# MATERIAL SAFETY DATA SHEET

## D-SCUM

### SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>MANUFACTURER'S NAME:</th>
<th>ROCHESTER MIDLAND LIMITED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANUFACTURERS ADDRESS:</td>
<td>851 PROGRESS COURT, OAKVILLE, ONTARIO</td>
</tr>
<tr>
<td>EMERGENCY PHONE NUMBER:</td>
<td>CANUTEC (613) 996-6666</td>
</tr>
<tr>
<td>SUPPLIER IDENTIFIER:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>SUPPLIER'S ADDRESS:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>SUPPLIER EMERGENCY PHONE NUMBER:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>PRODUCT NAME:</td>
<td>D-SCUM</td>
</tr>
<tr>
<td>PRODUCT USE:</td>
<td>FOAMING ACID SHOWER CLEANER</td>
</tr>
<tr>
<td>WHMIS CATEGORY:</td>
<td>E</td>
</tr>
<tr>
<td>PREPARED BY:</td>
<td>ROCHESTER MIDLAND LIMITED.</td>
</tr>
<tr>
<td>PHONE NUMBER OF PREPARER:</td>
<td>(905) 847-3000</td>
</tr>
<tr>
<td>DATE PREPARED:</td>
<td>MAY 31, 2009</td>
</tr>
</tbody>
</table>

### SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>%</th>
<th>CAS#</th>
<th>EXPOSURE LEVELS</th>
<th>LD (50), ROUTE, SPECIES</th>
<th>LC(50), ROUTE, SPECIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOSPHORIC ACID</td>
<td>15-40</td>
<td>7664-38-2</td>
<td>ACGIH TLV-TWA 1 mg/ m$^3$  TLV-STEL 3 mg/ m$^3$ OSHA-TWA 1 mg/ m$^3$ STEL 3 mg/ m$^3$ IDLH: 1000 mg/ m$^3$</td>
<td>ORAL 1530 mg/ Kg (RAT) DERMAL 2740 mg/ Kg (RABBIT)</td>
<td>&gt;850 mg / m$^3$ 1 HOUR (RAT)</td>
</tr>
<tr>
<td>LAURYL DIMETHYL AMINE OXIDE</td>
<td>1-5</td>
<td>1643-20-5</td>
<td>NOT AVAILABLE</td>
<td>ORAL 2700 mg/Kg (MOUSE)</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>0.1-1</td>
<td>64-17-5</td>
<td>ACGIH TLV-TWA 1000 ppm NIOSH TLV-TWA 1000 ppm OSHA PEL-TWA 1000 ppm IDLH 3300 ppm</td>
<td>ORAL 7060 mg/Kg (RAT)</td>
<td>21000 ppm 4 HOUR EXPOSURE (MOUSE)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER INGREDIENTS</th>
<th>%</th>
<th>CAS#</th>
<th>EXPOSURE LEVELS</th>
<th>LD (50), ROUTE, SPECIES</th>
<th>LC(50), ROUTE, SPECIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALKOXYLATED FATTY ALCOHOL</td>
<td>1-5%</td>
<td>68439-46-3</td>
<td>NOT AVAILABLE</td>
<td>ORAL 1378 mg/ Kg (RAT) DERMAL 2000 - &gt;5000 mg/ Kg (RAT)</td>
<td>NOT AVAILABLE</td>
</tr>
</tbody>
</table>
SECTION 03: HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:
ROUTE OF ENTRY: EYES, SKIN, INHALATION, INGESTION

SKIN CONTACT: MAY CAUSE SEVERE IRRITATION; PROLONGED OR REPEATED CONTACT MAY CAUSE BURNS.
SKIN ABSORPTION: NOT AVAILABLE.
EYE: WILL CAUSE SEVERE BURNS, PERMANENT EYE DAMAGE EVEN BLINDNESS
INHALATION: MAY CAUSE IRRITATION, TISSUE DAMAGE TO MUCOUS MEMBRANES OF THE NOSE, THROAT AND ESOPHAGUS. NOT EXPECTED TO PRESENT A SIGNIFICANT INHALATION HAZARD UNDER NORMAL USE CONDITIONS
INGESTION: MAY BE FATAL IF SWALLOWED. WILL CAUSE SEVERE BURNS TO MUCOUS MEMBRANES OF MOUTH, THROAT AND DIGESTIVE TRACT. ASPIRATION OF VOMITED CONTENTS MAY CAUSE CHEMICAL PNEUMONITIS, WHICH CAN BE FATAL.

ACUTE OVER-EXPOSURE EFFECTS: AS ABOVE.
CHRONIC OVER EXPOSURE EFFECTS: DERMATITIS MAY DEVELOP WITH REPEATED OVEREXPOSURE

SECTION 04: FIRST AID MEASURES

EYES: FLUSH EYES WITH ABUNDANT WATER FOR AT LEAST 20 MINUTES WHILE HOLDING EYELIDS OPEN TO ENSURE COMPLETE IRRIGATION OF THE ENTIRE EYE CAVITY. GET IMMEDIATE MEDICAL ATTENTION.
SKIN: WASH SKIN WITH SOAP AND WATER FOR AT LEAST 20 MINUTES. REMOVE CONTAMINATED CLOTHING. IF SYMPTOMS PERsist, GET MEDICAL ATTENTION.
INHALATION: IF SAFE TO ENTER VICTIMS LOCATION, REMOVE VICTIM TO FRESH AIR. ASSIST BREATHING AS NEEDED. GET IMMEDIATE MEDICAL ATTENTION.
INGESTION: DO NOT INDUCE VOMITING. IF VICTIM CONSCIOUS, GIVE 1 - 2 GLASSES OF WATER TO DILUTE STOMACH CONTENTS. GET IMMEDIATE MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

SECTION 05: FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD OF DETERMINATION: NONE.
UPPER EXPLOSION LIMIT (% BY VOLUME): NOT APPLICABLE
LOWER EXPLOSION LIMIT (% BY VOLUME): NOT APPLICABLE
AUTO-IGNITION TEMPERATURE: NOT AVAILABLE
FLAMMABILITY CLASSIFICATION: NON-FLAMMABLE LIQUID
CONDITIONS OF FLAMMABILITY: NONE
MEANS OF EXTINCTION: AS FOR SURROUNDING FIRE.
SPECIAL FIRE FIGHTING PROCEDURES: FIREFIGHTERS SHOULD WEAR FULL PROTECTIVE EQUIPMENT AND USE APPROVED SELF CONTAINED BREATHING APPARATUS. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS TO PREVENT PRESSURE BUILDUP AND POSSIBLE RUPTURE. DO NOT SPATTER OR SPLASH PRODUCT.
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON, NITROGEN AND PHOSPHOROUS.
EXPLOSION DATA: AS WITH ANY STRONGLY ACIDIC SOLUTION, CAN REACT WITH "SOFT" METALS SUCH AS ALUMINUM AND ZINC GENERATING HYDROGEN GAS. THIS GAS IS FLAMMABLE AND/OR EXPLOSIVE IN THE PRESENCE OF AN IGNITION SOURCE. BRIEF INCIDENTAL OVER-SPRAY IS NOT EXPECTED TO CREATE AN EXPLOSION HAZARD.
SENSITIVITY TO STATIC DISCHARGE: NOT SENSITIVE.
SENSITIVITY TO MECHANICAL IMPACT: NOT SENSITIVE

SECTION 06: ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL PROCEDURES: EXTINGUISH ALL IGNITION SOURCES. CLEANUP PERSONNEL MUST USE FULL PROTECTIVE EQUIPMENT. REMOVE UNPROTECTED PERSONNEL AWAY FROM SPILL AREA. VENTILATE AREA. CAUTION: SPILL AREA MAY BE SLIPPERY.
SMALL SPILLS: MOP UP. AND FLUSH AREA WITH WATER.
LARGE SPILLS: DIKE SPILL. DO NOT ALLOW SPILL TO ENTER OPEN WATERWAYS OR SEWERS. RECLAIM ALL MATERIAL POSSIBLE. ABSORB REMAINDER WITH INERT MATERIAL AND PLACE IN SUITABLE CONTAINERS FOR NEUTRALIZATION AND DISPOSAL. ONLY TRAINED PERSONNEL SHOULD DILUTE AND NEUTRALIZE RESIDUE WITH DILUTED ALKALIS. FLUSH AREA WITH WATER.
SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES
AND EQUIPMENT: AVOID CONTACT WITH EYES, SKIN OR CLOTHING. WASH SKIN THOROUGHLY AFTER HANDLING. DO NOT BREATHE MISTS/ SPRAYS. REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE RE-USE. KEEP CONTAINER CLOSED WHEN NOT IN USE. MIX ONLY WITH WATER; ALWAYS ADD PRODUCT TO WATER: NEVER WATER TO PRODUCT. READ AND FOLLOW LABEL INSTRUCTIONS. DO NOT CONTAMINATE FOOD, WATER OR FEED DURING USE OR STORAGE OF THIS PRODUCT. DO NOT MIX WITH CHLORINE SANITIZERS (IE BLEACH)

STORAGE
REQUIREMENTS: KEEP CONTAINER CLOSED WHEN NOT IN USE. STORE IN A COOL WELL VENTILATED AREA AWAY FROM INCOMPATIBLE MATERIALS AND COMBUSTIBLE MATERIALS. KEEP FROM FREEZING. KEEP OUT OF REACH OF CHILDREN. DO NOT REUSE CONTAINER.

SECTION 08: EXPOSURE CONTROLS/ PERSONAL PROTECTION

EYE PROTECTION: WEAR CHEMICAL SPLASH GOGGLES. USE FACE SHIELD IF SPLASHES POSSIBLE.
RESPIRATORY PROTECTION: USE NIOSH APPROVED RESPIRATOR IF EXPOSURE LIMITS ARE EXCEEDED OR IRRITATION OCCURS.
GLOVES: WEAR BUTYL RUBBER, NEOPRENE OR NITRILE GLOVES.
OTHER PROTECTIVE EQUIPMENT: AS NEEDED TO PREVENT ALL CONTACT WITH PRODUCT.
SPECIFIC ENGINEERING CONTROLS: USE GENERAL MECHANICAL AND / OR LOCAL EXHAUST. USE CORROSION PROOF EQUIPMENT.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: LIQUID
ODOUR AND APPEARANCE: PEACH FRAGRANCE – CLEAR DARK RED LIQUID
ODOUR THRESHOLD: SCENT WILL BE PRESENT IN AIR WHEN USED AS DIRECTED
SPECIFIC GRAVITY: 1.18-1.19
VAPOUR PRESSURE : AS WATER
VAPOUR DENSITY (AIR=1): AS WATER
VOC CONTENT (%): 1.3 (ARB 310)
EVAPORATION RATE; SLOWER THAN WATER
BOILING POINT; >118°C (244°F) APPROX.
PH: <1
FREEZING POINT: NOT AVAILABLE
DENSITY (g/ml): 1.18-1.19
COEFFICIENT OF WATER/OIL DISTRIBUTION.: COMPLETELY WATER SOLUBLE

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE UNDER NORMAL USE
INCOMPATIBLE MATERIALS: DO NOT MIX WITH ALKALINE OR CHLORINE CONTAINING CHEMICALS (IE BLEACH), SULFITES, PEROXIDES OR REDUCING AGENTS. REACTIONS CAN GENERATE A GREAT DEAL OF HEAT AND TOXIC GASES. AVOID CONTACT WITH ALUMINIUM OR GALVANIZED SURFACES OR OTHER METALS EXCEPT AS DIRECTED ON THE LABEL.
CONDITIONS OF REACTIVITY: AS ANY STRONG ACID SOLUTION CAN REACT WITH METALS ESPECIALLY “SOFT” METALS SUCH AS ALUMINIUM OR ZINC (GALVANIZED) GENERATING HYDROGEN. THIS GAS IS FLAMMABLE AND/OR EXPLOSIVE IN PRESENCE OF IGNITION SOURCE.
HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON, NITROGEN AND PHOSPHOROUS.
SECTION 11: TOXICOLOGICAL INFORMATION

IRRITANCY OF PRODUCT: CORROSIVE PRODUCT, SEVERE IRRITANT
SENSITIZATION TO MATERIAL: NONE KNOWN.
CARCINOGENICITY: ETHANOL IN ALCOHOLIC BEVERAGES HAS BEEN CLASSED AS A GROUP I CARCINOGEN. DOES NOT APPLY TO OCCUPATIONAL USE.
REPRODUCTIVE EFFECTS: IT IS WELL DOCUMENTED INGESTION OF ALCOHOLIC BEVERAGES (ETHANOL) CAN CAUSE SIGNIFICANT HARMFUL EFFECTS IN UNBORN CHILDREN. THERE ARE NO REPORTS OF ADVERSE EFFECTS ON PREGNANCY FOLLOWING OCCUPATIONAL EXPOSURES.
TERATOGENICITY: THE INGESTION OF ETHANOL DURING PREGNANCY CAN CAUSE SIGNIFICANT HARMFUL EFFECTS IN UNBORN CHILDREN. NO REPORTS OF ADVERSE EFFECTS ON PREGNANCY FOLLOWING OCCUPATIONAL EXPOSURE TO ETHANOL. NOT EXPECTED UNDER NORMAL USE. PHOSPHORIC ACID COMPONENT IS NOT EXPECTED TO SHOW ADVERSE TERATOGENIC EFFECTS.
MUTAGENICITY: PHOSPHORIC ACID COMPONENT BACTERIA MUTAGENIC TEST RESULTS WERE NEGATIVE. NO REPORTED MUTAGENICITY IN HUMANS OR HUMAN CELL CULTURES
TOXICOLOGICALLY SYNERGISTIC PRODUCTS: MIXING THIS PRODUCT WITH NITRIC ACID, NITROUS ACID AND OTHER NITROSATING AGENTS MAY PRODUCE NITROSAMINES WHICH HAVE BEEN FOUND TO BE CARCINOGENIC IN ANIMAL TESTING. NOT A LIKELY OCCURRENCE UNDER NORMAL USE. ETHANOL APPEARS TO ENHANCE THE TOXICITY OF OTHER ALCOHOLS, KETONES, BENZENE, TOLUENE, HALOGENATED HYDROCARBONS, AROMATIC AMINES AND NITROSAMINES. NOT EXPECTED UNDER NORMAL USE CONDITIONS.
OTHER INFORMATION: ETHANOL COMPONENT CAN BE SECRETED THROUGH BREAST MILK.

SECTION 12: ECOLOGICAL INFORMATION

THERE IS NO ECOLOGICAL INFORMATION AVAILABLE FOR PRODUCT. ECOTOXICOLOGICAL INFORMATION TO FOLLOW IS BASED LARGELY OR COMPLETELY ON INFORMATION FOR COMPONENTS.
AQUATIC TOXICITY:
FISH SPECIES DATA:
PHOSPHORIC ACID LC 50 MOSQUITO FISH: 138 mg/ L
ETHANOL LC 50, 24 HR, FINGERLING TROUT : 11200 mg/ L
ETHANOL LC 50, 96 HR, RAINBOW TROUT (30 DAYS OLD) : 12900 mg/ L
ETHANOL LC 50, 96 HR, FATHEAD MINNOW : 14200 mg/ L
ALKOXYLATED FATTY ALCOHOL LC 50, 96 HR, FATHEAD MINNOW: 6 mg/ L
ALKOXYLATED FATTY ALCOHOL LC 50, 96 HR, RAINBOW TROUT: 5-7 mg/ L
INVERTEBRATES:
ETHANOL EC 50, 48 HR, DAPHNIA PULEX : 24 µg/ L
ALKOXYLATED FATTY ALCOHOL EC 50, 48 HR, DAPHNIA: 2.5 mg/ L
(GROWTH INHIBITION) PLANTS:
ETHANOL EC 50, 1-2 HR, GREEN ALGAE : 10000-25000 µg/ L
ALKOXYLATED FATTY ALCOHOL EC 50, 48 HR, ALGAE: 0.95 mg/ L

TOXICITY OF PHOSPHORIC ACID COMPONENT IS RELATED TO PH. IT IS HARMFUL TO AQUATIC LIFE AT LOW CONCENTRATIONS.
BIODEGRADABILITY: LAURYL DIMETHYLAMINE OXIDE COMPONENT IS READILY BIODEGRADABLE. ALKOXYLATED FATTY ALCOHOL BIODEGRADATION >60 % IN 28 DAYS. PHOSPHORIC ACID IS INORGANIC AND THEREFORE NOT AMENABLE TO BIODEGRADATION. IT HAS NO BOD. ETHANOL COMPONENT IS READILY BIODEGRADABLE
MOBILITY: THE PHOSPHOROUS COMPONENT OF PHOSPHORIC ACID MAY PERSIST INDEFINITELY.
PERSISTENCE: THE PHOSPHORIC ACID COMPONENT WHEN RELEASED IN THE SOIL MAY LEACH INTO GROUNDWATER. WHEN RELEASED TO WATER, ACIDITY MAY BE READILY REDUCED BY NATURAL WATER HARDNESS MINERALS.
BIACCUMULATIVE: ETHANOL COMPONENT IS NOT EXPECTED TO BIO ACCUMULATE
CHEMICAL FATE INFORMATION: NOT AVAILABLE
OTHER INFORMATION: NOT AVAILABLE

SECTION 13: DISPOSAL CONSIDERATIONS

IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.
SECTION 14: TRANSPORT INFORMATION

TDG: PHOSPHORIC ACID, LIQUID
8
UN 1805
PACKING GROUP III
ADDITIONAL INFORMATION: NOT AVAILABLE
MARINE POLLUTANT: NO

SECTION 15: REGULATORY INFORMATION:

DSL STATUS: LISTED
HMIS CLASSIFICATION (H, F, R, PE): 3, 0, 1, B
WHMIS CLASSIFICATION: E

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR (CONTROLLED PRODUCTS REGULATIONS) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

DISCLAIMER: THIS INFORMATION WAS COMPILED FROM CURRENT, RELIABLE SOURCES AND IS BELIEVED TO BE CORRECT. AS DATA AND/OR REGULATIONS CHANGE, AND CONDITIONS OF USE ARE BEYOND OUR CONTROL, NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.