1 – PRODUCT IDENTIFICATION

PRODUCT NAME: ................ CL-EP Cleaner
UN/NA NUMBER: .................. UN1987
CAS NUMBER: .................... 64-17-5,67-63-0,108-10-1

COMPANY: ......................... PANNIER CORPORATION
................................. 207 SANDUSKY STREET
................................. PITTSBURGH, PA 15212
................................. 412-323-4900 PH
................................. SALES@PANNIER.COM
................................. WWW.PANNIER.COM
24 HR. EMERGENCY PHONE NUMBER......................... INFOTRAC 1-800-535-5053

2 – HAZARDS IDENTIFICATION

HEALTH: ......................... 1
FLAMMABILITY: ..................... 3
REACTIVITY: ......................... 0
TOTAL VOC’S: ...................... 6.59 LBS/GAL

GHS HEALTH CLASSIFICATIONS: .................. SERIOUS EYE DAMAGE/IRRITATION (2B)
........................................ Skin Irritation (2)   Target Organ Toxicity- Single Exposure (3)

GHS PHYSICAL CLASSIFICATIONS: ........... FLAMMABLE LIQUIDS (2)

GHS SIGNAL WORD: ............... DANGER!


GHS PRECAUTIONARY STATEMENTS: .............. P240: GROUND AND BOND CONTAINER AND RECEIVING EQUIPMENT.   P337+313: IF EYE IRRITATION PERSISTS GET MEDICAL ADVICE/ATTENTION
P305+351+338: IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES IF PRESENT AND EASY TO DO – CONTINUE RINSING

P303+361+353: IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER

P370+378: IN CASE OF FIRE: USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE FOR EXTINCTION.

P210: KEEP AWAY FROM HEAT, HOT SURFACES, SPARKS, OPEN FLAMES AND OTHER IGNITION SOURCES. NO SMOKING.

P403+P235+P233: STORE IN A WELL VENTILATED PLACE. KEEP COOL. KEEP CONTAINER TIGHTLY CLOSED.

P243: TAKE ACTION TO PREVENT STATIC DISCHARGES.

P241: USE EXPLOSION-PROOF [ELECTRICAL/VENTILATING/LIGHTING/...] EQUIPMENT.

P242: USE NON-SPARKING TOOLS.

P264: WASH HANDS THOROUGHLY AFTER HANDLING.

P280: WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION

P501 DISPOSE OF CONTENTS/CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT

P233: KEEP CONTAINER TIGHTLY CLOSED

3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENT</th>
<th>PERCENT</th>
<th>CAS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDA-3C 200 PROOF</td>
<td>90 %</td>
<td>64-17-5</td>
</tr>
<tr>
<td>ISOPROPANOL</td>
<td>9%</td>
<td>67-63-0</td>
</tr>
<tr>
<td>METHYL ISOBUTYL KETONE</td>
<td>1%</td>
<td>108-10-1</td>
</tr>
</tbody>
</table>

4 – FIRST-AID MEASURES

BREATHING (INHALATION):... REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPOTMS CONTINUE, GET MEDICAL ATTENTION. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED.

SWALLOWING (INGESTION): IF VICTIM IS CONSCIOUS AND ALERT, GIVE 2-4 CUPFULS OF MILK OR WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL AID IMMEDIATELY. INDUCE VOMITING BY GIVING ONE TEASPOON OF SYRUP OF IPECAC.

EYES: FOR EYES, FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR 15 MINUTES AND CALL A PHYSICIAN.

SKIN (DERMAL): IN CASE OF SKIN CONTACT, WASH THOROUGHLY WITH SOAP AND WATER.

5 – FIRE-FIGHTING MEASURES

FLASHPOINT: 55 F
AUTOIGNITION TEMP: 685.4 F
Safety Data Sheet

EXTINGUISHING MEDIA: WATER FOG OR SPRAY, FOAM, DRY POWDER, CARBON DIOXIDE (CO2).

SPECIAL FIRE FIGHTING PROCEDURES: STATIC IGNITION HAZARD CAN RESULT FROM HANDLING AND USE. VAPORS MAY TRAVEL TO SOURCE OF IGNITION AND FLASH BLACK. VAPORS MAY SETTLE IN LOW OR CONFINED SPACES.

UNUSUAL FIRE AND EXPLOSION HAZARDS: MAY PRODUCE A FLOATING FIRE HAZARD

PROTECTIVE EQUIPMENT: HMIS PERSONAL PROTECTION: G: SAFETY GLASSES, GLOVES, AND VAPOR RESPIRATOR.

6 – ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES: IN CASE OF SPILLAGE, ABSORB WITH INERT MATERIAL AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE REGULATIONS.

WASTE DISPOSAL: DISPOSE OF ONLY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS

7 – HANDLING AND STORAGE

HANDLING/STORAGE: METAL CONTAINERS INVOLVED IN THE TRANSFER OF THIS MATERIAL SHOULD BE GROUNDED AND BONDED. KEEP CONTAINER TIGHTLY CLOSED IN A COOL, DRY AND WELL VENTILATED PLACE.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION: RESPIRATORY PROTECTION IS NORMALLY NOT REQUIRED EXCEPT IN EMERGENCIES OR WHEN CONDITIONS CAUSE EXCESSIVE AIRBORNE LEVELS OF MISTS OR VAPORS. USE NIOSH APPROVED RESPIRATORY PROTECTION

PROTECTIVE CLOTHING: HMIS PERSONAL PROTECTION: G: SAFETY GLASSES, GLOVES, AND VAPOR RESPIRATOR.

OCCUPATIONAL EXPOSURE LIMITS

ETHYL ALCOHOL US(OSHA) TWA 1000 PPM / 1900 mg/m3
ISOPROPYL ALCOHOL US(OSHA) STEL 500 PPM
ISOPROPYL ALCOHOL US(ACGIH) TWA 200 PPM

9 – PHYSICAL / CHEMICAL PROPERTIES

COLOR: CLEAR LIQUID
ODOR: ALCOHOL SCENT
BOILING POINT: 176 F
VAPOR PRESSURE: 44.6 mmHg
VAPOR DENSITY (AIR=1): 1.6 AIR=1
10 – STABILITY AND REACTIVITY

STABILITY: ...................... STABLE UNDER RECOMMENDED STORAGE CONDITIONS
HAZARDOUS DECOMP.: ....... CARBON OXIDES ARE EXPECTED TO BE, UNDER FIRE
CONDITIONS, THE PRIMARY HAZARDOUS
DECOMPOSITION PRODUCTS
INCOMPATIBILITY: .......... OXIDIZERS OR OXIDIZING MATERIALS.
HAZARDOUS REACTIONS: ...... VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR

11 – TOXICOLOGICAL INFORMATION

THRESHOLD LIMIT VALUE:  ACUTE ORAL TOXICITY ETHANOL:
LD50 RAT: 7,060 MG/KG; LITERATURE VALUE
ISOPROPYL ALCOHOL:
LD50 RAT: 5,045 MG/KG; LITERATURE VALUE
ISOPROPYL ALCOHOL:
LD50 RABBIT: 6,410 MG/KG; LITERATURE VALUE
METHYL ISOBUTYL KETONE:
LD50 RAT: 2,080 MG/KG; (LITERATURE VALUE)

ACUTE INHALATION TOXICITY
ETHANOL:
LC50 RAT: 66,000 MG/L; LITERATURE VALUE; 4 H
ISOPROPYL ALCOHOL:
LC50 RAT: 16,000 MG/L; LITERATURE VALUE; 8 H
METHYL ISOBUTYL KETONE:
LC50 RAT: 100 G/M3; (LITERATURE VALUE)

ACUTE DERMAL TOXICITY ETHANOL:
LDLO RABBIT: 20,000 MG/KG; LITERATURE VALUE
ISOPROPYL ALCOHOL:
LD50 RABBIT: 12,800 MG/KG; LITERATURE VALUE
METHYL ISOBUTYL KETONE:
LD50 RABBIT: 1,600 MG/KG; (LITERATURE VALUE)

SKIN IRRITATION ISOPROPYL ALCOHOL:
RABBIT: MILD SKIN IRRITATION; LITERATURE VALUE
METHYL ISOBUTYL KETONE:
RABBIT: MILD SKIN IRRITATION; (LITERATURE VALUE)

EYE IRRITATION ISOPROPYL ALCOHOL:
RABBIT: MODERATE EYE IRRITATION; LITERATURE VALUE; CAUSES EYE IRRITATION.
METHYL ISOBUTYL KETONE:
RABBIT: MODERATE EYE IRRITATION; IRRITATING(LITERATURE VALUE)

12 – ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND DISTRIBUTION:
TOXICITY TO FISH ETHANOL:
LC50 PIMEPHALES PROMELAS: 15,300 MG/L; 96 H; LITERATURE VALUE
METHYL ISOBUTYL KETONE:
Safety Data Sheet

LC50 PIMEPHALES PROMELAS: 505 - 540 MG/L; 96 H; (LITERATURE VALUE)
METHYL ISOBUTYL KETONE:
LC50 SALMO GAIRDNERI: 600 MG/L; 96 H; (LITERATURE VALUE)

ISOPROPYL ALCOHOL:
LC50 PIMEPHALES PROMELAS: > 6,000 MG/L; 96 H; (LITERATURE VALUE)

TOXICITY TO DAPHNIA METHYL ISOBUTYL KETONE:
EC50 DAPHNIA MAGNA: 1,000 MG/L; 24 H; (LITERATURE VALUE)

TOXICITY TO ALGAE METHYL ISOBUTYL KETONE:
EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA: 400 MG/L; 96 H; (LITERATURE VALUE)
METHYL ISOBUTYL KETONE:
EC50 DESMODESMUS SUBSPICATUS (GREEN ALGAE): 980 MG/L; 48 H; (LITERATURE VALUE)

13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: .................. DISPOSE OF ONLY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS

14 – TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:...... ALCOHOLS, N.O.S.
HAZARD CLASS:..................... 3
UN/NA NUMBER: .................... UN1987
PACKAGING GROUP .............. II

15 - REGULATIONS

U.S. FEDERAL CLASSIFICATIONS:
OSHA HAZARDS FLAMMABLE LIQUID, MILD EYE IRRITANT, MILD SKIN IRRITANT

SECTION 302:.......................... NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302

SECTION 312:.......................... ACUTE HEALTH HAZARD CHRONIC HEALTH HAZARD FIRE HAZARD
CERCLA.............................MIBK CAS NO. 108-10-1 RQ 5000 LBS

SARA SECTION 313:............. THE FOLLOWING COMPONENTS ARE SUBJECT TO REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313 ISOPROPYL ALCOHOL CAS NO. 67-63-0

U.S. REGULATED INGREDIENTS:
HAZARD INFORMATION REPORTING US. EPA EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) SARA TITLE III SECTION 313 TOXIC CHEMICALS (40 CFR 372.65) - SUPPLIER NOTIFICATION REQUIRED COMPONENTS CAS-NO.
4-METHYLPENTAN-2-ONE 108-10-1
US. MASSACHUSETTS COMMONWEALTH'S RIGHT-TO-KNOW LAW (APPENDIX A TO 105 CODE OF MASSACHUSETTS REGULATIONS SECTION 670.000)
COMPONENTS CAS-NO.
4-METHYL-PENTAN-2-ONE 108-10-1
ETHANOL 64-17-5
PROPAN-2-OL 67-63-0

US. NEW JERSEY WORKER AND COMMUNITY RIGHT-TO-KNOW ACT (NEW JERSEY STATUTE ANNOTATED SECTION 34:5A-5)
COMPONENTS CAS-NO.
ETHANOL 64-17-5
PROPAN-2-OL 67-63-0
4-METHYL-PENTAN-2-ONE 108-10-1

US. PENNSYLVANIA WORKER AND COMMUNITY RIGHT-TO-KNOW LAW (34 PA. CODE CHAP. 301-323)
COMPONENTS CAS-NO.
ETHANOL 64-17-5
PROPAN-2-OL 67-63-0
4-METHYL-PENTAN-2-ONE 108-10-1

US. EPA EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA)
SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE (40 CFR 355, APPENDIX A)
COMPONENTS CAS-NO.
SARA 302: NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

SPILL REPORTING
US. EPA CERCLA HAZARDOUS SUBSTANCES (40 CFR 302)
COMPONENTS CAS-NO. REPORTABLE QUANTITY
4-METHYL-PENTAN-2-ONE 108-10-1 5,000 LBS 5,000 LBS 1,000
LBS 0.4 MG/L 70 MG/KG 0.5
MG/KG 50 MG/L 100
LBS 5,000 LBS 1 LBS

HEALTH
US. CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65)
COMPONENTS CAS-NO.
NOT LISTED

INVENTORIES
EU LIST OF EXISTING CHEMICAL SUBSTANCES ALL CHEMICAL CONSTITUENTS ARE LISTED IN: EU LIST OF EXISTING CHEMICAL SUBSTANCES (SEE CHAPTER 3)
US TSCA INVENTORY ALL CHEMICAL CONSTITUENTS ARE LISTED IN: US TSCA INVENTORY (SEE CHAPTER 3)
AUSTRALIAN INV. OF CHEM. SUBSTANCES AICS ALL CHEMICAL CONSTITUENTS ARE LISTED IN: AUSTRALIAN INV. OF CHEM. SUBSTANCES AICS (SEE CHAPTER 3)
CANADIAN DOMESTIC SUBSTANCES LIST DSL ALL CHEMICAL CONSTITUENTS ARE LISTED IN: CANADIAN DOMESTIC SUBSTANCES LIST DSL (SEE CHAPTER 3)
JAP. INV. OF EXIST. & NEW CHEMICALS ENCS ALL CHEMICAL CONSTITUENTS ARE LISTED IN: JAP. INV. OF EXIST. & NEW CHEMICALS ENCS (SEE CHAPTER 3)
KOREAN EXIST. CHEMICALS LIST ECL ALL CHEMICAL CONSTITUENTS ARE LISTED IN: KOREAN EXIST. CHEMICALS LIST ECL (SEE CHAPTER 3)
PHILIPPINES INV. OF CHEM. SUBST. PICCS ALL CHEMICAL CONSTITUENTS ARE LISTED IN: PHILIPPINES INV. OF CHEM. SUBST. PICCS (SEE CHAPTER 3)
INV. OF EXIST. CHEM. SUBSTANCES IN CHINA ALL CHEMICAL CONSTITUENTS ARE LISTED IN: INV. OF EXIST. CHEM. SUBSTANCES IN CHINA (SEE CHAPTER 3)
ADDITIONAL: NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY PANNIER CORP. IN THIS RESPECT, SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE,