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**** MATERIAL SAFETY DATA SHEET ****

Ethyl Alcohol, Denatured (A407)
08701

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Ethyl Alcohol, Denatured (A407)

Catalog Numbers:

A407 1, A407 20, A407 20 001, A407 20 002, A407 20 003, A407 20 004,
A407 20 005, A407 20 006, A407 20 007, A407 20 008, A407 20 009,
A407 20 010, A407 200, A407 4, A407 500, A407 500 001, A407-1, A407-20,
A407-200, A407-4, A407-500, A4071, A40720, A40720 001, A40720 002,
A40720 003, A40720 004, A40720 005, A40720 006, A40720 007, A40720 008,
A40720 009, A40720 010, A407200, A40720001, A40720002, A40720003, A40720004,
A40720005, A40720006, A40720007, A40720008, A40720009, A40720010, A4074,
A407500, A407500 001, A407500001, A407J500, A407OLC, A407P 1GAL, A407P-1GAL,
A407P1GAL, A407P4, A407S 4, A407S-4, A407S4, A407SK 4, A407SK-4, A407SK4,
BW6100200, S739791, S739792

Synonyms:

Ethanol denatured, grain alcohol denatured, ethyl hydroxide
denatured, ethyl hydrate denatured, algarin denatured

Company Identification: Fisher Scientific
1 Regent Lane
Fairlawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
64-17-5	Ethyl Alcohol	85.4-92.	200-578-6
67-56-1	Methyl alcohol	3.6	200-659-6
67-63-0	Isopropyl alcohol	25 ppm	200-661-7
67-64-1	Acetone	2 ppm	200-662-2
71-43-2	Benzene	trace	200-753-7
75-07-0	Acetaldehyde	10 ppm	200-836-8
108-10-1	Methyl isobutyl ketone	1.9	203-550-1
108-88-3	Toluene	0.80%	203-625-9
141-78-6	Ethyl acetate	1.3	205-500-4
7732-18-5	Water	5.0%	231-791-2
64742-89-8	Solvent naphtha (petroleum), light ali phatic	0.72-0.7	265-192-2

Hazard Symbols: F

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: clear,colorless. Flash Point: 57 deg F.

Danger! May cause skin irritation. May be fatal if swallowed.

Flammable liquid. May cause central nervous system depression. May

be absorbed through the skin. May cause blindness if swallowed.

Causes severe eye irritation. May cause liver and kidney damage. May

cause reproductive and fetal effects.

Target Organs: Kidneys, central nervous system, liver.

Potential Health Effects

Eye:

Produces irritation, characterized by a burning sensation, redness,
tearing, inflammation, and possible corneal injury. May cause
painful sensitization to light. Vapors may cause eye irritation.

Skin:

May cause skin irritation. Prolonged and/or repeated contact may
cause defatting of the skin and dermatitis. May be absorbed through
the skin.

Ingestion:

May be fatal or cause blindness if swallowed. May cause systemic
toxicity with acidosis. May cause liver and kidney damage. May cause
central nervous system depression, characterized by excitement,
followed by headache, dizziness, drowsiness, and nausea. Advanced
stages may cause collapse, unconsciousness, coma and possible death
due to respiratory failure.

Inhalation:

Inhalation of high concentrations may cause central nervous system

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effects characterized by headache, dizziness, unconsciousness and
coma. May cause respiratory tract irritation. May cause effects
similar to those described for ingestion. May cause drowsiness,
unconsciousness, and central nervous system depression.

Chronic:

Chronic inhalation and ingestion may cause effects similar to those
of acute inhalation and ingestion. Prolonged or repeated skin
contact may cause defatting and dermatitis. Prolonged or repeated
exposure may cause adverse reproductive effects. May cause fetal
effects.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes,
occasionally lifting the upper and lower lids. Get medical aid
immediately.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and
water for at least 15 minutes while removing contaminated clothing
and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.
Never give anything by mouth to an unconscious person. Get medical
aid. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air
immediately. If not breathing, give artificial respiration. If
breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and supportively.

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in
pressure-demand, MSHA/NIOSH (approved or equivalent), and full
protective gear. Vapors may form an explosive mixture with air.
Vapors can travel to a source of ignition and flash back. Use water
spray to keep fire-exposed containers cool. Containers may explode
in the heat of a fire. Flammable Liquid. Vapors may be heavier than
air. They can spread along the ground and collect in low or confined
areas.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or
alcohol-resistant foam. Use water spray to cool fire-exposed
containers. Water may be ineffective. Do not use straight streams of
water. For large fires, use dry chemical, carbon dioxide,
alcohol-resistant foam, or water spray. Cool containers with
flooding quantities of water until well after fire is out.

Autoignition Temperature: 685 deg F (362.78 deg C)

Flash Point: 57 deg F (13.89 deg C)

NFPA Rating: Not published.

Explosion Limits, Lower: 3.3 (ethanol)

Upper: 19 (ethanol)

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated
in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then
place into a chemical waste container. Remove all sources of
ignition. A vapor suppressing foam may be used to reduce vapors.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use with adequate ventilation.
Ground and bond containers when transferring material. Avoid contact
with eyes, skin, and clothing. Empty containers retain product
residue, (liquid and/or vapor), and can be dangerous. Keep container
tightly closed. Avoid contact with heat, sparks and flame. Avoid
ingestion and inhalation. Do not pressurize, cut, weld, braze,
solder, drill, grind, or expose empty containers to heat, sparks or
open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of
ignition. Store in a tightly closed container. Store in a cool, dry,
well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne
concentrations below the permissible exposure limits.

Exposure Limits

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Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ethyl Alcohol	1000 ppm ; 1880 mg/m3	none listed	1000 ppm TWA; 1900 mg/m3 TWA
Methyl alcohol	200 ppm ; 262 mg/m3; 250 ppm STEL; 328 mg/m3 STEL	200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL	200 ppm TWA; 260 mg/m3 TWA
Isopropyl alcohol	400 ppm ; 983 mg/m3; 500 ppm STEL; 1230 mg/m3 STEL	400 ppm TWA; 980 mg/m3 TWA; 500 ppm STEL; 1225 mg/m3 STEL	400 ppm TWA; 980 mg/m3 TWA
Acetone	750 ppm ; 1780 mg/m3; 1000 ppm STEL; 2380 mg/m3 STEL	250 ppm TWA; 590 mg/m3 TWA	1000 ppm TWA; 2400 mg/m3 TWA
Benzene	(10) ppm ; (32) mg/m3	0.1 ppm TWA; 1 ppm STEL	10 ppm TWA
Acetaldehyde	150 ppm STEL; 270 mg/m3 STEL; C 25 ppm; C 45 mg/m3	none listed	200 ppm TWA; 360 mg/m3 TWA
Methyl isobutyl ketone	50 ppm ; 205 mg/m3; 75 ppm STEL; 307 mg/m3 STEL	50 ppm TWA; 205 mg/m3 TWA; 75 ppm STEL; 300 mg/m3 STEL	100 ppm TWA; 410 mg/m3 TWA
Toluene	50 ppm ; 147 mg/m3; (150) ppm STEL; (565) mg/m3 STEL	100 ppm TWA; 375 mg/m3 TWA; 150 ppm STEL; 560 mg/m3 STEL	200 ppm TWA; C 300 ppm; C 300 ppm
Ethyl acetate	400 ppm ; 1440 mg/m3	400 ppm TWA; 1400 mg/m3 TWA	400 ppm TWA; 1400 mg/m3 TWA
Water	none listed	none listed	none listed
Solvent naphtha (petroleum), light aliphatic	none listed	none listed	none listed

OSHA Vacated PELs:

Ethyl Alcohol:
1000 ppm TWA; 1900 mg/m3 TWA
 Methyl alcohol:
200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL
 Isopropyl alcohol:
400 ppm TWA; 980 mg/m3 TWA; 500 ppm STEL; 1225 mg/m3 STEL
 Acetone:
750 ppm TWA; 1800 mg/m3 TWA; 1000 ppm STEL; 2400 mg/m3 STEL
 Benzene:
10 ppm TWA (unless specified in 1910.1028); 50 ppm STEL (10 min) (unless specified in 1910.1028); C 25 ppm (unless specified in 1910.1028)
 Acetaldehyde:
100 ppm TWA; 180 mg/m3 TWA; 150 ppm STEL; 270 mg/m3 STEL
 Methyl isobutyl ketone:
50 ppm TWA; 205 mg/m3 TWA; 75 ppm STEL; 300 mg/m3 STEL
 Toluene:
100 ppm TWA; 375 mg/m3 TWA; 150 ppm STEL; 560 mg/m3 STEL
 Ethyl acetate:
400 ppm TWA; 1400 mg/m3 TWA
 Water:

No OSHA Vacated PELs are listed for this chemical.
 Solvent naphtha (petroleum), light aliphatic:
 No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

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**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Liquid
 Appearance: clear, colorless
 Odor: aromatic odor
 pH: No data
 Vapor Pressure: 25 mm Hg
 Vapor Density: 1.6 (ethanol)
 Evaporation Rate: 2.0
 Viscosity: Not available.
 Boiling Point: 173.3 deg F
 Freezing/Melting Point: -90 deg C
 Decomposition Temperature: Not available.
 Solubility: Soluble in water.
 Specific Gravity/Density: 0.7905
 Molecular Formula: Mixture.
 Molecular Weight: Not available.

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable.

Conditions to Avoid:

Stable., incompatible materials, ignition sources.

Incompatibilities with Other Materials:

Ethanol is incompatible with acetic anhydride + sodium hydrogensulfate, acetyl bromide, ammonia + silver nitrate, disulfuric acid + nitric acid, dichloromethane + sulfuric acid, disulfuryl difluoride, magnesium perchlorate, nitric acid + silver, oxidants, phosphorus (III) oxide, platinum, potassium tert-butoxide, silver nitrate, silver oxide, sodium, tetrachlorosilane. Methanol is incompatible with acetyl bromide, alkylaluminum solutions, beryllium hydride, boron trichloride, carbon tetrachloride + metals, chloroform + sodium, chloroform + sodium hydroxide, cyanuric chloride, dichloromethane, diethylzinc, hydrogen + raney nickel, metals,

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

CAS# 64-17-5: K06300000
 CAS# 67-56-1: PC1400000
 CAS# 67-63-0: NT8050000
 CAS# 67-64-1: AL3150000
 CAS# 71-43-2: CY1400000
 CAS# 75-07-0: AB1925000
 CAS# 108-10-1: SA9275000
 CAS# 108-88-3: XS5250000
 CAS# 141-78-6: AH5425000
 CAS# 7732-18-5: ZC0110000
 CAS# 64742-89-8 unlisted.

LD50/LC50:

CAS# 67-56-1: Inhalation, rat: LC50 = 64000 ppm/4H; Oral, mouse: LD50 = 7300 mg/kg; Oral, rabbit: LD50 = 14200 mg/kg; Oral, rat: LD50 = 5628 mg/kg; Skin, rabbit: LD50 = 15800 mg/kg.
 CAS# 67-64-1: Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Skin, rabbit: LD50 = 20 gm/kg.
 CAS# 67-64-1: Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Skin, rabbit: LD50 = 20 gm/kg.
 CAS# 67-64-1: Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Skin, rabbit: LD50 = 20 gm/kg.
 CAS# 67-64-1: Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Skin, rabbit: LD50 = 20 gm/kg.
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 CAS# 67-64-1: Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Skin, rabbit: LD50 = 20 gm/kg.
 CAS# 67-64-1: Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; Skin, rabbit: LD50 = 20 gm/kg.

Carcinogenicity:

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Ethyl Alcohol -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Methyl alcohol -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Isopropyl alcohol -
IARC: Group 3 carcinogen
Acetone -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Benzene -
ACGIH: (A2)-suspected human carcinogen
California: carcinogen
NIOSH: occupational carcinogen
NTP: Known carcinogen
OSHA: Select carcinogen
IARC: Group 1 carcinogen
Acetaldehyde -
ACGIH: A3-animal carcinogen
California: carcinogen
NIOSH: occupational carcinogen
NTP: Suspect carcinogen
OSHA: Possible Select carcinogen
IARC: Group 2B carcinogen
Methyl isobutyl ketone -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Toluene -
IARC: Group 3 carcinogen
Ethyl acetate -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Water -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Solvent naphtha (petroleum), light aliphatic -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No data available.
Teratogenicity:
No data available.
Reproductive Effects:
Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have been collectively termed the fetal alcohol syndrome. Among the characteristics of this syndrome are intrauterine and postnatal growth deficiency, a distinctive pattern of physical malformation, and behavioral/cognitive impairment such as fine motor dysfunction and mental retardation. Not all affected children have all of the features of the syndrome. This syndrome has been associated with alcoholic women who drank heavily and chronically during pregnancy
Neurotoxicity:
No data available.
Mutagenicity:
No data available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:
250 ppm/6hr/goldfish/lethal/fresh water
Environmental Fate:
Ethanol: In water, will volatilize and probably degrade.
Physical/Chemical:
Not available.
Other:
Not expected to bioconcentrate in fish.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration of Contaminants: Not listed.
RCRA D-Series Chronic Toxicity Reference Levels: Not listed.
RCRA F-Series: Not listed.
RCRA P-Series: Not listed.
RCRA U-Series: Not listed.
Not listed as a material banned from land disposal according to RCRA.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: ETHANOL SOLUTIONS
Hazard Class: 3
UN Number: UN1170
Packing Group: II
IMO
No information available.
IATA
No information available.
RID/ADR
No information available.
Canadian TDG
Shipping Name: ALCOHOLS TOXIC NOS (ETHANOL, METHANOL MIXTURE)

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Hazard Class: 3(6.1)
UN Number: UN1986
Other Information: FP 18C

**** SECTION 15 - REGULATORY INFORMATION ****

FEDERAL
TSCA

CAS# 64-17-5 is listed on the TSCA inventory.
CAS# 67-56-1 is listed on the TSCA inventory.
CAS# 67-63-0 is listed on the TSCA inventory.
CAS# 67-64-1 is listed on the TSCA inventory.
CAS# 71-43-2 is listed on the TSCA inventory.
CAS# 75-07-0 is listed on the TSCA inventory.
CAS# 108-10-1 is listed on the TSCA inventory.
CAS# 108-88-3 is listed on the TSCA inventory.
CAS# 141-78-6 is listed on the TSCA inventory.
CAS# 7732-18-5 is listed on the TSCA inventory.
CAS# 64742-89-8 is listed on the TSCA inventory.
Health & Safety Reporting List
CAS# 67-63-0: Effective Date: December 15, 1986
CAS# 75-07-0: Effective Date: September 30, 1991
CAS# 108-10-1: Effective Date: October 4, 1982
CAS# 108-88-3: Effective Date: October 4, 1982
Chemical Test Rules
CAS# 67-63-0: Testing required by: manufacturers; importers; processor
Section 12b
CAS# 67-63-0: export notification required - Section 4
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)
final RQ = 5000 pounds (2270 kg)
final RQ = 5000 pounds (2270 kg)
final RQ = 10 pounds (4.54 kg)
final RQ = 1000 pounds (454 kg)
final RQ = 5000 pounds (2270 kg)
final RQ = 1000 pounds (454 kg)
final RQ = 5000 pounds (2270 kg)
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 64-17-5: acute, chronic, flammable.
CAS # 67-56-1: acute, flammable.
CAS # 67-63-0: acute, chronic, flammable.
CAS # 67-64-1: acute, chronic, flammable, sudden release of pressure.
CAS # 71-43-2: acute, chronic, flammable.
CAS # 75-07-0: acute, chronic, flammable, reactive.
CAS # 108-10-1: acute, chronic, flammable, reactive.
CAS # 108-88-3: acute, flammable.
CAS # 141-78-6: flammable.

Section 313

This material contains Methyl alcohol (CAS# 67-56-1, 3.6%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
This material contains Isopropyl alcohol (CAS# 67-63-0, 25 ppm%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
This material contains Acetone (CAS# 67-64-1, 2 ppm%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
This material contains Benzene (CAS# 71-43-2, trace%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
This material contains Acetaldehyde (CAS# 75-07-0, 10 ppm%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
This material contains Methyl isobutyl ketone (CAS# 108-10-1, 1.9%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
This chemical is not at a high enough concentration to be reportable under Section 313.

Clean Air Act:

CAS# 67-56-1 is listed as a hazardous air pollutant (HAP).
CAS# 71-43-2 is listed as a hazardous air pollutant (HAP).
CAS# 75-07-0 is listed as a hazardous air pollutant (HAP).
CAS# 108-10-1 is listed as a hazardous air pollutant (HAP).
CAS# 108-88-3 is listed as a hazardous air pollutant (HAP).
This material does not contain any Class 1 Ozone depleters.
This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 71-43-2 is listed as a Hazardous Substance under the CWA.
CAS# 75-07-0 is listed as a Hazardous Substance under the CWA.
CAS# 108-88-3 is listed as a Hazardous Substance under the CWA.
CAS# 71-43-2 is listed as a Priority Pollutant under the Clean Water Act.
CAS# 108-88-3 is listed as a Priority Pollutant under the Clean Water Act.
CAS# 71-43-2 is listed as a Toxic Pollutant under the Clean Water Act.

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Act.
CAS# 108-88-3 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:
CAS# 75-07-0 is considered highly hazardous by OSHA.

STATE

Ethyl Alcohol can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Methyl alcohol can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Isopropyl alcohol can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Acetone can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Benzene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Acetaldehyde can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Methyl isobutyl ketone can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Toluene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Ethyl acetate can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Not present on state lists from CA, PA, MN, MA, FL, or NJ.
Solvent naphtha (petroleum), 1 can be found on the following state right to know lists: New Jersey.

WARNING: This product contains Benzene, a chemical known to the state of California to cause cancer.

WARNING: This product contains Acetaldehyde, a chemical known to the state of California to cause cancer.

WARNING: This product contains Ethyl Alcohol, a chemical known to the state of California to cause birth defects or other reproductive harm.

WARNING: This product contains Toluene, a chemical known to the state of California to cause birth defects or other reproductive harm.

California No Significant Risk Level:

CAS# 71-43-2: no significant risk level = 7 ug/day

CAS# 75-07-0: inhalation: no significant risk level = 90 ug/day

INTERNATIONAL

European Labeling in Accordance with EC Directives

Hazard Symbols: F

Risk Phrases:

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 2 Keep out of reach of children.

S 7 Keep container tightly closed.

Canada

CAS# 64-17-5 is listed on Canada's DSL/NDL List.

CAS# 67-56-1 is listed on Canada's DSL/NDL List.

CAS# 67-63-0 is listed on Canada's DSL/NDL List.

CAS# 67-64-1 is listed on Canada's DSL/NDL List.

CAS# 71-43-2 is listed on Canada's DSL/NDL List.

CAS# 75-07-0 is listed on Canada's DSL/NDL List.

CAS# 108-10-1 is listed on Canada's DSL/NDL List.

CAS# 108-88-3 is listed on Canada's DSL/NDL List.

CAS# 141-78-6 is listed on Canada's DSL/NDL List.

CAS# 7732-18-5 is listed on Canada's DSL/NDL List.

CAS# 64742-89-8 is listed on Canada's DSL/NDL List.

CAS# 64-17-5 is listed on Canada's Ingredient Disclosure List.

CAS# 67-56-1 is listed on Canada's Ingredient Disclosure List.

CAS# 67-63-0 is listed on Canada's Ingredient Disclosure List.

CAS# 67-64-1 is listed on Canada's Ingredient Disclosure List.

CAS# 71-43-2 is listed on Canada's Ingredient Disclosure List.

CAS# 75-07-0 is listed on Canada's Ingredient Disclosure List.

CAS# 108-10-1 is listed on Canada's Ingredient Disclosure List.

CAS# 108-88-3 is listed on Canada's Ingredient Disclosure List.

CAS# 141-78-6 is listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 64742-89-8 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits:

CAS# 64-17-5: OEL-AUSTRALIA:TWA 1000 ppm (1900 mg/m3). OEL-BELGIUM:TWA 1000 ppm (1880 mg/m3). OEL-CZECHOSLOVAKIA:TWA 1000 mg/m3;STEL 5000 mg/m3. OEL-DENMARK:TWA 1000 ppm (1900 mg/m3). OEL-FINLAND:TWA 1000 ppm (1900 mg/m3);STEL 1250 ppm (2400 mg/m3). OEL-FRANCE:TWA 1000 ppm (1900 mg/m3);STEL 5000 pp. OEL-GERMANY:TWA 1000 ppm (1900 mg/m3). OEL-HUNGARY:TWA 1000 mg/m3;STEL 3000 mg/m3. OEL-THE NETHERLANDS:TWA 1000 ppm (1900 mg/m3). OEL-THE PHILIPPINES:TWA 1000 ppm (1900 mg/m3). OEL-POLAND:TWA 1000 mg/m3. OEL-RUSSIA:STEL 1000 mg/m3. OEL-SWEDEN:TWA 1000 ppm (

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1900 mg/m3). OEL-SWITZERLAND:TWA 1000 ppm (1900 mg/m3). OEL-THAILAND:TWA 1000 ppm (1900 mg/m3). OEL-TURKEY:TWA 1000 ppm (1900 mg/m3). OEL-UNITED KINGDOM:TWA 1000 ppm (1900 mg/m3). OEL-IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV.

CAS# 67-56-1: OEL-ARAB Republic of Egypt:TWA 200 ppm (260 mg/m3);Skin. OEL-AUSTRALIA:TWA 200 ppm (260 mg/m3);STEL 250 ppm (320 mg/m3). OEL-BELGIUM:TWA 200 ppm (262 mg/m3);STEL 250 ppm (320 mg/m3). OEL-CZECHOSLOVAKIA:TWA 100 mg/m3;STEL 500 mg/m3. OEL-DENMARK:TWA 200 ppm (260 mg/m3);Skin. OEL-FINLAND:TWA 200 ppm (260 mg/m3);STEL 250 ppm (320 mg/m3). OEL-FRANCE:TWA 200 ppm (260 mg/m3);STEL 1000 ppm (1300 mg/m3). OEL-GERMANY:TWA 200 ppm (260 mg/m3);Skin. OEL-HUNGARY:TWA 50 mg/m3;STEL 100 mg/m3;Skin. OEL-JAPAN:TWA 200 ppm (260 mg/m3);Skin. OEL-THE NETHERLANDS:TWA 200 ppm (260 mg/m3);Skin. OEL-THE PHILIPPINES:TWA 200 ppm (260 mg/m3). OEL-POLAND:TWA 100 mg/m3. OEL-RUSSIA:TWA 200 ppm;STEL 5 mg/m3;Skin. OEL-SWEDEN:TWA 200 ppm (250 mg/m3);STEL 250 ppm (350 mg/m3);Skin. OEL-SWITZERLAND:TWA 200 ppm (260 mg/m3);STEL 400 ppm;Skin. OEL-THAILAND:TWA 200 ppm (260 mg/m3). OEL-TURKEY:TWA 200 ppm (260 mg/m3). OEL-UNITED KINGDOM:TWA 200 ppm (260 mg/m3);STEL 250 ppm;Skin. OEL-IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV.

CAS# 67-63-0: OEL-AUSTRALIA:TWA 400 ppm (980 mg/m3);STEL 500 ppm (1230 mg/m3). OEL-BELGIUM:TWA 400 ppm (985 mg/m3);STEL 500 ppm (1230 mg/m3). OEL-DENMARK:TWA 200 ppm (490 mg/m3);Skin. OEL-FRANCE:STEL 400 ppm (980 mg/m3). OEL-GERMANY:TWA 400 ppm (980 mg/m3). OEL-JAPAN:STEL 400 ppm (980 mg/m3). OEL-THE NETHERLANDS:TWA 400 ppm (980 mg/m3);Skin. OEL-THE PHILIPPINES:TWA 400 ppm (980 mg/m3). OEL-RUSSIA:STEL 400 ppm (1000 mg/m3). OEL-SWEDEN:TWA 150 ppm (350 mg/m3);STEL 250 ppm (600 mg/m3). OEL-SWITZERLAND:TWA 400 ppm (980 mg/m3);STEL 800 ppm. OEL-TURKEY:TWA 200 ppm (500 mg/m3). OEL-UNITED KINGDOM:TWA 400 ppm (980 mg/m3);STEL 500 ppm. OEL-IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV.

CAS# 67-64-1: OEL-AUSTRALIA:TWA 500 ppm (1185 mg/m3);STEL 1000 ppm. OEL-AUSTRIA:TWA 750 ppm (1780 mg/m3). OEL-BELGIUM:TWA 750 ppm (1780 mg/m3);STEL 1000 ppm. OEL-CZECHOSLOVAKIA:TWA 800 mg/m3;STEL 4000 mg/m3. OEL-DENMARK:TWA 250 ppm (600 mg/m3). OEL-FINLAND:TWA 500 ppm (1200 mg/m3);STEL 625 ppm (1500 mg/m3). OEL-FRANCE:TWA 750 ppm (1800 mg/m3). OEL-GERMANY:TWA 1000 ppm (2400 mg/m3). OEL-HUNGARY:TWA 600 mg/m3;STEL 1200 mg/m3. OEL-INDIA:TWA 750 ppm (1780 mg/m3);STEL 1000 ppm (2375 mg/m3). OEL-JAPAN:TWA 200 ppm (470 mg/m3). OEL-THE NETHERLANDS:TWA 750 ppm (1780 mg/m3) JAN9. OEL-THE PHILIPPINES:TWA 1000 ppm (2400 mg/m3). OEL-POLAND:TWA 200 mg/m3. OEL-RUSSIA:TWA 200 ppm;STEL 200 mg/m3. OEL-SWEDEN:TWA 250 ppm (600 mg/m3);STEL 500 ppm (1200 mg/m3). OEL-SWITZERLAND:TWA 750 ppm (1780 mg/m3). OEL-TURKEY:TWA 1000 ppm (2400 mg/m3). OEL-UNITED KINGDOM:TWA 1000 ppm (2400 mg/m3);STEL 1250 ppm. OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV.

CAS# 71-43-2: OEL-AUSTRALIA:TWA 5 ppm (16 mg/m3);Carcinogen. OEL-BELGIUM:TWA 10 ppm (32 mg/m3);Carcinogen. OEL-CZECHOSLOVAKIA:TWA 10 mg/m3;STEL 20 mg/m3. OEL-DENMARK:TWA 5 ppm (16 mg/m3);Skin;Carcinogen. OEL-FINLAND:TWA 5 ppm (15 mg/m3);STEL 10 ppm (30 mg/m3);Skin;CAR. OEL-FRANCE:TWA 5 ppm (16 mg/m3);Carcinogen. OEL-GERMANY:Skin;Carcinogen. OEL-HUNGARY:STEL 5 mg/m3;Skin;Carcinogen. OEL-INDIA:TWA 10 ppm (30 mg/m3);Carcinogen. OEL-JAPAN:TWA 10 ppm (32 mg/m3);STEL 25 ppm (80 mg/m3);CAR. OEL-THE NETHERLANDS:TWA 10 ppm (30 mg/m3);Skin. OEL-THE PHILIPPINES:TWA 25 ppm (80 mg/m3);Skin. OEL-POLAND:TWA 30 mg/m3;Skin. OEL-RUSSIA:TWA 10 ppm (5 mg/m3);STEL 25 ppm (15 mg/m3);Skin;CAR. OEL-SWEDEN:TWA 5 ppm (16 mg/m3);Skin;Carcinogen. OEL-SWITZERLAND:TWA 5 ppm (16 mg/m3);Skin;Carcinogen. OEL-THAILAND:TWA 10 ppm (30 mg/m3);STEL 25 ppm (7 mg/m3). OEL-TURKEY:TWA 20 ppm (64 mg/m3);Skin. OEL-UNITED KINGDOM:TWA 10 ppm (30 mg/m3). OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV.

CAS# 75-07-0: OEL-ARAB Republic of Egypt:TWA 100 ppm (180 mg/m3). OEL-AUSTRALIA:TWA 100 ppm (180 mg/m3);STEL 150 ppm (270 mg/m3). OEL-BELGIUM:TWA 100 ppm (180 mg/m3);STEL 150 ppm (270 mg/m3). OEL-CZECHOSLOVAKIA:TWA 200 mg/m3;STEL 400 mg/m3;CAR. OEL-DENMARK:TWA 25 ppm (45 mg/m3). OEL-FINLAND:TWA 50 ppm (90 mg/m3);STEL 75 ppm (13 mg/m3). OEL-FRANCE:TWA 100 ppm (180 mg/m3). OEL-GERMANY:TWA 50 ppm (90 mg/m3);Carcinogen. OEL-HUNGARY:STEL 25 mg/m3;Carcinogen. OEL-INDIA:TWA 100 ppm (180 mg/m3);STEL 150 ppm (270 mg/m3). OEL-THE NETHERLANDS:TWA 100 ppm (180 mg/m3);STEL 150 ppm (270 mg/m3). OEL-THE PHILIPPINES:TWA 200 ppm (360 mg/m3). OEL-POLAND:TWA 5 ppm (16 mg/m3);Skin;Carcinogen. OEL-SWEDEN:TWA 25 ppm (45 mg/m3);STEL 50 ppm (90 mg/m3). OEL-SWITZERLAND:TWA 50 ppm (90 mg/m3);STEL 100 ppm (180 mg/m3). OEL-TURKEY:TWA 200 ppm (360 mg/m3). OEL-UNITED KINGDOM:TWA 100 ppm (180 mg/m3);STEL 150 ppm. OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV.

CAS# 108-88-3: OEL-AUSTRALIA:TWA 100 ppm (375 mg/m3);STEL 150 ppm (560 mg/m3). OEL-BELGIUM:TWA 100 ppm (377 mg/m3);STEL 150 ppm (565 mg/m3). OEL-CZECHOSLOVAKIA:TWA 200 mg/m3;STEL 1000 mg/m3. OEL-DENMARK:TWA 50 ppm (190 mg/m3);Skin. OEL-FINLAND:TWA 100 ppm (375 mg/m3);STEL 150 ppm;Skin. OEL-FRANCE:TWA 100 ppm (375 mg/m3);STEL 150 ppm (560 mg/m3). OEL-GERMANY:TWA 100 ppm (380 mg/m3). OEL-HUNGARY:TWA 100 mg/m3;STEL 300 mg/m3;Skin. OEL-JAPAN:TWA 100 ppm (380 mg/m3). OEL-THE NETHERLANDS:TWA 100 ppm (375 mg/m3);Skin. OEL-THE PHILIPPINES:TWA 100 ppm (375 mg/m3). OEL-POLAND:TWA 100 mg/m3. OEL-RUSSIA:TWA 100 ppm;STEL 50 mg/m3. OEL-SWEDEN:TWA 50 ppm (200 mg/m3);STEL 100 ppm (400 mg/m3);Skin. OEL-SWITZERLAND:TWA 100 ppm (380 mg/m3);STEL 500 ppm. OEL-THAILAND:TWA 200 ppm

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m:STEL 300 ppm. OEL-TURKEY:TWA 200 ppm (750 mg/m3). OEL-UNITED KINGDOM :TWA 100 ppm (375 mg/m3);STEL 150 ppm;Skin. OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV
CAS# 141-78-6: OEL-AUSTRALIA:TWA 400 ppm (1400 mg/m3). OEL-BELGIUM:TWA 400 ppm (1440 mg/m3). OEL-CZECHOSLOVAKIA:TWA 400 mg/m3;STEL 2000 mg/m3. OEL-DENMARK:TWA 300 ppm (1100 mg/m3). OEL-FINLAND:TWA 300 ppm (1100 mg/m3);STEL 500 ppm (1800 mg/m3). OEL-FRANCE:TWA 400 ppm (1400 mg/m3). OEL-GERMANY:TWA 400 ppm (1400 mg/m3). OEL-HUNGARY:TWA 400 mg/m3;STEL 1200 mg/m3. OEL-JAPAN:TWA 400 ppm (1400 mg/m3). OEL-THE NETHERLANDS :TWA 400 ppm (1400 mg/m3) JAN9. OEL-THE PHILIPPINES:TWA 400 ppm (1400 mg/m3) JAN9. OEL-POLAND:TWA 200 ppm. OEL-RUSSIA:TWA 400 ppm;STEL 200 mg/m3. OEL-SWEDEN:TWA 150 ppm (500 mg/m3);STEL 300 ppm (1100 mg/m3). OEL-SWITZERLAND:TWA 400 ppm (1400 mg/m3);STEL 800 ppm. OEL-TURKEY:TWA 400 ppm (1400 mg/m3). OEL-UNITED KINGDOM:TWA 400 ppm (1400 mg/m3). OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

Additional Information:

No additional information available.

MSDS Creation Date: 1/18/1995 Revision #15 Date: 9/02/1997

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.
