



Imperial Oil

MATERIAL SAFETY DATA SHEET

SKIN CONTACT:

Immediately flush with large amounts of water. Use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. If irritation persists, seek medical attention.

INGESTION:

DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). 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 goggles, long sleeves, and chemical-resistant gloves. 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. In keeping with good personal hygiene practices, wash hands thoroughly after handling the material. Do not handle or store near an open flame, sources of heat, or sources of ignition. Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source. Use proper relaxation and grounding procedures. 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. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent. 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:

Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters. 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: > 40 deg C PMCT ASTM D93

Autoignition: NA Flammable Limits: LEL: 0.7% UEL: 6.5%

GENERAL HAZARDS:

Combustible Liquid; may form combustible mixtures at or above the flash point. Toxic gases will form upon combustion. Static Discharge; material may accumulate static charges which may cause a fire.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire. Use 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 and traces of oxides of sulphur

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

All components of this product are listed on the U.S. TSCA inventory.

10. PREPARATION

Date Prepared: April 08, 1997

Prepared by: Lubricants & Specialties
IMPERIAL OIL
Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3
(800) 288-3183

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 with the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Imperial Oil customers and their employees and agents only. Any further distribution of this MSDS by Imperial Oil customers is prohibited without the written consent of Imperial Oil.



MATERIAL SAFETY DATA SHEET

SKIN CONTACT:

Immediately flush with large amounts of water. Use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. If irritation persists, seek medical attention.

INGESTION:

DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). 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 goggles, long sleeves, and chemical-resistant gloves. 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. In keeping with good personal hygiene practices, wash hands thoroughly after handling the material. Do not handle or store near an open flame, sources of heat, or sources of ignition. Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source. Use proper relaxation and grounding procedures. 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. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent. 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:

Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters. 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: >40 deg C PMCT ASTM D93

Autoignition: NA Flammable Limits: LEL: 0.7% UEL: 6.5%

GENERAL HAZARDS:

Combustible Liquid; may form combustible mixtures at or above the flash point. Toxic gases will form upon combustion. Static Discharge; material may accumulate static charges which may cause a fire.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire. Use 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 and traces of oxides of sulphur

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

All components of this product are listed on the U.S. TSCA inventory.

10. PREPARATION

Date Prepared: April 08, 1997

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 with the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Imperial Oil customers and their employees and agents only. Any further distribution of this MSDS by Imperial Oil customers is prohibited without the written consent of Imperial Oil."



MATERIAL SAFETY DATA SHEET

Date Prepared: April 21, 1999
Supersedes: June 20, 1997
MSDS Number: 08522

Cette fiche signalétique est aussi disponible en français

1. PRODUCT INFORMATION

Product Identifier: UNLEADED GASOLINE
REGULAR UNLEADED
MIDGRADE UNLEADED
ESSO SUPER PREMIUM UNLEADED
PREMIUM UNLEADED
ESSO REGULAR UNLEADED
ESSO MIDGRADE UNLEADED
ESSO EXTRA MIDGRADE UNLEADED
ESSO PREMIUM UNLEADED
EXXON MIDGRADE UNLEADED
EXXON PREMIUM UNLEADED
INDOLINE GASOLINE
PREMIUM GASOLINE
ESSO EXTRA MIDGRADE GASOLINE
MIDGRADE GASOLINE
GASOLINE REGULAR UNLEADED
GASOLINE MIDGRADE UNLEADED MUL89 (DYED OR CLEAR)
GASOLINE REGULAR UNLEADED RUL87 (DYED OR CLEAR)
GASOLINE PREMIUM UNLEADED PUL91 (DYED OR CLEAR)
GASOLINE PREMIUM UNLEADED PUL92 (DYED OR CLEAR)
GASOLINE PREMIUM UNLEADED SUL94
SUPERSUPREME 94 PREMIUM UNLEADED GASOLINE-MTBE
GASOLINE MIDGRADE UNLEADED MUL89 < P91/R87 >
GASOLINE MIDGRADE UNLEADED MUL89 DCA < P92/R87 >

Application and Use:
Motor gasoline fuel, for use in internal combustion engines only

Product Description:

A mixture of aliphatic and aromatic hydrocarbons and additives.

REGULATORY CLASSIFICATION

WHMIS:

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

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT

All components of this product are either on the Domestic Substances List (DSL), exempt, or have been notified under Section 26 of CEPA.

TDG INFORMATION (RAIL/ROAD):

Shipping Name: Gasoline
Class: 3
Packing Group: II
PIN Number: UN1203

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 #
Gasoline	> 99 v/v	8006-61-9
		LD50 > 18ml/kg, ori, rat LD50 > 5ml/kg, skn, rbt
Methyl T-Butyl Ether	0-11 v/v	1634-04-4
		LD50: 3.9g/Kg, ing, rat LD50: > 10g/Kg, skn, rbt LC50: 142Mg/L, inh, rat

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available
Viscosity: 0.80 cSt at 20 deg C
Vapour Density: 3.2
Boiling Point: 25 to 210 deg C
Evaporation rate: > 10 (1 = n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: -60 deg C less than
Odour Threshold: not available
Vapour Pressure: 76 kPa to 103 kPa at 38 deg C
Density: 0.73 g/cc at 15 deg C
Appearance/odour: Naturally occurring water white or pale yellow;
may be dyed a variety of colours for tax or other
purposes; petroleum odour.

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

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 and cause a skin rash (dermatitis).

INGESTION:

Low toxicity.
Small amounts of this liquid drawn into the lungs from swallowing or vomiting may cause severe health effects (e.g. bronchopneumonia or pulmonary edema).

CHRONIC:

The International Agency for Research on Cancer (IARC) has evaluated gasoline and found it to be a possible human carcinogen.
Contains benzene. Human health studies (epidemiology) indicate that prolonged and/or repeated overexposures to benzene may cause damage to the blood producing system and serious blood disorders, including leukemia.
Animal tests suggest that prolonged and/or repeated overexposures to benzene may damage the embryo/fetus. The relationship of these animal studies to humans has not been fully established.
Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.).

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products, the acute toxicity of this product is expected to be:
Oral : LD50 > 18 ml/kg (Rat)
Dermal : LD50 > 5 ml/kg (Rabbit)

OCCUPATIONAL EXPOSURE LIMIT:

Manufacturer recommends:
For Benzene (skin) 1 ppm TWA for 8 hour workday.
For gasoline, 300 mg/m3.
For Methyl-tert-Butyl Ether, a 15 minute short-term exposure limit (STEL) of 50 ppm.

ACGIH recommends:
For Gasoline, ACGIH recommends a TWA of 300 ppm (890 mg/m3) and categorizes it as an animal carcinogen.
For n-Hexane (skin), 50 ppm (176 mg/m3).
For Benzene, ACGIH recommends a TWA of 0.5 ppm (1.6 mg/m3), (skin), and categorizes it as a confirmed human carcinogen.
For Methyl-tert-Butyl Ether, ACGIH recommends a TLV of 40 ppm (144 mg/m3) and categorizes it as an animal carcinogen.

Local regulated limits may vary.

Please turn over

**TO/A****FAXBACK**DATE: **23 February 2000**

PLEASE INDICATE CHANGES AND MAIL/FAX TO OUR ADDRESS BELOW
 NOUS AVISER DE TOUT CHANGEMENT PAR COURRIER OU PAR FAX
 (ADRESSE CI-DESSOUS)

ATTENTION:

COMPANY/COMPAGNIE:

ADDRESS/ADRESSE:

CITY/VILLE:

FAX NO./N° DE FAX: (780) 430 - 1797

PHONE NO./N° DE TÉLÉPHONE: (XXX) XXX -

LANGUAGE PREFERENCE/LANGUE DE CORRESPONDANCE:

ENG/ANG: **X** FR/FR: BOTH/LES DEUX:

ATTENTION:

COMPANY/COMPAGNIE:

ADDRESS/ADRESSE:

CITY/VILLE:

FAX NO./N° DE FAX:

PHONE NO./N° DE TÉLÉPHONE:

LANGUAGE PREFERENCE/LANGUE DE CORRESPONDANCE:

ENG/ANG: FR/FR: BOTH/LES DEUX:

FROM/DE

**IOL FAXBACK SYSTEM
 CUSTOMER SERVICE
 90 WYNFORD DR.
 NORTH YORK, ONTARIO
 FAX NUMBER: 416-441-7829
 PHONE NUMBER: 800-IOL-MSDS**

MESSAGE

**ONE OF OUR PRIORITIES IS TO KEEP OUR CUSTOMERS ABREAST OF HEALTH AND SAFETY
 INFORMATION REGARDING THE USE OF OUR PRODUCTS IN THE WORKPLACE.
 PLEASE FIND ATTACHED, OUR MOST CURRENT MATERIAL SAFETY DATA SHEET (MSDS).**

**PLEASE REPLACE ANY PREVIOUS SHEETS WITH THE ATTACHED VERSIONS.
 IT IS IMPERATIVE THAT THIS NEW INFORMATION BE COMMUNICATED, AS
 APPROPRIATE, TO YOUR EMPLOYEES AND/OR CUSTOMERS.
 SHOULD YOU EXPERIENCE ANY DIFFICULTY WITH THIS FAX TRANSMISSION, OR HAVE
 RECEIVED IT BY ERROR, PLEASE NOTIFY THE SENDER BY CALLING THE ABOVE NUMBER.
 WE ALSO WOULD ASK YOUR HELP IN KEEPING OUR RECORDS CURRENT.
 IF THE ABOVE INFORMATION REQUIRES ANY REVISION, COMPLETE THE FAXBACK AREA
 ON THIS LETTER AND RETURN IT TO US AT THE ABOVE ADDRESS OR FAX NUMBER.**

**YOUR BUSINESS IS APPRECIATED AND WE WILL CONTINUE TO SUPPLY QUALITY
 PRODUCTS AND SERVICES, ALONG WITH INFORMATION TO ASSIST YOU IN YOUR
 EFFORTS TO MAINTAIN A HEALTHY AND SAFE WORKPLACE.
 PRODUCTS WITH (OBSOLETE) AS SUFFIX ARE NO LONGER MANUFACTURED OR SOLD.***

MSDS INCLUDED/FS INCLUDE(S)

**UNLEADED GASOLINE
 LIGHT DISTILLATE
 MIDDLE DISTILLATE**



MATERIAL SAFETY DATA SHEET

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:

DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). 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. Use explosion-proof ventilation equipment.

HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care. 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.

Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source. Use proper relaxation and grounding procedures.

For personnel entry into confined spaces (i.e. bulk storage tanks) a proper confined space entry procedure must be followed including ventilation and testing of tank atmosphere.

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. Vapours or dust may be harmful or fatal. Warn occupants of downwind areas.

Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust.

Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent.

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:

Eliminate all sources of ignition. Vapours or dust may be harmful or fatal. Warn occupants and shipping in downwind areas.

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: -40 deg C COC D92 less than/moins de

Autoignition: NA Flammable Limits: LEL: 1.4% UEL: 7.6%

GENERAL HAZARDS:

Extremely flammable; material will readily ignite at normal temperatures. Flammable Liquid; may release vapours that form flammable mixtures at or above the flash point. Toxic gases will form upon combustion. Static Discharge; material may accumulate static charges which may cause a fire.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited use water spray to disperse the vapours.

Either allow fire to burn out under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.

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

All components of this product are listed on the U.S. TSCA inventory.

This MSDS has been revised in Section 4. Occupational Exposure Limit change.

10. PREPARATION

Date Prepared: April 21, 1999

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 with the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Imperial Oil customers and their employees and agents only. Any further distribution of this MSDS by Imperial Oil customers is prohibited without the written consent of Imperial Oil."



Imperial Oil

MATERIAL SAFETY DATA SHEET

Date Prepared: May 12, 1998
Supersedes: May 18, 1995
MSDS Number: 08529

Cette fiche signalétique est aussi disponible en français

1. PRODUCT INFORMATION

Product Identifier: LIGHT DISTILLATE
 ESSO STOVE OIL (DYED OR CLEAR)
 DIESEL ARCTIC (DYED OR CLEAR)
 ESSO DIESEL DEW (DYED OR CLEAR)
 ESSO DIESEL ARCTIC (DYED OR CLEAR)
 ESSO STOVE QUALITY COMMERCIAL FUEL
 ESSO STOVE QUALITY FURNACE FUEL
 ESSO STOVE QUALITY HEATING OIL (DYED OR CLEAR)
 STOVE QUALITY FURNACE FUEL
 DIESEL 60 (DYED OR CLEAR)
 DIESEL DEW (DYED OR CLEAR)
 ESSO DIESEL 60 (DYED OR CLEAR)
 ESSO DIESEL LIGHT (DYED OR CLEAR)
 STOVE OIL (DYED OR CLEAR)
 STOVE QUALITY HEATING OIL (DYED OR CLEAR)
 ESSO DIESEL FUEL OIL 50 (DYED OR CLEAR)
 DIESEL LOW SULFUR LIGHT (DYED OR CLEAR)
 LIGHT DISTILLATE (LOW SULFUR)
 STOVE QUALITY COMMERCIAL FUEL
 DIESEL FUEL OIL 50 (DYED OR CLEAR)
 DIESEL LIGHT (DYED OR CLEAR)
 DIESEL LOW SULFUR LIGHT DYED EP
 FURNACE LIGHT (DYED OR CLEAR)

Application and Use:
Multi-purpose fuel

Product Description:

A complex mixture of aliphatic, olefinic, naphthenic and aromatic hydrocarbons, and additives.

REGULATORY CLASSIFICATION

WHMIS:

Class B, Division 3: Combustible Liquids.
Class D, Division 2, Subdivision B: 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):

Shipping Name: FUEL OIL
Class: 3
Packing Group: III
PIN Number: UN1202

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) 968-4111

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 #
Kerosene, straight run	0-100 v/v	8008-20-6 LD50: > 5g/kg, oral, rat
Light Atmospheric Gas Oil	0-100 v/v	64741-44-2
Light Hydrocracked Distillate	0-100 v/v	64741-77-1

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available

Viscosity: 1.80 cSt at 40 deg C
Vapour Density: 4
Boiling Point: 180 to 320 deg C
Evaporation rate: < 1 (1= n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: -39 deg C ASTM D97
Odour Threshold: not available
Vapour Pressure: 4 kPa at 38 deg C
Density: 0.85 g/cc at 15 deg C
Appearance/odour: White or pale yellow liquid, petroleum odour

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

Negligible hazard at normal temperatures (up to 38 deg C).
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.
Irritating.

INGESTION:

Low toxicity.
Small amounts of this liquid drawn into the lungs from swallowing or vomiting may cause severe health effects (e.g. bronchopneumonia or pulmonary edema).

CHRONIC:

Lifetime skin painting tests indicate that materials of similar composition have produced skin cancer in experimental animals. The relationship of these results to humans has not been fully established.

ACUTE TOXICITY DATA:

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

Oral : LD50 > 5000 mg/kg (Rat)
Dermal : LD50 > 2000 mg/kg (Rabbit)
Inhalation : LC50 > 2500 mg/m3 (Rat)

OCCUPATIONAL EXPOSURE LIMIT:

Manufacturer recommends:
100 ppm based on composition.

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:

Immediately flush with large amounts of water. Use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. If irritation persists, seek medical attention.

INGESTION:

DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). Keep at rest. Get prompt medical attention.

Please turn over



Imperial Oil

MATERIAL SAFETY DATA SHEET

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 goggles, long sleeves, and chemical-resistant gloves.
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. In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.
Do not handle or store near an open flame, sources of heat, or sources of ignition.
Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source. Use proper relaxation and grounding procedures.
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. Do not use combustible materials such as sawdust.
Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent.
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:

Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters.

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: 40 deg C PMCT ASTM D93

Autoignition: NA Flammable Limits: LEL: 0.7% UEL: 6.5%

GENERAL HAZARDS:

Combustible Liquid; may form combustible mixtures at or above the flash point.
Toxic gases will form upon combustion.
Static Discharge; material may accumulate static charges which may cause a fire.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire.
Use 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, oxides of sulphur.
In addition, small amounts of nitrogen oxides will be formed.

8. REACTIVITY DATA

STABILITY:

This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents. Use product with caution around heat, sparks, pilot lights, static electricity and open flames.

HAZARDOUS DECOMPOSITION:

none

9. NOTES

All components of this product are listed on the U.S. TSCA inventory.

Three year WHMIS review.

This MSDS has been revised in Sections 1, 3, 7 and 8.

10. PREPARATION

Date Prepared: May 12, 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 with the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Imperial Oil customers and their employees and agents only. Any further distribution of this MSDS by Imperial Oil customers is prohibited without the written consent of Imperial Oil."



MATERIAL SAFETY DATA SHEET

Date Prepared: April 08, 1997
Supersedes: April 13, 1994
MSDS Number: 00826

Cette fiche signalétique est aussi disponible en français

1. PRODUCT INFORMATION

Product Identifier: MIDDLE DISTILLATE
ESSO MARINE GAS OIL (DYED OR CLEAR)
ESSO RAILROAD DIESEL (DYED OR CLEAR)
HEATING OIL (DYED OR CLEAR)
DIESEL (DYED OR CLEAR)
DIESEL QUALITY FURNACE FUEL (DYED OR CLEAR)
DIESEL QUALITY HEATING OIL (DYED OR CLEAR)
ESSO DIESEL (DYED OR CLEAR)
ESSO DIESEL QUALITY COMMERCIAL FUEL (DYED OR CLEAR)
ESSO DIESEL QUALITY FURNACE FUEL
ESSO DIESEL QUALITY HEATING OIL
ESSO FURNACE FUEL (DYED OR CLEAR)
ESSO HEATING OIL (DYED OR CLEAR)
ESSO MARINE DIESEL FUEL (DYED OR CLEAR)
ESSO RAILROAD DIESEL FUEL #3 (DYED OR CLEAR)
ESSO TOBACCO CURING OIL
FUEL OIL 75
FUEL OIL 76
DIESEL MARINE (DYED OR CLEAR)
DIESEL MARINE GAS OIL (DYED OR CLEAR)
FURNACE (DYED OR CLEAR)
DIESEL MARINE - POUR DEPRESSED (DYED OR CLEAR)
NO.2 FUEL OIL
NAVAL FUEL OIL 3-GP-11M (DYED)
ESSO DIESEL FUEL LS
DIESEL LOW SULFUR (DYED OR CLEAR)
NO.2 FUEL OIL FOR EXPORT
DIESEL FOR EXPORT (DYED OR CLEAR)
FURNACE TOBACCO CURING OIL
DIESEL NAVAL 3GP-11 (DYED OR CLEAR)
DIESEL NAVAL 3GP-15 (DYED OR CLEAR)
DIESEL LOW SULFUR RAIL (DYED OR CLEAR)
DIESEL LOW SULFUR DYED EP
DIESEL RAIL (DYED OR CLEAR)
DIESEL RAIL #3 (DYED OR CLEAR)
DIESEL RAIL #3 <HD> (DYED OR CLEAR)
DIESEL LOW SULFUR <032> (DYED OR CLEAR)
FURNACE URBAN (DYED OR CLEAR)
DIESEL (032) (DYED OR CLEAR)
DIESEL LOW SULFUR (EXP DYED)
FURNACE FUEL <032> DYED
DIESEL LOW SULFUR <EXPORT>

Application and Use:
Multi-purpose fuel

Product Description:

A complex mixture of aliphatic, olefinic, naphthenic and aromatic hydrocarbons.

REGULATORY CLASSIFICATION

WHMIS:

Class D, Division 2, Subdivision B: Toxic Material
Class B, Division 3: Combustible Liquids

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):

Shipping Name: FUEL OIL
Class: 3
Packing Group: III
PIN Number: UN1202

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) 968-4111

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 #
Fuel Oil No.2	> 89.9 v/v	68476-30-2

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available
Viscosity: 1.30 cSt at 40 deg C
to 11.00 cSt at 40 deg C
Vapour Density: 4
Boiling Point: 150 to 370 deg C
Evaporation rate: < 1 (1 = n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: not available
Odour Threshold: not available
Vapour Pressure: 4 kPa at 38 deg C
Density: 0.85 g/cc at 15 deg C
Appearance/odour: White or pale yellow liquid, petroleum odour

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

Negligible hazard at normal temperatures (up to 38 deg C).
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.
Irritating.

INGESTION:

Low toxicity.
Small amounts of this liquid drawn into the lungs from swallowing or vomiting may cause severe health effects (e.g. bronchopneumonia or pulmonary edema).

CHRONIC:

Lifetime skin painting tests indicate that materials of similar composition have produced skin cancer in experimental animals. The relationship of these results to humans has not been fully established.

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products, the acute toxicity of this product is expected to be:
Oral : LD50 > 5000 mg/kg (Rat)
Dermal : LD50 > 2000 mg/kg (Rabbit)
Inhalation : LC50 > 2500 mg/m3 (Rat)

OCCUPATIONAL EXPOSURE LIMIT:

Manufacturer recommends:
100 ppm based on composition.

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.

Please turn over

Windex

Windex

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

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 2132117
PRODUCT NAME(S) : WINDEX - BLUE
MR. MUSCLE WINDOW CLEANER
PRODUCT IDENTIFICATION : UPC CODE 59200 789
UPC CODE 59200 772
UPC CODE 59200 770
UPC CODE 59200 769
UPC CODE 59200 738
UPC CODE 59200 672
UPC CODE 59200 10672
UPC CODE 19800 8521
UPC CODE 19800 8522
DATE OF MSDS : 1998-08-14
CURRENCY NOTE : This MSDS was provided to CCOHS in
electronic form on 1999-10-18

*** MANUFACTURER INFORMATION ***

MANUFACTURER : S C Johnson & Son, Inc
ADDRESS : 1525 Howe Street
Racine Wisconsin
U.S.A. 53403-2236
Telephone: 800-725-6737
MANUFACTURER : S C Johnson and Son, Limited
ADDRESS : 1 Webster Street
Brantford Ontario
Canada N3T 5R1
Telephone: 519-756-7900
EMERGENCY TELEPHONE NO. : 800-228-5635 Ext 092 (Transportation,
U.S.A.)
613-996-6666 (Transportation, CANUTEC,
collect)
888-779-7920 (Poison Control)

*** SUPPLIER/DISTRIBUTOR INFORMATION ***

SUPPLIER/DISTRIBUTOR : S C Johnson and Son, Limited
ADDRESS : 1 Webster Street
Brantford Ontario
Canada N3T 5R1
Telephone: 519-758-6611

*** MATERIAL SAFETY DATA ***

MATERIAL SAFETY DATA SHEET

Page 2 of 6

MSDS # 126000004

WINDEX - BLUE

Date Issued: 14Aug1998

Supersedes:

07Oct1997

SECTION 2 - INGREDIENT INFORMATION

WEIGHT%	INGREDIENT AND EXPOSURE LIMIT
0.1-1.0	Ethylene glycol n-hexyl ether (CAS# 112-25-4) Exposure Limit: 20 ppm TWA (SUPPLIER RECOMMENDED)
0.5-1.5	2-butoxyethanol (CAS# 111-76-2) Exposure Limit: 25 ppm ACGIH/OSHA TWA (SKIN)
1-5	Isopropanol (CAS# 67-63-0) Exposure Limit: 400 ppm OSHA/ACGIH TWA , 500 ppm OSHA/ACGIH STEL
90-95	Water (CAS# 7732-18-5) Exposure Limit: NOT ESTABLISHED

SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also See Section 11)

ROUTE(S) OF ENTRY

Eye contact. Skin contact.

EFFECTS OF ACUTE EXPOSURE:

EYE

May cause: Moderate eye irritation.

SKIN

Prolonged or repeated contact may cause: Mild skin irritation.

Drying/defatting of skin.

INHALATION

None known.

INGESTION

None known.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE

None known.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT

Flush immediately with water for 20 minutes. If irritation persists, get medical attention.

SKIN CONTACT

Wash contaminated area with water and soap. If irritation persists, get medical attention.

INHALATION

Remove to fresh air.

MATERIAL SAFETY DATA SHEET

Page 3 of 6

MSDS # 126000004

WINDEX - BLUE

Date Issued: 14Aug1998

Supersedes:

07Oct1997

SECTION 4 - FIRST AID MEASURES (continued)

INGESTION

Immediately drink 1-2 glasses of water or milk. Do not administer anything by mouth to an unconscious person. Do not induce vomiting! Seek immediate medical attention.

SECTION 5 - FIRE AND EXPLOSION INFORMATION

FLASH POINT

124°F (51°C) (TCC)

FLAMMABLE LIMITS

Not available.

AUTOIGNITION TEMPERATURE

Not available.

EXTINGUISHING MEDIA

Foam. CO2. Dry chemical. Water fog.

SPECIAL FIREFIGHTING PROCEDURES

Normal fire fighting procedure may be used. Fire fighters should wear self-contained breathing apparatus and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Container may burst in heat of fire.

SECTION 6 - PREVENTIVE RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Dike large spills. Absorb with oil-dri or similar inert material. Sweep or scrape up and containerize.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONARY INFORMATION

Keep out of reach of children.

OTHER HANDLING AND STORAGE CONDITIONS

Keep container well closed when not in use.

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

No special requirements under normal use conditions.

VENTILATION

General room ventilation adequate.

PROTECTIVE GLOVES

No special requirements under normal use conditions.

EYE PROTECTION

No special requirements under normal use conditions.

MATERIAL SAFETY DATA SHEET

Page 4 of 6

MSDS # 126000004

WINDEX - BLUE

Date Issued: 14Aug1998

Supersedes:

07Oct1997

SECTION 8 - SPECIAL PROTECTION INFORMATION (continued)

OTHER PROTECTIVE MEASURES

If major exposure is possible to eyes/skin, wear/use appropriate protective equipment.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

COLOR

Blue

PRODUCT STATE

Liquid.

ODOR

Ammonia-like

pH

10.3-11.3

ODOR THRESHOLD

Not available.

SOLUBILITY IN WATER

Complete

SPECIFIC GRAVITY (H₂O=1)

0.996

VAPOR DENSITY (AIR=1)

Same as water.

EVAPORATION RATE (BUTYL ACETATE=1)

Not available.

VAPOR PRESSURE (mm HG)

Same as water.

BOILING POINT

Not available.

FREEZING POINT

Not available.

COEFFICIENT OF WATER/OIL

Not available.

PERCENT VOLATILE BY VOLUME (%)

Not available.

VOLATILE ORGANIC COMPOUND (VOC)

2-Butoxyethanol. Isopropanol.

THEORETICAL VOC (LB/GAL)

0.37 lb/gal

SECTION 10 - STABILITY AND REACTIVITY

STABILITY

Stable

STABILITY - CONDITIONS TO AVOID

No special requirements.

INCOMPATIBILITY

No special requirements.

MATERIAL SAFETY DATA SHEET

Date Issued: 14Aug1998

Supersedes:

07Oct1997

SECTION 10 - STABILITY AND REACTIVITY (continued)

HAZARDOUS DECOMPOSITION PRODUCTS

Produces normal products of combustion.

HAZARDOUS POLYMERIZATION

Will not occur.

HAZARDOUS POLYMERIZATION - CONDITIONS TO AVOID

No special requirements.

SECTION 11 - TOXICOLOGY INFORMATION (Also See Section 3)

LD50 (ACUTE ORAL TOX)

Estimated to be greater than 5000 mg/kg (rats).

LD50 (ACUTE DERMAL TOX)

Not applicable.

LC50 (ACUTE INHALATION TOX)

Not applicable.

EFFECTS OF CHRONIC EXPOSURE

None known.

SENSITIZATION

None known.

CARCINOGENICITY

None known.

REPRODUCTIVE TOXICITY

None known.

TERATOGENICITY

None known.

MUTAGENICITY

None known.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA

Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL INFORMATION

No special method. Observe all applicable Federal/ Provincial/ State regulations and Local/ Municipal ordinances regarding disposal of non-hazardous materials.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT INFORMATION

Cleaning, scouring or washing compounds, N.O.I., Liquids Contains:

Isopropyl Alcohol

CANADIAN SHIPPING NAME

WINDEX - BLUE

MATERIAL SAFETY DATA SHEET

Date Issued: 14Aug1998

Supersedes:

07Oct1997

SECTION 14 - TRANSPORTATION INFORMATION (continued)

TDG CLASSIFICATION

Not applicable.

PIN/NIP

Not applicable.

PACKING GROUP

Not applicable.

EXEMPTION NAME

EXEMPT AS PER TDG REGULATION 2.23.2(1)

SECTION 15 - REGULATORY INFORMATION

WHMIS CLASSIFICATION

B,3; D,2B;

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under California's Proposition 65.

SECTION 16 - OTHER INFORMATION

ADDITIONAL INFORMATION

Use as directed.

EPA REGISTRATION #

Not applicable.

PREPARATION INFORMATION -

PREPARED BY

Manufacturer's Technical Support Department. Refer to page 1 (Manufacturer) for contact information.

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

PRINT DATE: 06Oct1999

TOILET CLEANER

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

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 2132015
PRODUCT NAME(S) : TOILET DUCK - PINE FRESH
PRODUCT IDENTIFICATION : UPC CODE 62300 715
DATE OF MSDS : 1995-06-05
CURRENCY NOTE : This MSDS was provided to CCOHS in
electronic form on 1999-10-18

*** MANUFACTURER INFORMATION ***

MANUFACTURER : S C Johnson & Son, Inc
ADDRESS : 1525 Howe Street
Racine Wisconsin
U.S.A. 53403-2236
Telephone: 800-725-6737
MANUFACTURER : S C Johnson and Son, Limited
ADDRESS : 1 Webster Street
Brantford Ontario
Canada N3T 5R1
Telephone: 519-756-7900
EMERGENCY TELEPHONE NO. : 800-228-5635 Ext 092 (Transportation,
U.S.A.)
613-996-6666 (Transportation, CANUTEC,
collect)
888-779-7920 (Poison Control)

*** SUPPLIER/DISTRIBUTOR INFORMATION ***

SUPPLIER/DISTRIBUTOR : S C Johnson and Son, Limited
ADDRESS : 1 Webster Street
Brantford Ontario
Canada N3T 5R1
Telephone: 519-758-6611

*** MATERIAL SAFETY DATA ***

MATERIAL SAFETY DATA SHEET

Page 1 of 6

MSDS # 110471006

TOILET DUCK - PINE FRESH

Date Issued: 05Jun1995

Supersedes:

31May1995

US MANUFACTURER:

S.C. Johnson Commercial Markets, Inc.
S.C. Johnson Professional
8310 16th Street
Sturtevant, Wisconsin 53177-0902
Phone: (800) 725-6737

TOILET CLEANER

MSDS Internet Address:
www.scjprofessional.com
Emergency Phone: (800) 851-7145

CANADIAN MANUFACTURER:
S.C Johnson Professional, Inc.
Phone: (519) 756-7900
1 Webster Street, Suite 100
Brantford, Ontario N3T 5R1
Transportation Emergency:
CANUTEC (collect) (613) 996-6666
Emergency Phone: (800) 851-7145

DISTRIBUTED IN CANADA BY:
S.C Johnson Professional, Inc.
Phone: (519) 758-6611
1 Webster Street, Suite 100
Brantford, Ontario N3T 5R1

HAZARD RATING	HMIS	HAZARD	NFPA
4-Very High	2	Health	1
3-High	0	Flammability	0
2-Moderate	0	Reactivity	0
1-Slight		Special	
0-Insignificant			

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME
TOILET DUCK - PINE FRESH
REASON FOR CHANGE
No significant changes.
PRODUCT USE
Bathroom care

UPC CODE	QUANTITY US SIZE	CANADIAN SIZE
62300 00715	12	475 mL
WEIGHT%	INGREDIENT AND EXPOSURE LIMIT	
	MATERIAL SAFETY DATA SHEET	

Page 2 of 6

MSDS # 110471006

TOILET DUCK - PINE FRESH

Date Issued: 05Jun1995

Supersedes:

31May1995

SECTION 2 - INGREDIENT INFORMATION

0.5-1.5 Dodecylbenzene sulfonic acid (CAS# 27176-87-0)
Exposure Limit: NOT ESTABLISHED

1-5 Lactic acid (CAS# 50-21-5)
Exposure Limit: NOT ESTABLISHED

TOILET CLEANER

1-5 Alkoxyated linear alcohol (CAS# 68439-50-9)
Exposure Limit: NOT ESTABLISHED

90-98 Water (CAS# 7732-18-5)
Exposure Limit: NOT ESTABLISHED

0.1-1.0 Sulfamic acid, crystal grade (CAS# 5329-14-6)
Exposure Limit: 1 mg/m3 TWA (SUPPLIER RECOMMENDED)

SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also See Section 11)

ROUTE(S) OF ENTRY

Skin contact.

EFFECTS OF ACUTE EXPOSURE:

EYE

May cause: Moderate eye irritation.

SKIN

May cause: Mild skin irritation.

INHALATION

None known.

INGESTION

None known.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE

None known.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT

Flush immediately with plenty of water for at least 15 to 20 minutes.

If irritation persists, get medical attention.

SKIN CONTACT

Wash contaminated area with water and soap.

INHALATION

No special requirements.

MATERIAL SAFETY DATA SHEET

Page 3 of 6

MSDS # 110471006

TOILET DUCK - PINE FRESH

Date Issued: 05Jun1995

Supersedes:

31May1995

SECTION 4 - FIRST AID MEASURES (continued)

INGESTION

Immediately drink 1-2 glasses of water or milk. Seek immediate medical attention.

SECTION 5 - FIRE AND EXPLOSION INFORMATION

FLASH POINT

Not applicable.

TOILET CLEANER

FLAMMABLE LIMITS

Not applicable.

AUTOIGNITION TEMPERATURE

Not applicable.

EXTINGUISHING MEDIA

Foam. CO2. Dry chemical. Water fog.

SPECIAL FIREFIGHTING PROCEDURES

Normal fire fighting procedure may be used.

UNUSUAL FIRE AND EXPLOSION HAZARDS

No special hazards known.

SECTION 6 - PREVENTIVE RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Absorb with oil-dri or similar inert material. Sweep or scrape up and containerize, Rinse affected area thoroughly with water.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONARY INFORMATION

Keep out of reach of children.

OTHER HANDLING AND STORAGE CONDITIONS

Keep from freezing.

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

No special requirements under normal use conditions.

VENTILATION

General room ventilation adequate.

PROTECTIVE GLOVES

No special requirements under normal use conditions.

EYE PROTECTION

No special requirements under normal use conditions.

OTHER PROTECTIVE MEASURES

No special requirements.

MATERIAL SAFETY DATA SHEET

Page 4 of 6

MSDS # 110471006

TOILET DUCK - PINE FRESH

Date Issued: 05Jun1995

Supersedes:

31May1995

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

COLOR

Green

PRODUCT STATE

Liquid.

ODOR

Pine

pH

0.9-1.5

ODOR THRESHOLD

Not available.

SOLUBILITY IN WATER

TOILET CLEANER

Complete
SPECIFIC GRAVITY (H2O=1)
1.01
VAPOR DENSITY (AIR=1)
Same as water.
EVAPORATION RATE (BUTYL ACETATE=1)
Not available.
VAPOR PRESSURE (mm HG)
Same as water.
BOILING POINT
212°F (100°C)
FREEZING POINT
32°F (0°C)
COEFFICIENT OF WATER/OIL
Not available.
PERCENT VOLATILE BY VOLUME (%)
Not available.
VOLATILE ORGANIC COMPOUND (VOC)
Not available.
THEORETICAL VOC (LB/GAL)
Not available.

SECTION 10 - STABILITY AND REACTIVITY

STABILITY

Stable

STABILITY - CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

Do not mix with any other chemicals or products unless specified by label. Strong bases/alkalis/caustics (e.g. sodium hydroxide).

HAZARDOUS DECOMPOSITION PRODUCTS

None known.

MATERIAL SAFETY DATA SHEET

Page 5 of 6

MSDS # 110471006

TOILET DUCK - PINE FRESH

Date Issued: 05Jun1995

Supersedes:

31May1995

SECTION 10 - STABILITY AND REACTIVITY (continued)

HAZARDOUS POLYMERIZATION

Will not occur.

HAZARDOUS POLYMERIZATION - CONDITIONS TO AVOID

Not applicable.

SECTION 11 - TOXICOLOGY INFORMATION (Also See Section 3)

LD50 (ACUTE ORAL TOX)

Estimated to be greater than 5000 mg/kg (rats).

LD50 (ACUTE DERMAL TOX)

Not available.

LC50 (ACUTE INHALATION TOX)

Not applicable.

EFFECTS OF CHRONIC EXPOSURE

TOILET CLEANER

None known.
SENSITIZATION
None known.
CARCINOGENICITY
None known.
REPRODUCTIVE TOXICITY
None known.
TERATOGENICITY
None known.
MUTAGENICITY
None known.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA
Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL INFORMATION
Do not ship to local landfill site. Observe all Federal, Provincial,
State and Municipal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT INFORMATION
ORM-D Consumer commodity Cleaning, scouring or washing compounds,
N.O.I., Liquids
CANADIAN SHIPPING NAME
TOILET DUCK - PINE FRESH
TDG CLASSIFICATION
Non-regulated.

MATERIAL SAFETY DATA SHEET

Page 6 of 6

MSDS # 110471006

TOILET DUCK - PINE FRESH

Date Issued: 05Jun1995

Supersedes:

31May1995

SECTION 14 - TRANSPORTATION INFORMATION (continued)

PIN/NIP
Not applicable.
PACKING GROUP
Not applicable.
EXEMPTION NAME
Not applicable.

SECTION 15 - REGULATORY INFORMATION

WHMIS CLASSIFICATION
Not applicable.

All ingredients of this product are listed or are excluded from
listing on the U.S. Toxic Substances Control Act (TSCA) Chemical
Substance Inventory.

TOILET CLEANER

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under California's Proposition 65.

SECTION 16 - OTHER INFORMATION

ADDITIONAL INFORMATION

Use as directed.

EPA REGISTRATION #

Not applicable.

PREPARATION INFORMATION -

PREPARED BY

Manufacturer's Technical Support Department. Refer to page 1
(Manufacturer) for contact information.

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.
PRINT DATE: 06Oct1999

PINE CLEANER

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

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 1338898
PRODUCT NAME(S) : PINE CLEANER
PRODUCT IDENTIFICATION : MSDS.S15
DATE OF MSDS : 1997-01-01

*** MANUFACTURER INFORMATION ***

MANUFACTURER : DUSTBANE PRODUCTS LIMITED
ADDRESS : 25 Pickering Place
Ottawa Ontario
Canada K1G 5P4
Telephone: 613-745-6861
EMERGENCY TELEPHONE NO. : 613-996-6666 (TDG EMERGENCY TELEPHONE,
COLLECT)

*** MATERIAL SAFETY DATA ***

MATERIAL SAFETY DATA SHEET PINE CLEANER

SECTION I PRODUCT IDENTIFICATION

PRODUCT NAME: PINE CLEANER
PRODUCT TYPE: LIQUID DETERGENT
WHMIS CLASSIFICATION: B-3

SECTION II HAZARDOUS INGREDIENTS

CAS REGISTRY NO.	%	CHEMICAL NAME(S)	TOXICITY
67-56-1	3-7	METHYL ALCOHOL	LD50 ORAL (RAT) 6200 mg/kg
8002-09-3	3-7	PINE OIL	LD50 ORAL (RAT) >3200 mg/kg

SECTION III PHYSICAL DATA

APPEARANCE: CLEAR GREEN LIQUID
ODOUR: SCENTED
pH (CONCENTRATE): 10.5
BOILING POINT (DEG C): 100.
SPECIFIC GRAVITY: 1.0
SOLUBILITY IN WATER (%): 100

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) (deg C): 87 TCC
EXTINGUISHING MEDIA: WATER, FOG, FOAM, DRY CHEMICAL
SPECIAL FIRE FIGHTING PROCEDURES: USE SELF CONTAINED BREATHING APPARATUS
UNUSUAL FIRE AND EXPLOSION HAZARDS: MAY FORM EXPLOSIVE VAPOUR/AIR MIXTURES
ESPECIALLY AT ELEVATED TEMPERATURES.

PINE CLEANER

SECTION V TOXICOLOGICAL PROPERTIES

HAZARD RATING		RATING SYSTEM
HEALTH:	[1]	0 = INSIGNIFICANT
FLAMMABILITY:	[1]	1 = SLIGHT
REACTIVITY:	[0]	2 = MODERATE
SPECIAL WARNING:	NONE	3 = HIGH
		4 = EXTREME

EFFECTS OF OVEREXPOSURE:
 SWALLOWING: SLIGHTLY TOXIC
 INHALATION: NOT APPLICABLE
 SKIN ABSORPTION: NOT APPLICABLE
 SKIN CONTACT: SLIGHT IRRITANT
 EYE CONTACT: SLIGHT IRRITANT

SECTION VI FIRST AID MEASURES

INGESTION: DRINK 3-4 GLASSES OF MILK OR WATER
 INHALATION: NOT APPLICABLE
 SKIN: FLUSH WITH WATER
 EYES: FLUSH WITH WATER. IF IRRITATION PERSISTS, CALL A PHYSICIAN.

SECTION VII REACTIVITY DATA

STABLE:	[X]	CONDITIONS TO AVOID:
UNSTABLE:	[]	NONE
INCOMPATIBILITY (Materials to avoid): NONE		
HAZARDOUS DECOMPOSITION PRODUCTS: NONE		
HAZARDOUS	MAY OCCUR	[]
POLYMERIZATION:	WILL NOT OCCUR	[X]

SECTION VIII PREVENTIVE MEASURES

PROTECTIVE GLOVES:	EYE PROTECTION:
NO	NO
VENTILATION: LOCAL EXHAUST: []	GENERAL: [X]
RESPIRATORY PROTECTION (Specify type): NO	
OTHER PROTECTIVE EQUIPMENT: NONE	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MOP UP SPILLAGE. RINSE SPILL AREA WITH WATER AND ALLOW TO DRY.	
WASTE DISPOSAL METHOD: FLUSH WITH WATER INTO WASTE SYSTEMS IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: NORMAL HANDLING PROCESSES. INSIDE STORAGE AT 4-40 DEG C RECOMMENDED.	
OTHER PRECAUTIONS: FOLLOW LABEL USE INSTRUCTIONS.	
PIN: NOT APPLICABLE	TDG CLASS: NONE
	TDG EMERGENCY TELEPHONE #: (613) 996-6666 (COLLECT)

SECTION IX PREPARATION DATA

PREPARED BY: D.R. DUNLOP	PHONE: (613) 745-6861
DATE: JANUARY 1, 1997	MSDS.S15

DUSTBANE PRODUCTS LIMITED, 25 PICKERING PLACE, OTTAWA, ONTARIO, K1G 5P4

PINE CLEANER

PINE CLEANER

Pine oil detergent

"A liquid cleaner containing natural pine oil"

FEATURES AND BENEFITS

Pine oil base - serves as a deodorizer, emulsifier and a solvent
High concentration - a little goes a long way
Contains alcohol - serves as a solvent to cut through grime, grease, oil, stains etc.; speeds up drying process
Environmentally friendly - biodegradable surfactants, low pH, and natural solvent
Pleasant fragrance - leave a fresh, clean pine scent

WHERE TO USE

For use on any washable surface where odours are a problem,

HOW TO USE

Apply moderately by using a strip mop, sponge or cloth and rinse with potable water.

VERY LIGHT: 1:40
NORMAL: 1:27
HEAVY DUTY: 1:20

SPECIFICATIONS

Appearance	clear green liquid	Solvent	alcohol and pine oil
Fragrance	pine	Phosphate	no
Viscosity	as water	WHMIS	yes
Actives %	16.0	TDG	no
pH (conc.)	10.5		
pH (1%)	9.0		
Non-volatile %	9.0		

07/96

MSDS.S15

ORANGE HAND CLEANER

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

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 2085677
 PRODUCT NAME(S) : Canadian Fast Orange (R) Pumice Lotion
 Hand Cleaner
 PRODUCT IDENTIFICATION : 20856
 DATE OF MSDS : 1999-08-13
 CURRENCY NOTE : This MSDS was provided to CCOHS in
 electronic form on 1999-08-27

*** MANUFACTURER INFORMATION ***

MANUFACTURER : LOCTITE CORPORATION
 ADDRESS : 1001 TROUT BROOK CROSSING
 ROCKY HILL CONNECTICUT
 U.S.A. 06067
 Telephone: 860-571-5100
 EMERGENCY TELEPHONE NO. : 860-571-5100

*** MATERIAL SAFETY DATA ***

LOCTITE CORPORATION

08/13/99

ROCKY HILL, CONNECTICUT 06067
 EMERGENCY PHONE: (203) 571-5100

MATERIAL SAFETY DATA SHEET

Page 01 of 05

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Canadian Fast Orange(R) Pumice Lotion Hand Cleaner
 w/ Corn Huskers Lotion(R)
 Item No.: 20856
 Product Type: Industrial Waterless Handcleaner

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients	CAS No.	%
Water	7732-18-5	70-80
Pumice	1332-09-8	5-10
Terpenes and terpenoids, sweet orange-oil	68647-72-3	5-10
d-Limonene	5989-27-5	***
PO/EO linear C6-12 Alcohol	68154-97-2	1-5
Triethanolamine	0102-71-6	0.1-1
SILICA, QUARTZ	014808-60-7	0.1-1

ORANGE HAND CLEANER

***d-Limonene is a major fraction of the sweet orange oil terpenes/terpenoids.

Ingredients which have exposure limits

Exposure Limits (TWA) Ingredients	ACGIH (TLV)	OSHA (PEL)	OTHER
Pumice	10 mg/m3 total	15 mg/m3 total 5 mg/m3 resp.	None
d-Limonene	None	None	30 ppm
SILICA, QUARTZ	0.1 mg/m3 TWA respirable dust	0.1 mg/m3 TWA respirable dust	None
Exposure Limits (STEL) Ingredients	ACGIH (TLV)	OSHA (PEL)	

3. HAZARDS IDENTIFICATION

Toxicity:

Primary Routes of Entry: Skin contact, ingestion, and inhalation.

LOCTITE CORPORATION

08/13/99

ROCKY HILL, CONNECTICUT 06067
EMERGENCY PHONE: (203) 571-5100

MATERIAL SAFETY DATA SHEET

Page 02 of 05

Product Name: Canadian Fast Orange(R) Pumice Lotion Hand Cleaner
w/ Corn Huskers Lotion(R)
Item No.: 20856

3. HAZARDS IDENTIFICATION

(continued)

Signs and Symptoms
of Exposure:

None under normal conditions of use.

Existing Conditions

Aggravated by Exposure: None known

Ingredients	Literature Referenced Target Organ and Other Health Effects	Carcinogen		
		NTP	IARC	OSHA
Water	NTO	NO	NO	NO
Pumice	NTO	NO	NO	NO
Terpenes and terpenoids, sweet orange-oil	No Data	NO	NO	NO
d-Limonene	IRR	NO	N/A	NO
PO/EO linear C6-12 Alcohol	No Data	NO	NO	NO
Triethanolamine	No Data	NO	NO	NO
SILICA, QUARTZ	LUN SOM	YES	2A	NO

Abbreviations

ORANGE HAND CLEANER

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Not normally needed, but safety glasses offer increased protection.
Skin: None normally needed.
Ventilation: Some local ventilation may be desired for prolonged exposure in a confined area.
Respiratory: Not available

See Section 2 for Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White lotion with pumice.
Odor: Orange
Boiling Point: Not Available
pH: 7.0
Solubility in Water: Soluble
Specific Gravity: 1.03
Volatile Organic Compound (EPA Method 24) 9.2%; 95 grams per liter of material
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate (Ether = 1) Not available

LOCTITE CORPORATION

08/13/99

ROCKY HILL, CONNECTICUT 06067
EMERGENCY PHONE: (203) 571-5100

MATERIAL SAFETY DATA SHEET

Page 04 of 05

Product Name: Canadian Fast Orange(R) Pumice Lotion Hand Cleaner
w/ Corn Huskers Lotion(R)
Item No.: 20856

10. STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur
Incompatibility: None
Conditions to Avoid: Not available
Hazardous Decomposition Products (non-thermal): None

11. TOXICOLOGICAL INFORMATION

Estimated Oral LD50 more than 5000 mg/kg.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of

ORANGE HAND CLEANER

N/A Not Applicable
IRR Irritant
NTO No Target Organs

2A Probably carcinogenic to humans
LUN Lung
SOM Evidence of some carcinogenicity

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Keep individual calm. Obtain medical attention.
Inhalation: Remove to fresh air. If symptoms persist, obtain medical attention.
Skin Contact: Flush with water.
Eye Contact: Flush at least 15 minutes with water. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: 193 F Method: Setaflash Closed Cup
Recommended
Extinguishing Agents: Carbon dioxide, chemical powder
Special Firefighting
Procedures: Not available
Hazardous Products formed
by Fire or Thermal Decomp Irritating organic vapors
Unusual Fire or
Explosion Hazards: None

LOCTITE CORPORATION

08/13/99

ROCKY HILL, CONNECTICUT 06067
EMERGENCY PHONE: (203) 571-5100

MATERIAL SAFETY DATA SHEET

Page 03 of 05

Product Name: Canadian Fast Orange(R) Pumice Lotion Hand Cleaner
w/ Corn Huskers Lotion(R)
Item No.: 20856

5. FIRE FIGHTING MEASURES

(continued)

Explosive Limits:
(% by volume in air) Lower Not available
(% by volume in air) Upper Not available

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case
of spill or leak: Rinse away with water or wipe up with a towel.

7. HANDLING AND STORAGE

Safe Storage: Hand cleaner should be stored between 40 F and 100 F
(Contact Loctite Customer Service 1-800-243-4874 for shelf life information)
Handling: Follow all general safety precautions. Keep away from children.

LAUNDRY DETERGENT

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

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 876262
 PRODUCT NAME(S) : LAUNDRY DETERGENT
 DATE OF MSDS : 1994-09-15
 CURRENCY NOTE : MSDS Confirmed Current: 1998-11-03

*** MANUFACTURER INFORMATION ***

MANUFACTURER : The Hotsy Corporation
 Detergent Division
 ADDRESS : 2621 Seventh Avenue South
 Estherville Iowa
 U.S.A. 51334
 Telephone: 712-362-7737
 EMERGENCY TELEPHONE NO. : 303-623-5716 (MEDICAL EMERGENCY, Rocky
 Mountain Poison Control Center)
 800-424-9300 (CHEMICAL EMERGENCY, Spill,
 Leak, Fire, Exposure or Accident call
 CHEMTREC)
 202-483-7616 (CHEMICAL EMERGENCY, Outside
 U.S.)

Message from The Hotsy Corporation, Detergent Division: While the information and recommendations set forth herein are believed to be accurate as of the date hereof, THE HOTSY CORPORATION, DETERGENT DIVISION, MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

*** MATERIAL SAFETY DATA ***

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: L A U N D R Y D E T E R G E N T

SECTION I

Person Responsible for Preparation: Dean F. Fernholz
 Revision Date : September 15, 1994
 Supersedes : June 1, 1993

D.O.T. Shipping Class: Cleaning Compound, Class 55

Health Hazards :Health [2]
 0 > 4 :Flammability [0]
 None-Extreme :Reactivity [0]

SECTION II HAZARDOUS INGREDIENTS

LAUNDRY DETERGENT

HAZARDOUS COMPONENTS	CAS NO.	%
Sodium Metasilicate	6834-92-0	3-7%
OSHA PEL NE		
ACGIH TLV NE		
ORAL LD50 Rat 800 mg/kg		
Sodium Carbonate	497-19-8	10-30%
OSHA PEL NE		
ACGIH TLV NE		
ORAL LD50 Rat 4000 mg/kg		
Sodium Dodecylbenzene Sulfonate	25155-30-0	1-5%
OSHA PEL NE		
ACGIH TLV NE		
ORAL LD50 Rat 2600 mg/kg		
Ethoxylated Alcohol	127087-87-0	1-5%
OSHA PEL NE		
ACGIH TLV NE		
ORAL LD50 Rat NE		

SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point	N.A.
Specific Gravity	>1
Vapor Pressure	N.A.
Vapor Density (Air=1)	N.A.
Solubility in Water	Soluble
Reactivity in Water	None
pH	5% solution = 11.7
Melting Point	212 (Deg. F.)
Appearance & Odor	White powder, lilac scent

SECTION IV FIRE & EXPLOSION DATA

Flash Point:	NA	Method Used:	NA
Flammable Limits in air % by volume	LEL Lower NA	UEL Upper NA	
Auto-Ignition Temperature:	NA		

Extinguisher Media: Water, Dry Chemical, Carbon Dioxide, Foam

Special Fire Fighting Procedures: None

Unusual Fire & Explosion Hazards: None

SECTION V PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Stable [X] Unstable []
 Incompatibility (Materials to avoid): Acids
 Hazardous Decomposition Products: NA
 Hazardous Polymerization: May occur [] Will NOT occur [x]