-4, EMC/Electrical Fast Transient/Burst Immunity Test
IEC 61000-4-5, EMC/ Surge Immunity Test(3)
IEC 61000-4-6, EMC/Conducted Disturbances induced by Radio Frequency Fields Immunity Test
IEC 61000-4-8, EMC/Power Frequency Magnetic Field Immunity Test(4)
IEC 61000-4-11, EMC/Voltage Dips, Short Interruptions and Variations Immunity Test(5)

Manufacturers Name: MKS Instruments, Inc.
6 Shattuck Road
Andover, MA 01810
USA

Importer’s Name: ________________________________

Importer’s Address: ________________________________

Type of Equipment: Pressure Measurement Products


I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s), when installed in accordance with manufacturers specifications.

Place: Andover, MA
Date: June 28, 2001
Rev: 2

Frank L. Uttaro
(Corporate Director of Quality Assurance)

(Full Name)

*Compliance of the above model numbers requires the use of a braided shielded cable properly terminated at both ends.

FRM12722, Rev. A
DESCRIPTION
The DCM-1000 is a compact, single channel DC-operated signal conditioner capable of providing conditioning of most LVDTs and RVDTs. Operating from ±15V DC, the DCM-1000 provides all necessary circuitry required to operate the position sensor and provide a high level, low noise analog DC output suitable for feeding analog or digital indicators, PLCs and other system indicating and control instrumentation. The DCM-1000 features user selectable excitation frequency and gain to permit use with sensors having widely varying sensitivities. Connections can be made either through a PC board edge connector (mating connector optional) or to solder terminals located on the PC board. Board-mounted standoffs, threaded 6-32, are provided to facilitate mounting.

SPECIFICATIONS
Power Input Voltage & Current .......... ±15V DC, 50mA max.
LVDT Excitation Voltage ................. 3V rms
LVDT Excitation Freq .................. 3k Hz, 5k Hz or 10k Hz
LVDT Input Impedance .................. 200 Ohms (min.)
Output Voltage ....................... ±10V DC
Output Current .......................... 5mA
Frequency Response ................... -3db at 250Hz
Output Ripple ......................... <10mV rms
Output Impedance ..................... <10 Ohms
Nonlinearity .......................... ±0.01% FSO
Operating Temp. Range .................. 0°F to +160°F (-18°C to +70°C)
Temp. Coeff. of Sens ................... ±0.1% FSO/F (0.18% FSO/°C)
Controlled ............................. Zero and Span
Weight .................................. 0.8 ounces (24 grams)
Mating Connector (Optional) .......... Cinch #50-10A-20 or equiv.

CONNECTIONS
Connections to the DCM-1000 must be made in accordance with Figure 1 shown below. The DCM-1000 may be plugged into a PC Board connector (optional) or connections may be made to the solder pin terminals located adjacent to the edge connector fingers. Be sure that power supply common and output Lo are connected as shown to insure proper operation.

Figure 1
Connection Diagram
EXCITATION FREQUENCY SELECTION
The DCM-1000 has three selectable LVDT excitation frequencies. The desired frequency is normally set to match the specifications and/or recommended operating frequency of the LVDT being used. As shipped from the factory, the unit is set to provide 3k Hz frequency, which is common to many LVDTs. Frequency control is obtained by positioning jumpers (shorting bars) on S1, S2 or S3, (see Figure 2). As supplied, a jumper is positioned across S1 as shown in Figure 2. To obtain 5k Hz move the jumper from S1 to S2. To obtain 10k Hz, move the jumper from S1 to S3.

OUTPUT GAIN SELECTION
The DCM-1000 can operate with LVDTs having a wide range of sensitivities. Coarse gain selection adjustment is provided to permit operation with most LVDTs. To set coarse gain, the AC full scale output of the LVDT being used must be determined by performing a calculation as follows:

Sensitivity in Volts/0.001" X Excitation Voltage X Full Stroke in thousandths of an inch = Full Scale Output (V AC rms)

Example 1:±0.050" Stroke LVDT
Sensitivity: 0.0005V/0.001" X 3V rms X 50 (stroke in .001") = 0.975V rms full scale output

Example 2:±1.000" Stroke LVDT
Sensitivity: 0.000065 V/0.001" X 3V rms X 1000 (stroke in .001") = 1.95V rms full scale output

Gain may be adjusted by placing jumpers (shorting bars) as shown in table below. Adjustments are made to S4, S5, S6 and S7.

Placing jumpers as instructed below will yield a ±10V DC full scale output.

<table>
<thead>
<tr>
<th>LVDT Full Scale Output</th>
<th>S4</th>
<th>S5</th>
<th>S6</th>
<th>S7</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 0.3V</td>
<td>Open</td>
<td>Open</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>0.31V - 0.6V</td>
<td>Open</td>
<td>Jumper</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>0.61V - 2.5V</td>
<td>Open</td>
<td>Jumper</td>
<td>Open</td>
<td>Jumper</td>
</tr>
<tr>
<td>2.51V - 5.5V</td>
<td>Jumper</td>
<td>Open</td>
<td>Jumper</td>
<td>Open</td>
</tr>
</tbody>
</table>

Figure 2

 Indicates Jumper Positions as Shipped From Factory

Jumper (Shorting Bar) Locations

Zero Control
Span Control
MULTI-CHANNEL APPLICATIONS
A requirement may exist where multiple DCM-1000s are to be used and where units will be located in close proximity to each other. The DCM-1000 is provided with facility to synchronize the oscillators of multiple units to prevent crosstalk, beating and intermodulation between units. To synchronize the oscillators, a connection between all units should be made to Pin 1. One unit should be designated as the Master and the balance of the units designated as Slaves. The Master unit excitation frequency must be set in accordance with the instructions given in the paragraph entitled "EXCITATION FREQUENCY SELECTION". The Slave units must have a jumper (shorting bar) on S8. On Slave units only, all jumpers (shorting bars) must be removed from S1, S2, S3 and S9.

CALIBRATION PROCEDURE
To calibrate, remove LVDT secondary wire, usually Black (O) from pin 6. Insert temporary jumper between pins 6 and 8 (this jumper will be removed after null adjustment). Apply DC power to unit and allow a 3-5 minute warm-up. Adjust Zero control until a reading of 0V DC is obtained. Turn off power to unit and remove temporary jumper from between pins 6 and 8. Re-connect secondary wire Black (O) to pin 8. Apply power to unit. Adjust core or body of LVDT until 0V DC output is obtained. This position is the true null or zero point of the sensor and the reference point from which subsequent measurements are made.

NOTE: Mechanical adjustment of the core or LVDT body is difficult; try to get as close to null as possible and adjust the zero control to obtain 0V DC output. It is best that the LVDT be within 5% of its true null position to ensure that full displacement is within the LVDTs rated linear range. Offsets of more than 5% can cause non-linear results.

Move the LVDT core to its full scale displacement and adjust the Span control to obtain a reading of 10V DC. Outputs of less than 10V DC may be obtained by adjustment of the Span control (Ex: 5V DC). If desired full scale output cannot be obtained by Span adjustment, reset gain jumpers (shorting bars) to next higher or lower setting as shown in "GAIN SELECTION TABLE" and re-adjust Span control to obtain desired output.

Unit is now ready for normal operation.

CALIBRATION FOR 100% OR LESS ZERO OFFSET OR SUPPRESSION
100% or less zero offset or suppression allows the user to obtain an ascending output over the total or partial full range of the LVDT.

Follow the above instructions for full scale use, but adjust Span control for half the desired full scale output. Move the LVDT core to minus full scale displacement and adjust the Zero control to obtain 0V DC output. Move the LVDT core to plus full scale displacement and adjust the Span control for desired full scale output. Repeat the above procedure to insure proper calibration.

Unit is now ready for normal operation.
Material Safety Data Sheet

IDENTITY (As Used on Label and List)
Kleenmaster Brillanzize

Section I
Manufacturer's Name
Chemical Products Co. Inc.
Address (Number, Street, City, State, and ZIP Code)
1213 Jackson St.
Omaha Nebr. 68102

Emergency Telephone Number
(402)-345-5432 or (402)-553-8340

Telephone Number for Information
(402)-345-5432

Date Prepared
January 1, 1992

Signature of Preparer (designated)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))
None Present - The Toxicologist said this product does not contain hazardous components.

OSHA PEL
ACGIH TLV

Other Limits
Recommended
% (optional)

Section III — Physical/Checmical Characteristics

Boiling Point
212°F

Specific Gravity (H2O = 1)
1.0

Milling Point

N.A.

Evaporation Rate

N.A.

Solvency in Water
Infinite

PH as is

6.3

Appearance and Odor
Milky white - Very little odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)
Open cup, Closed cup
None

Flammable Limits
N.A.

LEL
UEL

Extinguishing Media
None required

Special Fire Fighting Procedures
None known to us

Unusual Fire and Explosion Hazards
None known to us
Section V — Reactivity Data

Stability

Unstable

Stable

X

Conditions to Avoid

N.A.

Compatibility (Materials to Avoid)

Oxidizing material may cause a reaction

Hazardous Decomposition or Byproducts

Silicon Dioxide, Carbon Dioxide, & Traces of incompletely burned carbon products

Hazardous Polymerization

May Occur

Conditions to Avoid

X

Section VI — Health Hazard Data

Route(s) of Entry:

Inhalation?

Skin?

Ingestion?

Health Hazards (Acute and Chronic)

Toxicologist said there are no hazards

Carcinogenicity

None Known

NTP?

IARC Monographs?

OSHA Regulated?

Signs and Symptoms of Exposure

Effects of over exposure may irritate eyes

Medical Conditions

Generally Aggravated by Exposure

Toxicologist said no harm can come from its use. It is safe to use.

Emergency and First Aid Procedures

Flush with water

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Use absorbent material to collect & contain for salvage or disposal

Keep from freezing

None known to us

Waste Disposal Method

We suggest that all local, state & federal regulations concerning health and pollution be reviewed to determine approved disposal procedures.

Precautions to Be Taken in Handling and Storing

None: Keep from freezing

Other Precautions

None

Section VIII — Control Measures

Respiratory Protection (Specify Type)

None required

Ventilation

Local Exhaust

None required

Mechanical (General)

Special

None required

Other

None required

Protective Gloves

None required

Eye Protection

None required

We think proper eye protection is advisable when doing any industrial operation

Protective Clothing or Equipment

None required

Work/Hygienic Practices

None known to us
KLEENMASTER® BRILLIANIZE®
Anti-Static Cleaner and Polish
for Plastics and Shiny Surfaces.

Kleenmaster Brillianize has grown up with the plastics industry, helping them shine up and eliminate static. The applications have expanded just as the industry itself has. This product has proven to be excellent in quality and performance.

ANTI-STATIC:
Surface repels dust.

BRILLIANCE:
Cleans and glazes in one operation.
Makes shiny surfaces brilliant and resist finger marking.

SAFE FOR THE ENVIRONMENT:
Non-toxic and non-hazardous to people and the environment. Has no strong odors or vapors.
Non-flammable. Almost odorless.

EASY TO USE:
Shake the container and spray a good surface to be cleaned at room temperature. Rub briskly with a soft cloth. Before the surface has a chance to dry, polish until it is brilliant. Protect Kleenmaster Brillianize from freezing. Do not use on surfaces to be painted.

RECOMMENDED FOR:

- Plexiglas®
- Lexan®
- Acrylite®
- Lucite®
- Light Fixtures
- Chandeliers
- Showcases & Motorcycles
- Plastic Sheet
- Rod & Tube
- Glass
- Windows
- Displays & Exhibits
- Chromium
- Fiberglass
- Mirrors
- TV Screens
- Video Games
- Copy Machines

Any hard, shiny, non-absorbent surface.

Distributed by:
MATERIAL SAFETY DATA SHEET

PRODUCT NAME: MISSION BLUE
PRODUCT CODE: 615-0005

HMIS CODES: H F R P
2* 3 2 G

================================== SECTION I - MANUFACTURER IDENTIFICATION ==================================

MANUFACTURER'S NAME: LILLY INDUSTRIES, INC.
ADDRESS: 26335 Clay Street, Elkhart, IN 46517
EMERGENCY PHONE: (800) 424-9300 INFORMATION PHONE: (800) 397-1062
DATE REVISED: 01-03-94

NAME OF PREPARER:

================================== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION ==================================

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>CAS NUMBER</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>OTHER</th>
<th>VAPOR PRESSURE</th>
<th>WEIGHT</th>
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<tbody>
<tr>
<td>Styrene Monomer</td>
<td>100-42-5</td>
<td>50ppm</td>
<td>50ppm</td>
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<td>68F</td>
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<tr>
<td>Methyl Methacrylate</td>
<td>60-62-6</td>
<td>100ppm</td>
<td>100ppm</td>
<td></td>
<td>29.0</td>
<td>58F</td>
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</table>

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
This information must be included in all MSDSs that are copied and distributed for this material.

================================== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS ==================================

BOILING RANGE: 214 to 293 Deg F
SPECIFIC GRAVITY (H2O=1): 1.2
VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
SOLUBILITY IN WATER: INSOLUBLE

================================== SECTION IV - FIRE AND EXPLOSION HAZARD DATA ==================================

FLASH POINT: 49 Deg F
METHOD USED: TCC
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: 1.1% UPPER: 12.5%

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES
Closed containers may be cooled with water to prevent pressure build-up.
Fire fighters should wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Isolate from heat, sparks, electrical equipment and open flame.
Closed containers may explode when exposed to extreme heat.
SECTION V - Reactivity Data

Stability: Stable
Conditions to Avoid
Catalysis of large masses may allow build-up of exothermic heat.

Incompatibility (Materials to Avoid)
Avoid accidental contact with peroxides.

Hazardous Decomposition or Byproducts
Carbon monoxide and low molecular weight hydrocarbons.

Hazardous Polymerization: May Occur
Store in a cool place.

SECTION VI - Health Hazard Data

Inhalation Health Risks and Symptoms of Exposure
Excessive breathing of vapors can cause respiratory irritation, nausea and even asphyxiation.

Skin and Eye Contact Health Risks and Symptoms of Exposure
Skin contact can cause moderate irritation (rash/dermatitis)
Eye contact will cause severe irritation or burns.

Skin Absorption Health Risks and Symptoms of Exposure
A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts.

Ingestion Health Risks and Symptoms of Exposure
Ingestion may cause irritation of the mouth, throat and gastro-intestinal tract.

Health Hazards (Acute and Chronic)
Overexposure can cause respiratory irritation and nausea.
Repeated excessive exposures to high amounts may cause central nervous system, liver and kidney effects.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No
Not listed as a carcinogen.

Medical Conditions Generally Aggravated by Exposure
Repeated excessive exposure may aggravate pre-existing liver and kidney disease.

Emergency and First Aid Procedures
Wash skin thoroughly with soap and water.
Flush eyes with large amounts of water and get medical attention.
Remove person to fresh air and give artificial respiration if necessary. Get medical attention.
If swallowed, do not induce vomiting; summon a physician. Vomiting may lead to chemical pneumonitis which can be fatal.
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
- Remove all sources of ignition. Ventilate the area. Clean up spills with inert absorbent using non-sparking utensils.
- Keep out of drains, sewers and waterways.

WASTE DISPOSAL METHOD
- Do not flush to sewer, watershed or waterway.
- Dispose of in accordance with local, state and federal regulations.
- Do not incinerate closed containers.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
- Store away from sources of heat or ignition. Keep containers closed when not in use.

OTHER PRECAUTIONS
- Do not take internally.
- For industrial use only.
- Ground container when pouring to prevent build-up of static charge.

RESPIRATORY PROTECTION
If TLV is exceeded, use chemical respirator with an organic vapor cartridge with prefilter or an air-supplied respirator with self-contained breathing apparatus.

VENTILATION
Heavy solvent vapors should be removed from the lower levels of the working area. In spray application areas engineering and administrative control can be instituted to maintain exposure level below 50ppm for styrene.

PROTECTIVE GLOVES
- Neoprene or polyvinyl alcohol for repeated contact.

EYE PROTECTION
- Safety glasses for protection against spray or splashes.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
- Prevent prolonged skin contact with contaminated clothing. Wash contaminated clothing before reuse.

WORK/HYGIENIC PRACTICES
- Wash hands before eating or smoking.

DISCLAIMER
The information contained herein is information received from our raw material suppliers and other sources and is believed to be reliable. This data is not to be taken as a warranty or representation for which Lilly Industries Inc. assumes legal responsibility.
PRODUCT NAME: Wg31286/Engineering Lab Design
PRODUCT CODE: 150-32751
C.A.S.#: None (Mixture)

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: Polydyne Inc.
ADDRESS: 260 Grell Lane
Johnson Creek, WI 53038

EMERGENCY PHONE: 800-424-9300
INFORMATION PHONE: 800-225-7659

DATE PRINTED: 01/15/01

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS

<table>
<thead>
<tr>
<th>CAS NUMBER</th>
<th>VAPOR PRESSURE</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5</td>
<td>5</td>
<td>88F</td>
</tr>
<tr>
<td>Methyl Methacrylate</td>
<td>Mixture</td>
<td>29</td>
</tr>
</tbody>
</table>

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: N/A.
VAPOR DENSITY: Heavier than air.
SOLUBILITY IN WATER: Negligible.
VOC & BY WT. 33.45%
APPEARANCE AND ODOR: Viscous liquid, slightly sweet odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 77 Deg. F.
METHOD USED: TCC.
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 1.1%  UPPER: 12.5%

EXTINGUISHING MEDIA: Use foam, dry chemical, CO2, or water.

SPECIAL FIREFIGHTING PROCEDURES
Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking. Electric motors, static discharge, or other ignition sources at locations distant from material handling points.
Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.
Polymerization may take place under fire conditions. If polymerization occurs in a closed container, there is a possibility that it will rupture violently. Cool storage container with water if exposed to fire or extreme heat.

SECTION V - REACTIVITY DATA

STABILITY: This is a stable product.

CONDITIONS TO AVOID
Avoid heat, flame, contaminants and catalyst for vinyl polymers. This product is corrosive to copper and copper alloys; dissolve rubber.

INCOMPATIBILITY (MATERIALS TO AVOID)
This product is highly reactive, especially with oxidizers, peroxides, strong acids, metal halides, pure oxygen, and alkali metal graphite compounds.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
Heating of this product to decomposition may cause the emission of irritating, acid fumes.

HAZARDOUS POLYMERIZATION: May occur. See “Conditions to avoid”.

------------------ SECTION VI - HEALTH HAZARD DATA ------------------

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Short term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Symptoms are more likely seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include:
Irritation (nasal, throat, respiratory tract), metallic taste in mouth, impaired coordination, confusion. CNS depression (dizziness, drowsiness, weakness, fatique, nausea, headache, unconsciousness).

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Eyes: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.
Skin: Exposure causes skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Symptoms may include: Gastrointestinal irritation (nausea, vomiting, diarrhea) and possible liver damage. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

HEALTH HAZARDS (ACUTE AND CHRONIC)
This product can irritate all parts of respiratory tract and eyes. May be fatal at 10,000 ppm. Vapor generation of gel coats will rarely exceed 200 ppm.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
May aggravate pre-existing respiratory and skin disorders.

EMERGENCY AND FIRST AID PROCEDURES
Remove victim from exposure to well-ventilated area. Use oxygen or artificial respiration as necessary. In case of eye contact, flush promptly with large amounts of water and seek medical attention. IF INGESTED, DO NOT INDUCE VOMITING - SEEK MEDICAL ATTENTION IMMEDIATELY.

------------------ SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE ------------------

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Remove all sources of ignition. Ventilate area. Absorb spill with an absorbant material such as sawdust, vermiculite or sand, and place in a closed container. In case of large spill, block the area to prevent this material from entering water systems or sewers.

WASTE DISPOSAL METHOD
This product has been tested and found to have a flash point below 140 F. If discarded in liquid form, this product should be
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Avoid storage above 100 Deg. F. Avoid prolonged or repeated skin contact. Avoid inhalation of heated vapors or spray mist.

OTHER PRECAUTIONS
Avoid improper addition of promoter and/or catalyst. A promoter and catalyst used with this product should always be mixed separately with the product, and must never be mixed together.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION
If exposure can exceed the PEL/TLV, use only NIOSH/MSHA approved air-purifying or supplied air respirator operated in a positive pressure mode per the NIOSH/MSHA occupational health guidelines for chemical hazards.

VENTILATION
Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(TWA).

PROTECTIVE GLOVES
Wear chemical resistant gloves.

EYE PROTECTION
Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other type safety glasses. (Consult your safety equipment supplier).

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
Wear protective clothing to prevent skin contact. Keep exposed skin area to a minimum. Eye wash station and safety shower should be available.

WORK/HYGENIC PRACTICES
Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work, using plenty of soap and water.

D.O.T./SHIPPING INFORMATION
Resin Solution, 3, UN1846, PG III.

SECTION IX - DISCLAIMER
The information in this MSDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.
The conditions or methods of handling, storage, use and disposal of the product are beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT.
This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.
PRODUCT NAME: WGO664 White Engineering Lab Design
PRODUCT CODE: 150-62893
C.A.S. #: None (Mixture)

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: Polydyne Inc.
ADDRESS: 260 Grell Lane
Johnson Creek, WI 53038

EMERGENCY PHONE: 800-424-9300 DATE PRINTED: 01/15/01
INFORMATION PHONE: 800-225-7659

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS NUMBER</th>
<th>VAPOR PRESSURE</th>
<th>TEMP</th>
<th>PERCENT (+/- 2%)</th>
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<tr>
<td>Styrene Monomer</td>
<td>100-42-5</td>
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<td>68F</td>
<td>32.1</td>
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<td>(TWA) 50 PPM</td>
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<tr>
<td>(STEL) 100 PPM</td>
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<tr>
<td>OSIA (TWA) 50 PPM</td>
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</tr>
<tr>
<td>(STEL) 100 PPM</td>
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<td></td>
<td></td>
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<tr>
<td>Acetone</td>
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<td></td>
</tr>
<tr>
<td>(TWA) 50 PPM</td>
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<td></td>
</tr>
<tr>
<td>(STEL) 100 PPM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: N/A
VAPOR DENSITY: Heavier than air.
SOLUBILITY IN WATER: Negligible.
VOC % BY WT.: 36.71%
APPEARANCE AND ODOR: Viscous liquid, slightly sweet odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 77 Deg. F.
METHOD USED: TCC
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 1.15 UPPER: 12.15

EXTINGUISHING MEDIA: Use foam. Dry chemical, CO2, or water.
SPECIAL FIREFIGHTING PROCEDURES
Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty), because product (even just residue) can ignite explosively. Polymerization may take place under fire conditions. If polymerization occurs in a closed container, there is a possibility that it will rupture violently. Cool storage container with water if exposed to fire or extreme heat.

SECTION V - REACTIVITY DATA

STABILITY: This is a stable product
CONDITIONS TO AVOID
Avoid heat, flame, contaminants and catalyst for vinyl polymers. This product is corrosive to copper and copper alloys, dissolves rubber.

**INCOMPATIBILITY (MATERIALS TO AVOID)**
This product is highly reactive, especially with oxidizers, peroxides, strong acids, metal halides, pure oxygen, and alkali metal graphite compounds.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS**
Heating of this product to decomposition may cause the emission of irritating, acrid fumes.

**HAZARDOUS POLYMERIZATION:** May occur. See "Conditions to avoid".

---

**SECTION VI - HEALTH HAZARD DATA**

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**
Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.
Symptoms are more likely seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include:
- Irritation (nose, throat, respiratory tract), metallic taste in mouth, impaired coordination, confusion, (by depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).

**SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE**
Eyes: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness, and swelling.
Skin: Exposure causes skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying, and cracking.

**SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**
Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**
Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects.
Swallowing large amounts may be harmful.
Symptoms may include:
- Gastrointestinal irritation (nausea, vomiting, diarrhea) and possible liver damage. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

**HEALTH HAZARDS (ACUTE AND CHRONIC)**
This product can irritate all parts of the respiratory tract and eyes. May be fatal at 10,000 ppm. Vapor generation of gel coats will rarely exceed 200 ppm.

**CARCINOGENICITY:** NTP CARCINOGEN: No  IARC MONOGRAPHS: No  OSHA REGULATED: No

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**
May aggravate pre-existing respiratory and skin disorders.

**EMERGENCY AND FIRST AID PROCEDURES**
Remove victim from exposure to well-ventilated area. Use oxygen or artificial respiration as necessary. In case of eye contact, flush promptly with large amounts of water and seek medical attention. IF INGESTED, DO NOT INDUCE VOMITING; SEEK MEDICAL ATTENTION IMMEDIATELY.

---

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**
Remove all sources of ignition. Ventilate area. Absorb spill with an absorbent material such as sawdust, vermiculite or sand, and place in a closed container. In case of large spill, dike the area to prevent this material from entering water systems or sewers.

**WASTE DISPOSAL METHOD**
This product has been tested and found to have a flash point below 140 F. If discarded in liquid form, this product should be
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid storage above 100 Deg. F. Avoid prolonged or repeated skin contact. Avoid inhalation of heated vapors or spray mist.

OTHER PRECAUTIONS

Avoid improper addition of promoter and/or catalyst. A promoter and catalyst used with this product should always be mixed separately with the product, and must never be mixed together.

RESPIRATORY PROTECTION

If exposure can exceed the PEL/TLV, use only NIOSH/MSHA approved air-purifying or supplied air respirator operated in a positive pressure mode per the NIOSH/MSHA occupational health guidelines for chemical hazards.

VENTILATION

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLVs.

PROTECTIVE GLOVES

Wear chemical resistant gloves.

EYE PROTECTION

Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other type safety glasses. (Consult your safety equipment supplier.)

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Wear protective clothing to prevent skin contact. Keep exposed skin area to a minimum. Eye wash station and safety shower should be available.

WORK/HYGENIC PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work, using plenty of soap and water.

D.O.T./SHIPPING INFORMATION

Resin Solution. 1. UN1866. PG III.

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This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.
MATERIAL SAFETY DATA SHEET

MANUFACTURED BY: Diamond Vogel Paint
1020 Albany Place South
Orange City, Ia 51041

24 Hour Emergency Telephone
CHEMTREC 1-800-424-9300

TRADE NAME: ICS White Base Enamel W/R W/B L/F
MFG. PRODUCT NUMBER: KB-1531
ALTERNATE CODE:

II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>MSG</th>
<th>INGREDIENT</th>
<th>CAS #</th>
<th>WT. %</th>
<th>TLV</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethylene Glycol Butyl Ether</td>
<td>114-76-2</td>
<td>5-10</td>
<td>25 PPM</td>
<td>5</td>
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<tr>
<td>1</td>
<td>Propylene Glycol Butyl Ether</td>
<td>112-04-1</td>
<td>1-3</td>
<td>15</td>
<td>50</td>
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<tr>
<td>1</td>
<td>Isobutyl Alcohol</td>
<td>78-83-1</td>
<td>1-3</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>Butanol</td>
<td>71-36-3</td>
<td>1-5</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

WARNING MESSAGES:
1. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Chronic exposure may cause damage to the central nervous system, respiratory system, lungs, eyes, skin, liver, gastrointestinal tract, spleen, kidneys, and blood.
2. See Section 2A for reportable Hazardous Air Pollutants.

III. PHYSICAL DATA

BOILING RANGE: 212° F

EVAPORATION RATE: * slower than ether *

PERCENT VOLATILE BY VOLUME: 72.12%

WEIGHT PER GALLON: 10.18 LBS

VAPOR DENSITY: * trace amounts of organic vapors will be heavier than air *

ACTUAL VOC (lb/gal): 1.67

EPA VOC (lb/gal): 3.29

EPA VOC (g/L): 394.27

FLASH POINT: 48° C 118° F

LEL: Refer to Section II

IV. FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: CLASS II

DOT CLASSIFICATION (HAZARD CLASS): *Combustible Liquid*

EXTINGUISHING MEDIA: *carbon dioxide, dry chemical, or fire foam*
UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode when exposed to extreme heat. (Due to buildup of steam pressure.)

SPECIAL FIRE FIGHTING PROCEDURES: Use water to keep closed containers cool.

-----------------------**** V. HEALTH AND HAZARD DATA ****-----------------------

Threshold Limit Value: See Section II.

EFFECTS OF OVEREXPOSURE:

ACUTE: High vapor concentrations are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Product has a low order of acute oral and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

CHRONIC: None recognized.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: consult physician

PRIMARY ROUTE(S) OF ENTRY: Skin and Inhalation

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove to fresh air. Restore breathing. Treat symptomatically. Consult a physician.

EYES: Flush immediately with large amounts of water for at least 15 minutes. Talk to a physician for medical treatment.

SKIN: Wipe off with towel. Wash with soap and water. Remove contaminated clothing.

INGESTION: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by a medical personnel. Never give anything by mouth to an unconscious person.

-----------------------**** VI. REACTIVITY DATA ****-----------------------

STABILITY: *stable* HAZARDOUS POLYMERIZATION: *will not occur*

INCOMPATIBILITY: *unknown*

Hazardous Decomposition Products: Fire, burning and welding may generate carbon monoxide.

Conditions to Avoid: Fire, burning, and welding.

-----------------------**** VII. SPILL OR LEAK PROCEDURES ****-----------------------

Steps to be taken in case material is released or spilled:
Remove all sources of ignition (flames, hot surfaces and electrical, static or frictional sparks). Avoid breathing vapors. Ventilate area. Use non-sparking tools. Remove with inert absorbent.

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations.

-----------**** VIII. SPECIAL PROTECTION INFORMATION ***************

RESPIRATORY PROTECTION: In confined areas of poor ventilation, use chemical cartridge respirator or self-contained breathing apparatus.

VENTILATION: Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV and LEI of most hazardous ingredient in Section II, below acceptable limit.

PROTECTIVE GLOVES: None required except for prolonged contact.

EYE PROTECTION:
Splash proof eye goggles. In emergency situations, use eye goggles with a full face shield.

OTHER PROTECTIVE EQUIPMENT: *none*

HYGIENIC PRACTICES: See Section V

-----------**** IX. SPECIAL PRECAUTIONS ***************

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Do not store near heat, sparks, or flame.

OTHER PRECAUTIONS: * none *

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants':

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Wt% of HAPS in product</th>
<th>Pounds HAPS/ Gal product</th>
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<tr>
<td>Ethylene Glycol Butyl Ether</td>
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****
MATERIAL SAFETY DATA SHEET

PRODUCT: ACETONE

SECTION II-A PRODUCT/INGREDIENT

NO. ACETONE

CAS NUMBER PERCENT

NFPA HAZARD RATING: HEALTH 1 FIRE 3 REACTIVITY 0

SECTION II-B ACUTE TOXICITY DATA

NO. ACUTE ORAL LD50 ACUTE DERMAL LD50 ACUTE INHALATION LC50

P 8.75 G/KG (RAT) 20.0 G/KG (RABBIT) 16,000 PPM/4H (RAT)

SECTION III HEALTH INFORMATION


EYE CONTACT
LIQUID IS SEVERELY IRRITATING TO THE EYES. HIGH VAPOR CONCENTRATIONS ARE ALSO IRRITATING.

SKIN CONTACT
LIQUID IS MILDLY IRRITATING TO THE SKIN. PROLONGED OR REPEATED LIQUID CONTACT CAN RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS.

INHALATION
HIGH VAPOR CONCENTRATIONS MAY PRODUCE CENTRAL NERVOUS SYSTEM (CNS) DEPRESSION.

INGESTION
MAY PRODUCE CNS DEPRESSION.

SIGNS AND SYMPTOMS
IRRITATION AS NOTED ABOVE. EARLY TO MODERATE CNS DEPRESSION MAY BE EVIDENCED BY GIDDINESS, HEADACHE, DIZZINESS AND NAUSEA; IN EXTREME CASES, UNCONSCIOUSNESS AND DEATH MAY OCCUR.
Section IV
Occupational Exposure Limits

<table>
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<tr>
<th>No.</th>
<th>OSHA</th>
<th>PEL/Ceiling</th>
<th>TLV/TWA</th>
<th>ACGIH</th>
<th>TLV/STEL</th>
<th>OTHER</th>
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<td>P</td>
<td>750 PPM</td>
<td>750 PPM</td>
<td>1000 PPM</td>
<td>1000 PPM*</td>
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</table>

* OSHA PEL/STEL

Section V
Emergency and First Aid Procedures

Eye Contact
Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

Skin Contact
Flush skin with water. If irritation occurs, get medical attention.

Inhalation
Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention.

Ingestion
Do not give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water and induce vomiting by giving 30cc (2 tablespoons) syrup of ipecac.* If ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Get medical attention.

Note to Physician
*If victim is a child, give no more than 1 glass of water and (30cc (1 tablespoon) syrup of ipecac)

If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

Section VI
Supplemental Health Information

None identified.

Section VII
Physical Data

Boiling Point: 133 Deg F
Specific Gravity: 0.78 e (H2O=1)
60 Deg F
Melting Point: -139 Deg F
Solvency: Complete
(In water)
Evaporation Rate (n-butyl acetate = 1): 5.6
Vapor Pressure: 185.5 e (MM HG) 60 Deg F
Vapor Density: 2.0 (Air=1)
VOC: 100% e 6.55
LB/CAL 77 Deg F
PRODUCT NAME: ACETONE

APPEARANCE AND ODOR: COLORLESS, MOBILE LIQUID. MILD ODOR.

SECTION VIII  FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD: FLAMMABLE LIMITS % VOLUME IN AIR
0 DEG F (TCC) LOWER: 2.6 UPPER: 12.4

EXTINGUISHING MEDIA USE WATER FOG, "ALCOHOL" FOAM, DRY CHEMICAL OR CO2.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS:
DANGER. EXTREMELY FLAMMABLE. CLEAR FIRE AREA OF UNPROTECTED PERSONNEL AND ISOLATE. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS). INCLUDING A POSITIVE PRESSURE MIDSHAPED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

SECTION IX  REACTIVITY

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:
AVOID HEAT, SPARKS, FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS. PREVENT VAPOR ACCUMULATION.

HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

SECTION X  EMPLOYEE PROTECTION

RESPIRATORY PROTECTION:
AVOID PROLONGED OR REPEATED BREATHING OF VAPORS. IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SEC. IV) USE A MIDSHAPED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.124 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS.

PROTECTIVE CLOTHING:
AVOID CONTACT WITH EYES. WEAR CHEMICAL GOGGLES IF THERE IS LIKELIHOOD OF CONTACT WITH EYES. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WEAR GLOVES AND OTHER CLOTHING AS REQUIRED TO MINIMIZE CONTACT.

ADDITIONAL PROTECTIVE MEASURES:
USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS. AIR DRY CONTAMINATED CLOTHING IN A WELL-VENTILATED AREA, THEN LAUNDER BEFORE REUSING.

SECTION XI  ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES:
DANGER: EXTREMELY FLAMMABLE. ELIMINATE ALL IGNITION SOURCES. HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING. *** LARGE SPILLS *** ISOLATE THE HAZARD AREA AND DENY ENTRY TO UNNECESSARY PERSONNEL. WEAR APPROPRIATE RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK ONLY IF SAFE TO DO SO. DIKE AND CONTAIN. WATER FOG MAY BE USEFUL IN SUPPRESSING VAPOR CLOUD; CONTAIN ABSORBENT SUCH AS CLAY, SOD OR OTHER SUITABLE MATERIAL; PLACE IN NON-LEAKING CONTAINERS FOR PROPER DISPOSAL. FLUSH AREA WITH WATER TO REMOVE TRACES RESIDUE; DISPOSE OF FLUSH SOLUTIONS AS ABOVE. *** SMALL SPILLS *** TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS; SEAL.
PRODUCT NAME: ACETONE

TIGHTLY FOR PROPER DISPOSAL.

SECTION XIII
SPECIAL PRECAUTIONS

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS AND FLAME. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE EVEN LIQUID PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. EXTINGUISH PILOT LIGHTS. CIGARETTES AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPORS ARE GONE. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE: FLASH-FIRE CAN RESULT. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE WITH ADEQUATE VENTILATION.

CONTAINERS, EVEN THOSE THAT HAVE BEEN EMTIED, CAN CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, DRILL, GRIND, WELD OR PERFORM SIMILAR OPERATIONS ON OR NEAR CONTAINERS. DO NOT PRESSURIZE DRUM CONTAINERS TO EMBY THEM.

STATIC ELECTRICITY MAY ACCUMULATE AND CREATE A FIRE HAZARD. GROUND FIXED EQUIPMENT. BOND AND GROUND TRANSFER CONTAINERS AND EQUIPMENT.

SECTION XIII
TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION:
CLASS 3 (FLAMMABLE LIQUIDS). II
D.O.T. PROPER SHIPPING NAME:
ACETONE

OTHER REQUIREMENTS:
UN1090, GUIDE 2

SECTION XIV
OTHER REGULATORY CONTROLS

THIS PRODUCT IS LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.

PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT AMENDMENTS OF 1990): PER 40 CFR PART 82, THIS PRODUCT DOES NOT CONTAIN NOR WAS IT DIRECTLY MANUFACTURED WITH ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

IN ACCORDANCE WITH SARA TITLE III, SECTION 313, THE ENVIRONMENTAL DATA SHEET (EDS) SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

SECTION XV
STATE REGULATORY INFORMATION

THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES: OTHER PRODUCT SPECIFIC HEALTH AND SAFETY DATA IN OTHER SECTIONS OF THE MSDS MAY ALSO BE APPLICABLE FOR STATE REQUIREMENTS. FOR DETAILS ON YOUR REGULATORY REQUIREMENTS YOU SHOULD CONTACT THE APPROPRIATE AGENCY IN YOUR STATE.

STATE LISTED COMPONENT

| ACETONE
| CAS NO: 67-64-1 |
| STATE |
| CA, CT, FL, IL, LA, MA, ME, MN |
| NJ, PA, RI |

| PERCENT |
| 99.5-100 |

| STATE CODE |
PRODUCT NAME: ACETONE

SECTION XIV

SPECIAL NOTES

THIS MSDS REVISION HAS CHANGES IN SECTION VIII AND SECTION II OF THE EOS. A SPANISH TRANSLATION OF THIS MSDS MAY BE OBTAINED BY CALLING 1-800-240-MSDS.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: JULY 24, 1995

J. C. WILLET

BE SAFE
READ OUR PRODUCT
SAFETY INFORMATION ... AND PASS IT ON
(PRODUCT LIABILITY LAW REQUIRES IT)
ENVIRONMENTAL DATA SHEET

PRODUCT \ ACETONE
PRODUCT CODE \ 31125  44700

SECTION I  PRODUCT/COMPOSITION

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SECTION II  SARA TITLE III INFORMATION

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<td>(*2)</td>
<td>(*3)</td>
<td>(*4)</td>
<td>(*5)</td>
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</tbody>
</table>

FOOTNOTES

*1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC.302
*2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC.302
*3 = TOXIC CHEMICAL, SEC.319
*4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.65 C), MUST BE USED ON 'TOXIC RELEASE INVENTORY FORM
*5 = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD
P-5 = REACTIVE HAZARD

SECTION III  ENVIRONMENTAL RELEASE INFORMATION

EPA - COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT. UNDER EPA-CERCLA ('SUPERFUND') RELEASES TO AIR, LAND OR WATER WHICH EXCEED THE REPORTABLE QUANTITY MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802.

THE REPORTABLE QUANTITY (RQ) FOR THIS PRODUCT IS 5,000 LBS.

SECTION IV  RCRA INFORMATION


UNDER EPA - RCRA (40 CFR 261.21). IF THIS PRODUCT BECOMES A WASTE MATERIAL, IT WOULD BE AN IGNITABLE HAZARDOUS WASTE, HAZARDOUS WASTE NUMBER D001 REFER TO LATEST EPA OR STATE REGULATIONS REGARDING PROPER DISPOSAL.
PRODUCT NAME: ACETONE

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: JULY 24, 1986

SHELL OIL COMPANY
CORPORATE ENVIRONMENTAL AFFAIRS
P.O. BOX 4320
HOUSTON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(713) 241-2252

FOR EMERGENCY ASSISTANCE PLEASE CALL
SHELL: (713) 473-8461
CHEMTRAC: (800) 424-8300