

DOT-

PROPER SHIPPING NAME- FLAMMABLE LIQUID, N.O.S. (CONTAINS ISOPROPYL ALCOHOL)

HAZARD CLASS- 3 (FLAMMABLE LIQUID)

IDENTIFICATION NUMBER- UN1993

LABEL REQUIRED- PG III, FLAMMABLE LIQUID

IMDG- PROPER SHIPPING NAME- NOT AVAILABLE

IATA- PROPER SHIPPING NAME- NOT AVAILABLE

15. REGULATORY INFORMATION

SARA 302 THRESHOLD PLANNING QUANTITY. 164 POUNDS

SARA 304 REPORTABLE QUANTITY 7406 POUNDS

SARA 311 CATEGORIES- IMMEDIATE (ACUTE) HEALTH EFFECTS.. Y
DELATED (CHRONIC) HEALTH EFFECTS.. Y
FIRE HAZARD Y
SUDDEN RELEASE OF PRESSURE HAZARD. N
REACTIVITY HAZARD N

WHEN A PRODUCT AND/OR COMPONENT IS LISTED BELOW, THE REGULATORY LIST ON WHICH IT APPEARS IS INDICATED.

STODDARD SOLVENT - MA NJ PA RI
ISOPROPYL ALCOHOL - FL MA MN NJ PA 01
BUTYL CELLOSOLVE - CT LA MA NJ PA RI WV
1,2,4-TRIMETHYLBENZENE - MA NJ PA 01
1,3,5-TRIMETHYLBENZENE - MA NJ RI
XYLENE - FL IL MA ME MN NJ PA RI 01 07
ISOOCTANOL - MA NJ PA RI 05
CUMENE - FL MA MN NJ PA 01 07
ETHYL BENZENE - FL MA MN NJ PA 01 07
NAPHTHALENE - FL MA MN NJ PA 01 07
2-ETHYLHEXANOL - MA PA

01=SARA 313

04=OSHA CARCINOGEN

07=CERCLA 302.4

10=OTHER CARCINOGEN

PA=PENNSYLVANIA RTK

MA=MASSACHUSETTS RTK

FL=FLORIDA

NY=NEW YORK

LA=LOUISIANA

02=SARA 302/304

05=ACGIH CARCINOGEN

08=WHMIS CONTROLLED PROD.

NJ=NEW JERSEY RTK

MI=MICHIGAN 406

RI=RHODE ISLAND

WV=WEST VIRGINIA

ME=MAINE

03=IARC CARCINOGEN

06=NTP CARCINOGEN

CA=CALIFORNIA PROP 65

MN=MINNESOTA RTK

IL=ILLINOIS

CT=CONNECTICUT

OH=OHIO

THIS PRODUCT OR ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE U.S. TSCA INVENTORY.

16. OTHER INFORMATION

* M S D S *
*
* Canadian Centre for Occupational Health and Safety *
* ***** Issue : 2000-1 (February, 2000) *

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 1987798
PRODUCT NAME(S) : Diesel Fuel Water Remover
PRODUCT IDENTIFICATION : PART NO: 75223
DATE OF MSDS : 1997-12-15

*** MANUFACTURER INFORMATION ***

MANUFACTURER : CRC Industries Inc
ADDRESS : 885 Louis Drive
Warminster Pennsylvania
U.S.A. 18974
EMERGENCY TELEPHONE NO. : 215-674-4300

*** SUPPLIER/DISTRIBUTOR INFORMATION ***

SUPPLIER/DISTRIBUTOR : CRC CANADA INC
ADDRESS : 1246 LORIMAR DRIVE, UNIT #2
MISSISSAUGA ONTARIO
CANADA
Telephone: 905-670-2291
Fax: 905-670-5941

*** MATERIAL SAFETY DATA ***

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFIER: Diesel Fuel Water Remover
PART NO.: 75223
PRODUCT USE: Additive
PROPER SHIPPING NAME: n.ap
UN NUMBER: n.ap
TDG CLASS: n.ap
WHMIS CLASS: B3, D2B

=====

SECTION 2 - HAZARDOUS INGREDIENTS

=====

HAZARDOUS INGREDIENTS	%	CAS NUMBER
Petroleum Distillate	94	68476-34-6
LD50 OF INGREDIENT (SPECIES & ROUTE)		
N.AV		
LC50 OF INGREDIENT (SPECIES & ROUTE)		
N.AV		
2 Butoxy Ethanol	5	111-76-2
LD50 OF INGREDIENT (SPECIES & ROUTE)		
1480 mg/kg oral rat		
LC50 OF INGREDIENT (SPECIES & ROUTE)		
500 ppm/4hr/ihl/rat		

Detergent

1

N.AV

LD50 OF INGREDIENT (SPECIES & ROUTE)

N.AV

LC50 OF INGREDIENT (SPECIES & ROUTE)

N.AV

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: Liquid
BOILING POINT: n.av
VAPOUR PRESSURE: n.av
EVAPORATION RATE: n.av
SPECIFIC GRAVITY: 0.867
FREEZING POINT: n.av
VAPOUR DENSITY (AIR=1): n.av
PH: n.av
ODOUR & APPEARANCE: Light amber clear liquid.
COEFF. WATER/OIL DIST.: Negligible in water. Dissolves in most organic solvents.

SECTION 4 - FIRE & EXPLOSION DATA

FLAMMABILITY: Yes UNDER WHAT CONDITIONS: Class B, div 3.
MEANS OF EXTINCTION: Carbon dioxide, dry chemical, foam.
FLASH POINT (DEG C): 46 deg C METHOD: TCC
FLAMMABILITY LIMITS (% BY VOLUME) UPPER: n.av LOWER: n.av
AUTOIGNITION TEMP.: n.av
SENSITIVITY TO IMPACT: n.av
SENSITIVITY TO STATIC DISCHARGE: n.av
HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide.

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY: Stable
INCOMPATIBILITY WITH OTHER SUBSTANCES: Avoid strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: See "HAZARDOUS COMBUSTION PRODUCTS".
REACTIVITY, AND UNDER WHAT CONDITIONS: N.av

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: Skin, inhalation
EFFECTS OF ACUTE EXPOSURE: Inhalation - vapors may cause headache, nausea.
Mist may cause breathing problems. Skin - dryness. Eyes - burning irritation.
EFFECTS OF CHRONIC EXPOSURE: Dermatitis.

EXPOSURE LIMITS: n.av
IRRITANCY OF PRODUCT: Skin, eyes
CARCINOGENICITY: none known
SYNERGISTIC PRODUCTS: none known
TERATOGENICITY: none known
REPRODUCTIVE TOXICITY: none known
MUTAGENICITY: none known
SENSITIZATION TO PRODUCT: none known

SECTION 7 - PREVENTATIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: Solvent resistant.

EYES (SPECIFY): Safety glasses.

FOOTWEAR: Not required.

CLOTHING: Not required.

RESPIRATOR: Self contained above TLV.

ENGINEERING CONTROLS: Use mechanical means to keep concentration below TLV.

LEAK & SPILL PROCEDURE: Remove sources of ignition, ventilate, absorb with absorbant, place in closed container.

WASTE DISPOSAL: Dispose of in accordance with Local, Provincial and Federal Regulations.

HANDLING PROCEDURES & EQUIPMENT: n.ap

STORAGE REQUIREMENTS: Cool dry area

SPECIAL SHIPPING INFORMATION: Consumer Commodity.

SECTION 8 - FIRST AID MEASURES

1. INHALATION: Remove to fresh air, apply artificial respiration if necessary.
 2. EYE : Flush for 15 minutes with large amounts of water.
 3. SKIN : Wash affected area with soap and water. Remove contaminated clothing.
 4. INGESTION : DO NOT INDUCE VOMITING. Call physician or poison control centre.
-

SECTION 9 - PREPARATION DATE OF MSDS

PREPARED BY: Allen Reed

DATE: December 15, 1997.

PHONE NUMBER: (905) 670-2291

FAX NUMBER: (905) 670-5941

* M S D S *
*
* Canadian Centre for Occupational Health and Safety *
* * * * * Issue : 2000-1 (February, 2000) *

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 2180373
PRODUCT NAME(S) : ESSO HD ANTIFREEZE <GM6038M>
PRODUCT IDENTIFICATION : MSDS Number: 08513
DATE OF MSDS : 1998-01-20
CURRENCY NOTE : This MSDS was provided to CCOHS in
electronic form on 1999-12-08

*** MANUFACTURER INFORMATION ***

MANUFACTURER : Imperial Oil (Products Division)
ADDRESS : 111 St Clair Avenue West
Toronto Ontario
Canada M5W 1K3
Telephone: 416-968-4111

*** SUPPLIER/DISTRIBUTOR INFORMATION ***

SUPPLIER/DISTRIBUTOR : Imperial Oil (Products Division)
ADDRESS : 111 St Clair Avenue West
Toronto Ontario
Canada M5W 1K3
Telephone: 416-968-4111

*** MATERIAL SAFETY DATA ***

Date Prepared: January 20, 1998
Supersedes: May 17, 1997
MSDS Number: 08513

1. PRODUCT INFORMATION

Product Identifier: ESSO HD ANTIFREEZE <GM6038M>

Application and Use:
Engine antifreeze coolant

Product Description:

A glycol type antifreeze

REGULATORY CLASSIFICATION

WHMIS:

Class D, Division 2, Subdivision A: Very Toxic Material.

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT

All components of this product are either on the Domestic Substances List (DSL) or are exempt.

TDG INFORMATION (RAIL/ROAD):

Not Regulated in Canada.

Please be aware that other regulations may apply.

TELEPHONE NUMBERS

Emergency 24 hr. (519) 339-2145
Technical Info. (800) 268-3183

MANUFACTURER/SUPPLIER:

IMPERIAL OIL
Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3
(416) 968-4441

2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a) (i) to (iv) or paragraph 14(a) of the Hazardous Products Act:

NAME	%	CAS #
Monoethylene Glycol	60-100 V/V	107-21-1 LD50:4.7g/kg, orl, rat LD50: 9.53 g/Kg, skin, rabbit
Diethylene glycol	1.0-5.0 V/	111-46-6 LD50:12.5g/Kg, orl, hmn LD50:15g/kg, orl, rat
Sodium Tetraborate Pentahydrate	0.5-1.5 V/	1330-43-4

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: 1.110 at 16.0 deg C
Viscosity: >19.10 cSt at 20 deg C
Vapour Density: 2.15
Boiling Point: 166 deg C
Evaporation rate: <1 (1= n-butylacetate)
Solubility in water: 100.00%
Freezing/Pour Point: -37 deg C
pH: 11.0
Odour Threshold: not available
Vapour Pressure: <1 kPa at 38 deg C
Appearance/odour: Clear, green liquid, odourless.

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

Negligible hazard at normal temperatures (up to 38 deg C).
Elevated temperatures or mechanical action may form vapours, mists or fumes which may be irritating to the eyes, nose, throat and lungs.
High vapour concentrations are irritating to the eyes, nose, throat and lungs; may cause headaches and dizziness; may be anesthetic and may cause other central nervous system effects.
Avoid breathing vapours or mists.

EYE CONTACT:

Slightly irritating, but will not injure eye tissue.

SKIN CONTACT:

Low toxicity.
Frequent or prolonged contact may irritate the skin.

INGESTION:

Moderately toxic.

CHRONIC:

Contains ethylene glycol (EG). Repeated high dose exposure to EG by ingestion (animal studies) has caused kidney damage, brain damage, degeneration of the liver, changes in blood chemistry and circulating blood cells. Prolonged and/or repeated exposures may cause similar effects in humans.
Ethylene glycol has been shown to cause developmental and reproductive effects at high dose levels in laboratory animals. The relationship of these results to humans has not been fully established.
This product contains Diethylene Glycol (DEG). Prolonged and repeated exposure through ingestion of DEG may result in toxic effects on the kidney.
Contains sodium tetraborate pentahydrate. Studies have shown that sodium tetraborate pentahydrate can cause infertility in laboratory animals.

ACUTE TOXICITY DATA:

Based on animal and human testing data from similar materials and products, the acute toxicity of this product is expected to be:

Oral: LD50 > 1300 mg/kg (human)
LD50 > 8500 mg/kg (rat)

OCCUPATIONAL EXPOSURE LIMIT:

Manufacturer recommends:

For diethylene glycol, the Supplier recommends an exposure limit of 10 mg/m³ (aerosol) and 50 ppm (total), based upon the AIHA WEEL.

ACGIH recommends:

For Ethylene Glycol aerosol, a ceiling limit of 39.4 ppm (100 mg/m³).

For sodium tetraborate pentahydrate, 1 mg/m³.

Local regulated limits may vary.

5. FIRST AID MEASURES

INHALATION:

In emergency situations use proper respiratory protection to immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

EYE CONTACT:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:

Flush with large amounts of water. Use soap if available.

Remove severely contaminated clothing (including shoes) and launder before reuse.

If irritation persists, seek medical attention.

INGESTION:

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

6. PREVENTIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:

The selection of personal protective equipment varies, depending upon conditions of use.

In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.

Where only incidental contact is likely, wear safety glasses with side shields. No other special precautions are necessary provided skin/eye contact is avoided.

Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering, work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

ENGINEERING CONTROLS:

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces.

HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care.
Store in a cool, well ventilated place away from incompatible materials.
Poison. Do not drink this material.
In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.
Store and load at normal (up to 38 deg C) temperature and at atmospheric pressure.
Empty containers may contain product residue. Do not pressurize cut, heat, or weld empty containers. Do not reuse empty containers without commercial cleaning or reconditioning.

LAND SPILL:

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard.
Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth.
Recover by pumping or by using a suitable absorbant.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

WATER SPILL:

Keep public and other shipping traffic away. Prevent additional discharge of material, if possible to do so without hazard.
Consult health information and protection section regarding possible hazards.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: 119 deg C COC ASTM D92

Autoignition: 227 deg C Flammable Limits: LEL: 3.2% UEL: 15.3%

GENERAL HAZARDS:

Low Hazard; liquids may burn upon heating to temperatures at or above the flash point.
Toxic gases will form upon combustion.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire.

Use alcohol type foam, dry chemical or water spray to extinguish fire. Respiratory and eye protection required for fire fighting personnel. Avoid spraying water directly into storage containers due to danger of boilover.

A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, carbon monoxide, carbon dioxide under thermal decomposition.

8. REACTIVITY DATA

STABILITY:

This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents

HAZARDOUS DECOMPOSITION:

none

9. NOTES

This MSDS has been revised in Sections 2, 3 and 7.

10. PREPARATION

Date Prepared: January 20, 1998

Prepared by: Lubricants & Specialties

IMPERIAL OIL

Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3
(800) 268-3183

CAUTION: " The information contained herein relates only to this product or material and may not be valid when used in combination with any other product or material or in any process. If the product is not to be used for a purpose or under conditions which are normal or reasonably foreseeable, this information cannot be relied upon as complete or applicable. For greater certainty, uses other than those described in Section 1 must be reviewed.

BLEACH WASHING CLOTHES

LD50 / LC50 - ROUTE AND SPECIES
LD50 Oral rat 8910 mg/kg body wt
SODIUM HYDROXIDE <1 1310-73-2 1824
LD50 / LC50 - ROUTE AND SPECIES
LC50 Rat 10500 mg/m3/1 hour

SECTION 3--PHYSICAL DATA

PHYSICAL STATE

GAS ☐ LIQUID ☒ SOLID ☐

ODOUR AND APPEARANCE

Clear straw coloured liquid with a strong odour of chlorine.

ODOUR THRESHOLD PPM

.3 (Chlorine)

SPECIFIC GRAVITY (11% SOLIDS)

1.22 @ 15 C.

VAPOUR PRESSURE mm Hg

17.5 @ 20 C.

VAPOUR DENSITY (Air = 1)

Not Applicable

EVAPORATION RATE

Not Applicable

BOILING POINT

Slowly decomposes at 40 C.

MELTING POINT (11% SOLIDS)

-25 c.

% VOLATILE BY VOLUME

Not Applicable

SOLUBILITY IN WATER

Miscible in all concentrations

pH

Variable depending on residual caustic soda present. Consider as dilute caustic soda.

COEFF. WATER/OIL DIST.

Not Applicable

SECTION 4--FIRE AND EXPLOSION DATA

FLAMMABILITY

YES ☐ NO ☒ IF YES UNDER WHICH CONDITIONS

MEANS OF EXTINCTION

Not Applicable

SPECIAL PROCEDURES

Material is non-flammable, but is decomposed by heat and light causing pressure build-up in containers which could result in explosion. When heated or in contact with acids, it may release chlorine. Vigorous reaction with oxidizable or organic materials result in a fire.

FLASHPOINT AND METHOD

Not Flammable

UPPER EXPLOSION LIMIT

Not Applicable

LOWER EXPLOSION LIMIT

Not Applicable

AUTO IGNITION TEMP.

Not Applicable

HAZARDOUS COMBUSTION PRODUCTS

BLEACH WASHING CLOTHES

Wear rubber gloves.

RESPIRATORY (SPECIFY)

Wear NIOSH approved respirator for chlorine or hydrogen chloride.

EYES (SPECIFY)

Wear chemical safety goggles and for further protection a face shield.

FOOTWEAR (SPECIFY)

Wear high top acid resistant boots.

CLOTHING (SPECIFY)

Wear long sleeve shirt and long trousers. Use a rubber apron for further protection.

OTHER (SPECIFY)

Not Applicable

ENGINEERING CONTROLS

Ventilation should be consistent with generally accepted industrial hygiene and housekeeping practices. Packaging and unloading areas and open processing equipment should be equipped with mechanical exhaust systems.

LEAK AND SPILL PROCEDURE

Ventilate area. Stop and contain leak or spill. Absorb using an inert material (sand, ashes, etc.); collect and dispose. For recover, pump into polyethylene containers. Very small spill may be flushed with large amounts of water.

WASTE DISPOSAL

Consult supplier for specific recommendations for disposal. Waste may have to be disposed of by an approved contractor.

DISPOSER MUST COMPLY WITH FEDERAL, PROVINCIAL, STATE AND LOCAL DISPOSAL LAWS

HANDLING PROCEDURES AND EQUIPMENT

Containers may be under pressure, open cautiously.

STORAGE REQUIREMENTS

Store in a cool dry well ventilated area.

Store away from incompatible materials and direct sunlight.

SPECIAL SHIPPING INFORMATION

SECTION 8--FIRST AID MEASURES

EYES: Flush promptly with lukewarm water for at least 20 minutes and get medical attention. Repeat flushing if necessary.

SKIN: Flush with lukewarm water for at least 20 minutes while removing contaminated clothing. Obtain medical advice immediately.

INGESTION: NEVER give anything by mouth if victim is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 240-300mL (8-10oz) of water. If vomiting occurs naturally have victim lean forward to reduce risk of aspiration.

INHALATION: If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation CPR immediately. Oxygen may be beneficial if administered by a person trained in its use, preferably on a physician's advice. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

SOURCES USED

CCOHS, RTECS, ACGIH

BLEACH WASHING CLOTHES

ADDITIONAL INFORMATION

SECTION 9--PREPARATION DATA

PREPARED BY
Laboratory Services Department
ISSUE DATE
1 August 1988

PHONE NUMBER
(519) 336-2287
REVISED
1 July 1991

ROCTOR & GAMBLE -- BOUNCE, SCENTED HOUSEHOLD FABRIC SOFTENER
PROCTOR & GAMBLE -- BOUNCE, SCENTED HOUSEHOLD FABRIC SOFTE
NER (SU

=====

MSDS Safety Information

=====

FSC: 7930
MSDS Date: 12/07/1993
MSDS Num: CGVCQ
LIIN: 00N084876
Product ID: BOUNCE, SCENTED HOUSEHOLD FABRIC SOFTENER (SUPDAT)
MFN: 01
Responsible Party
Cage: PROCT
Name: PROCTOR & GAMBLE
Address: 11530 REED HARTMAN HWY
City: CINCINNATI OH 45241-2422
Info Phone Number: 800-526-8623
Emergency Phone Number: 800-526-8623
Published: Y

=====

Contractor Summary

=====

Cage: 60362
Name: PROCTER & GAMBLE
Address: 11520 REED HARTMAN HIGHWAY
City: CINCINNATI OH 45241-2422
Phone: 513-983-2508
Cage: PROCT
Name: PROCTOR & GAMBLE CO (513-562-0796)
Address: UNKNOWN
Box: 599
City: UNKNOWN NK 00000
Phone: UNKNOWN

=====

Ingredients

=====

Name: NONIONIC AND CATIONIC FABRIC SOFTENING AGENTS
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Cas: 1318-02-1
RTECS #: ZG6800000
Name: ZEOLITES; (ALUMINOSILICATES)
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

RTECS #: 1000511PU
Name: PERFUME
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Name: NON-WOVEN RAVON CLOTH
OSHA PEL: N/K (FP N)

APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N).
Ventilation: MECHANICAL (GENERAL): ACCEPTABLE.
Protective Gloves: IMPERVIOUS GLOVES (FP N).
Eye Protection: ANSI APPRVD CHEM WORKERS GOGGLES (FP N).
Other Protective Equipment: ANSI APPRVD EYE WASH & DELUGE SHOWER (FP N).
Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
Supplemental Safety and Health: MFR TRADE NAME/PART NO: (OUTDOOR FRESH).

=====

Physical/Chemical Properties

=====

Solubility in Water: LIMITED
Appearance and Odor: OPAQUE WHITE SLITTED SHEETS; MODERN WOODY FRAGRANCE

Percent Volatiles by Volume: 1

=====

Reactivity Data

=====

Stability Indicator: YES
Stability Condition To Avoid: NONE.
Materials To Avoid: NONE.
Hazardous Decomposition Products: BY PRODUCTS: BURNING CAN PRODUCE CARBO
N
MONOXIDE AND/OR CARBON DIOXIDE.
Hazardous Polymerization Indicator: NO

PROCTER & GAMBLE -- CASCADE (AUTOMATIC DISHWASHING DETERGENT) - DISHWASH
ING COMPOUND, MACHINE

PROCTER & GAMBLE -- CASCADE (AUTOMATIC DISHWASHING DETERGENT) - DISHWASH
ING COMPOUND, MACHINE

MATERIAL SAFETY DATA SHEET

NSN: 7930006092555

Manufacturer's CAGE: 74188

Part No. Indicator: A

Part Number/Trade Name: CASCADE (AUTOMATIC DISHWASHING DETERGENT)

=====
===

General Information

=====
===

Item Name: DISHWASHING COMPOUND, MACHINE

Company's Name: PROCTER AND GAMBLE

Company's Street: IVORYDALE TECHNICAL CENTER

Company's City: CINCINNATI

Company's State: OH

Company's Country: US

Company's Zip Code: 45217

Company's Emerg Ph #: 800-543-0485

Company's Info Ph #: 800-543-0485

Record No. For Safety Entry: 001

Tot Safety Entries This Stk#: 001

Status: SMJ

Date MSDS Prepared: 01FEB90

Safety Data Review Date: 04FEB92

MSDS Serial Number: BMSNQ

Hazard Characteristic Code: N/

=====
===

Ingredients/Identity Information

=====
===

Proprietary: NO

Ingredient: SODIUM MONOHYDROGEN PHOSPHATE HEPTAHYDRATE (2:1:1:7); (SODIU
M

PHOSPHATE)

Ingredient Sequence Number: 01

NIOSH (RTECS) Number: WC4600000

CAS Number: 7682-85-6

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: PEROXYDICARBONIC ACID, DISODIUM SALT; (SODIUM CARBONATE)

Ingredient Sequence Number: 02

NIOSH (RTECS) Number: SD9920000

CAS Number: 3313-92-6

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

```
=====
===
Appearance And Odor: LIGHT BLUE GRANULAR AGGLOMERATE W/LOW LEVEL WHITE
GRANULAR ADMIX. PERFUMED.
Boiling Point: N/A
Vapor Pressure (MM Hg/70 F): N/A
Vapor Density (Air=1): N/A
Specific Gravity: 1.0 G/CC
Evaporation Rate And Ref: NOT APPLICABLE
Solubility In Water: APPRECIABLE
=====
```

Fire and Explosion Hazard Data

```
=====
===
Flash Point: NOT APPLICABLE
Lower Explosive Limit: N/A
Upper Explosive Limit: N/A
Extinguishing Media: CO*2, WATER, OR DRY CHEMICAL.
Special Fire Fighting Proc: WEAR NIOSH/MSHA APPROVED SCBA AND FULL
PROTECTIVE EQUIPMENT (FP N).
Unusual Fire And Expl Hazrds: NONE.
=====
```

Reactivity Data

```
=====
===
Stability: YES
Cond To Avoid (Stability): NONE.
Materials To Avoid: NONE.
Hazardous Decomp Products: NONE.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT RELEVANT.
=====
```

Health Hazard Data

```
=====
===
LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: INGEST:MAY CAUSE VOMITING AND TRANSIENT,
MODERATE GI IRRITATION. EYE:MAY CAUSE MODERATE, TRANSIENT IRRITATION.
INHAL:HEAVY OR PROLONGED EXPOSURE TO DUST MAY CAUSE TRANSIENT RESPIRATOR
Y
TRACT IRRITATION. SKIN:TRANSIENT IRRITATION WITH PROLONGED EXPOSURE TO
CONCENTRATED MATERIAL.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NOT RELEVANT.
Signs/Symptoms Of Overexp: INGEST:MAY RESULT IN NAUSEA, VOMITING, AND/ O
R
```

IATA PSN Code: ZZZ

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

AFI PSN Code: ZZZ

AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

Additional Trans Data: NOT REGULATED FOR TRANSPORTATION

=====

===

Disposal Data

=====

===



Page 1 of 5
Procter & Gamble
Fabric and Home Care Division
Ivorydale Technical Center
5299 Spring Grove Avenue
Cincinnati, OH 45217-1087

MATERIAL SAFETY DATA SHEET

MSDS #: FHH/2001/LDLS-522GKL
Supersedes: FHH/2001/LDLS-4XBUK2

Issue Date: 9/7/01
Issue Date: 6/12/01

SECTION I - CHEMICAL PRODUCT

Identity: **Granular Laundry Detergent**

Brands: **CHEER (All variations)**

Hazard Rating:

Health: 1

4=EXTREME

Flammability: 0

3=HIGH

Reactivity: 0

2= MODERATE

1=SLIGHT

Emergency Telephone Number: 24hr P&G Operator - 1-800-846-7669 or call Local Poison Control Center

SECTION II - COMPOSITION AND INGREDIENTS

Cheer Ingredients/Chemical Name: Biodegradable surfactants and enzymes.

Cheer with Bleach Ingredients/Chemical Name: Biodegradable surfactants, enzymes and a color-safe oxygen bleach.

Hazardous Ingredients as defined by-OSHA, 29 CFR 1910.1200.

<u>Chemical Name</u>	<u>Common Name</u>	<u>CAS No.</u>	<u>Recommended Limits</u>	<u>Composition Range</u>	<u>LD50/LC50</u>
Sodium carbonate	Soda Ash	497-19-8	N/A	15-40%	LD50=1.86 g/kg LC50=N/A
Linear alkyl benzene sulfonate	C12.3 LAS	68081-81-2	N/A	7-13%	LD50=0.65-1.26 g/kg LC50=N/A
Subtilisin	Protealytic enzyme	9014-01-1	NIOSH/ ACGIH STEL: 0.00006 mg/m3	0.1-1%	LD50=3.7 g/kg LC50=N/A

Under normal consumer use, this product would not constitute a hazardous product under US OSHA Hazard Communication. With increased exposure (compared with consumer use) this mixture, when tested as a whole, is considered an inhalation hazard (enzymes) and an eye irritant within the meaning of the OSHA Hazard Communication Standard.

*Subtilisin is listed on Table Z-1-A (1989 Air Contaminants Rule - 29 CFR 1910.1000). Though Table Z-1-A was revoked on 6/30/93, the following U.S. states continue to enforce Table Z-1-A limits: Alaska, Connecticut, Michigan, Minnesota, New York, Tennessee, Vermont and Washington. The OSHA STEL (as listed on Table Z-1-A) is 0.00006 mg/m3.

SECTION VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Minimize dust levels while collecting product (see "Inhalation" health effects). Prevent exposure to dust with NIOSH approved respirators with HEPA filters. Use gloves to minimize skin contact.

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. Household solutions may be disposed of in sewer. Dry product may be landfilled if permitted by local regulations. Discard empty container in trash.

Steps To Be Taken in Case Material is Released or Spilled: Flush small quantities down acceptable sanitary/process sewer. Wipe up small spills with a damp cloth. Dispose of according to local regulations.

SECTION VII: HANDLING AND STORAGE

Precautions To Be Taken in Handling and Storing: Avoid skin contact and breathing product dust. Store in a cool, dry place. Keep product dry to maintain free-flowing granules.

Other Precautions: None

SECTION VIII EXPOSURE CONTROLS PERSONAL PROTECTION

Respiratory Protection (Specify Type): None required with normal consumer use. Industrial use may require a NIOSH approved respirator with HEPA filters.

Ventilation *Local Exhaust:* None required with normal consumer use. *Special:* None

Industrial use may require LEV.

Mechanical (General): General dilution ventilation is adequate with normal consumer use. *Other:* None

Eye Protection: None required with normal consumer use.

Industrial setting: If a splash of product in solution is likely, chemical goggles may be needed.

Protective Gloves: None required with normal consumer use.

Industrial Setting: Protective gloves (rubber, neoprene) should be used for any prolonged direct contact.

Other Protective Equipment: None required with normal consumer use.

Industrial Setting: Protective disposable suits may be required under heavy industrial dust conditions.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point °F: N/A

Specific Gravity ($H_2O=1$): N/A

Vapor Pressure (mm Hg): N/A

Percent Volatile by Volume (%): N/A.

Vapor Density (Air=1): N/A

Evaporation Rate (nBuOAc=1): N/A

Odor Threshold: N/A

Reserve Alkalinity: 4-5

Coefficient of Water/Oil Distribution: N/A

pH (10% solution): 10 - 11

Scooped Density: ~590 - 663 g/L

Solubility in Water: Mostly

Cheer Appearance and Odor: White granular agglomerate. Product is perfumed.

Cheer w/ Bleach Appearance and Odor: White granular agglomerate with blue speckles. Product is perfumed.

SECTION XVI. OTHER INFORMATION

*N/A. - Not Applicable

*N/K. - Not Known

The submission of this MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or any other process. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, for any damage to any property resulting from misuse of the controlled product.

THE CLOROX -- CLOROX 2 - BLEACH, LAUNDRY
THE CLOROX -- CLOROX 2 - BLEACH, LAUNDRY
MATERIAL SAFETY DATA SHEET
THE CLOROX

AS OF January 1999

NSN: 6850010141324
Manufacturer's CAGE: 93098
Part No. Indicator: B
Part Number/Trade Name: CLOROX 2

=====
===
General Information
=====

=====
===
Item Name: BLEACH, LAUNDRY
Company's Name: THE CLOROX CO
Company's Street: 7200 JOHNSON DR
Company's City: PLEASANTON
Company's State: CA
Company's Country: US
Company's Zip Code: 94566
Company's Emerg Ph #: 303-573-1014
Company's Info Ph #: 415-847-6100
Record No. For Safety Entry: 006
Tot Safety Entries This Stk#: 007
Status: SMJ
Date MSDS Prepared: 01MAY90
Safety Data Review Date: 21FEB95
MSDS Serial Number: BWRCG
Hazard Characteristic Code: NK
=====

=====
===
Ingredients/Identity Information
=====

=====
===
Proprietary: NO
Ingredient: PERBORIC ACID, SODIUM SALT, TETRAHYDRATE; (SODIUM PERBORATE
Ingredient Sequence Number: 01
Percent: 5-25
NIOSH (RTECS) Number: SC7350000
CAS Number: 10486-00-7
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Proprietary: NO
Ingredient: BACILLUS SUBTILIS BPN; (SUBTILISINS - PROTEOLYTIC) CONTAININ
G
INGS 3 & 4
Ingredient Sequence Number: 02
Percent: 0.5-2
NIOSH (RTECS) Number: CO9450000
CAS Number: 1395-21-7
OSHA PEL: C 0.00006 MG/M3
ACGIH TLV: C 0.00006 MG/M3

Conditions To Avoid (Poly): NOT RELEVANT.

=====
===

Health Hazard Data

=====
===

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: MODERATE EYE IRRITANT. HARMFUL IF SWALLOWED.

INHALATION OF LARGE QUANTITIES OF DUST MAY CAUSE SENSITIZATION.
SENSITIZATION SYMPTOMS MAY RANGE FROM HAY FEVER TO ASTHMA.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NOT RELEVANT.

Signs/Symptoms Of Overexp: SEE HEALTH HAZARDS.

Med Cond Aggravated By Exp: NONE.

Emergency/First Aid Proc: SKIN:FLUSH W/COPIOUS AMOUNTS OF WATER. CALL MD (FP N). EYE:FLUSH WITH WATER FOR @ LEAST 15 MINUTES. INGEST:DRINK GLASSFUL

OF WATER & CALL PHYS. INHAL:REMOVE TO FRESH AIR IF BREATHING PROBLEMS DEVELOP. IF BREATHING PROBLEMS PERSIST, SEEK PROMPT MEDICAL ATTENTION.

=====
===

Precautions for Safe Handling and Use

=====
===

Steps If Matl Released/Spill: RINSE WITH WATER. FLUSH SM QTYS (LESS THAN 2 LBS) DOWN DRAIN W/PLENTY OF WATER. FOR LARGER QTYS DISPOSE OF I/A/W LOCAL, STATE AND FEDERAL REGULATIONS.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Method: DISPOSAL MUST BE I/A/W FEDERAL, STATE & LOCAL REGULATIONS (FP N).

Precautions-Handling/Storing: KEEP OUT OF REACH OF CHILDREN. AVOID MAKING

DUST. STORE IN COOL, DRY AREA. KEEP AWAY FROM HEAT & ACIDS WHEN STORED IN

LARGE QUANTITIES.

Other Precautions: AVOID SKIN AND EYE CONTACT AND INHALATION OF DUST.

=====
===

Control Measures

=====
===

Respiratory Protection: NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N).

Ventilation: USE GENERAL VENTILATION TO MINIMIZE EXPOSURE TO DUST.

Protective Gloves: IMPERVIOUS GLOVES (FP N).

Eye Protection: ANSI APPRVD SAFETY GLASSES (FP N).



Page 1 of 4
Procter & Gamble
CPG TN 6
2 Procter & Gamble Plaza
Cincinnati, OH 45202

MATERIAL SAFETY DATA SHEET

Supersedes: N/A

Issue Date: 2/1/00

Issue Date: N/A

SECTION I - CHEMICAL PRODUCT

Identity: **Liquid Disinfecting Bathroom Cleaner**

Brands: **COMET DISINFECTING BATHROOM CLEANER (Professional Line)**

Hazard Rating: 1

Health: 1

4=EXTREME

Flammability:

3=HIGH

Reactivity:

2=MODERATE

1=SLIGHT

Emergency Telephone Number: 24hr P&G Operator - 1-513-983-1100 or call Local Poison Control Center

SECTION II - COMPOSITION AND INGREDIENTS

Ingredients/Chemical Name: Cleaning agents (dipropylene glycol butyl ether, citric acid), quality control agents, perfume, and water.

This mixture, when tested as a whole, is considered an eye irritant within the meaning of the OSHA Hazard Communication Standard

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.

<u>Chemical Name</u>	<u>Common Name</u>	<u>CAS No.</u>	<u>Recommended Limits</u>	<u>Composition Range</u>	<u>LD50/LC50</u>
None					

SECTION III - HAZARDS IDENTIFICATION

Health Hazards (Acute and Chronic):

Ingestion: Mild mucous membrane irritant.

Eye Contact: Mild eye irritant.

Inhalation: Mild respiratory irritant.

Skin: Mild skin irritant.

Signs and Symptoms of Exposure:

Ingestion: Oral ingestion may result in gastrointestinal irritation with nausea, vomiting and diarrhea.

Eye Contact: Instillation into the eye may result in transient mild to moderate irritation.

Skin: Use on irritated or extremely dry skin may aggravate the existing condition

Inhalation: May cause mild irritation

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: None

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. Do not landfill. Small (household) quantities may be disposed of via sewer.

Steps To Be Taken in Case Material is Released or Spilled: Use water spray to dilute and/or wash away spills to avoid exposure and to protect persons working to stop/repair leak.

SECTION VII - HANDLING AND STORAGE

Precautions To Be Taken in Handling and Storing: Handling and storage must be well ventilated, cool and dry. Materials must be isolated from potential sources of ignition. Fire fighting equipment must be available at all times.

Other Precautions: Keep away from heat/sparks and open flame.

SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection (Specify Type): None required with normal use.

Ventilation *Local Exhaust:* None required with normal use.

Special: None

Mechanical (General): Acceptable.

Other: None

Eye Protection: None required with normal use.

Industrial Setting: For splash protection, use chemical goggles. Eye wash fountain is desirable.

Protective Gloves: None required with normal use.

Other Protective Equipment: None required with normal use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point °F: N/A

Specific Gravity (H₂O=1): 1.030-1.045

Vapor Pressure (mm Hg): N/A

Percent Volatile by Volume (%): N/A

Vapor Density (Air=1): N/A

Evaporation Rate (nBuOAc=1): N/A

Odor Threshold: N/A

Freezing Point: N/A

Coefficient of Water/Oil Distribution: N/A

pH (1% solution): Unknown

Scooped Density: N/A

Solubility in Water: Completely

Appearance and Odor: Clear liquid. Product is perfumed.

Reserve Alkalinity: N/A

SECTION X - STABILITY AND REACTIVITY

Possible Hazardous Reactions/Conditions: None known

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None known

Other Recommendations: None