

Isopropyl alcohol	STEL; skin - potential for cutaneous absorption	200 ppm; 400 ppm STEL	mg/m ³ TWA ppm IDLH	6000	mg/m ³ TWA
Acetone	500 ppm; 750 ppm STEL		250 ppm TWA; mg/m ³ TWA ppm IDLH	2500	1000 ppm TWA; 2400 mg/m ³ TWA
Benzene	0.5 ppm; 2.5 ppm STEL; skin - potential for cutaneous absorption		0.1 ppm TWA ppm IDLH	500	10 ppm TWA (apply only to exempt industry segments); 25 ppm Ceiling; 1 ppm TWA; 5 ppm STEL; 0.5 ppm TWA section limit. Cancer hazard; Flammable (see 2 9 CFR 1910.1028)
Acetaldehyde	25 ppm Ceiling		2000 ppm IDLH		200 ppm TWA; 360 mg/m ³ TWA
Methyl isobutyl ket one	50 ppm; 75 ppm STEL		50 ppm TWA; 205 mg/m ³ TWA ppm IDLH	205	100 ppm TWA; 410 mg/m ³ TWA
Toluene	50 ppm; skin - potential for cutaneous absorption		100 ppm TWA; 375 mg/m ³ TWA ppm IDLH	500	200 ppm TWA; 300 ppm Ceiling
Ethyl acetate	400 ppm		400 ppm TWA; 1400 mg/m ³ TWA ppm IDLH	2000	400 ppm TWA; 1400 mg/m ³ TWA
Water	none listed		none listed		none listed
Solvent naphtha (pe troleum), light ali phatic	none listed		none listed		none listed
Gasoline, aviation	none listed		none listed		none listed

OSHA Vacated PELs:

Ethyl Alcohol: 1000 ppm TWA; 1900 mg/m³ TWA
Methyl alcohol: 100 ppm TWA; 200 mg/m³ TWA
Isopropyl alcohol: 100 ppm TWA; 200 mg/m³ TWA
Acetone: 400 ppm TWA; 980 mg/m³ TWA
Benzene: 750 ppm TWA; 1800 mg/m³ TWA
Carbon tetrachloride (unless specified in 1910.1028)
Acetaldehyde: 100 ppm TWA; 180 mg/m³ TWA
Methyl isobutyl ketone: 50 ppm TWA; 205 mg/m³ TWA
Toluene: 400 ppm TWA; 375 mg/m³ TWA
Ethyl acetate: 1000 ppm TWA; 1600 mg/m³ TWA
Water:
400 ppm TWA; 1400 mg/m³ TWA
No OSHA Vacated PELs are listed for this solvent.
So. No OSHA Vacated PELs are listed for this solvent.
Gasoline, aviation:
No OSHA Vacated PELs are listed for this solvent.

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 or European Standard EN166.

Skin: standard EN100. 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 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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

Physical State:	Liquid
Color:	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:	103.3 deg F
Freezing Point:	Not available.
Decomposition Temperature:	Not available.
Solubility in water:	Soluble in water.
Specific Gravity/Density:	0.7905
Molecular Formula:	Mixture.
Molecular Weight:	Not available.

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

Chemical Stability:
Stable. This material may be sensitive to peroxide formation.
Conditions to Avoid:
This material may be sensitive to peroxide formation., incompatible materials, ignition sources.
Incompatibilities with Other Materials:
Isopropanol is susceptible to autoxidation and therefore should be classified as peroxidizable., acids (mineral, non-oxidizing, e.g. hydrochloric acid, hydrofluoric acid, chromic acid, phosphoric acid), acids (mineral, oxidizing, e.g. muretic acid, hypochlorous acid), nitric acid, sulfuric acid, acids (organic, e.g. acetic acid, benzoic acid, formic acid, methacrylic acid, oxalic acid, tartaric acid, hydrazines (e.g. dimethyl hydrazine, hydrazine, methyl isocyanate, isocyanates (e.g. methyl isocyanate), nitrides (alkali and alkaline, e.g. cesium, potassium, sodium), nitrides (e.g. potassium nitride, sodium nitride), peroxides and hydroperoxides (organic, e.g. acetyl peroxide, benzoyl peroxide, butyl peroxide, methyl ethyl ketone peroxide), epoxides (e.g. butyl glycidyl ether), oxidizing agents (strong, e.g. bromine, hydrogen peroxide, nitrogen dioxide, potassium nitrate), reducing agents (strong, e.g. aluminum carbide, butadiene, hydrogen phosphide, lithium hydride), water reactive substances (e.g. dichlorosilane, alkyl aluminum chloride, calcium carbide, ethyl dichlorosilane).
Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

*** SECTION 11 - TOXICOLOGICAL INFORMATION ***

REC#	CAS#	64-17-5	KQ6300000
	CAS#	6-56-1	PC1400000
	CAS#	61-63-0	NT8050000
	CAS#	67-61-1	AL1450000
	CAS#	71-43-2	CY1400000
	CAS#	71-07-0	AB1925000
	CAS#	108-11-1	SA2750000
	CAS#	127-09-0	SA2750000
	CAS#	171-76-6	AR5430000
	CAS#	173-218-8	AC0110000
	CAS#	64-83-89	unlisted.
	CAS#	360808-09-9	unlisted.

LC50# 64-17-5: Draize test, rabbit, eye: 500 mg Severe; Draize test, rabbit, eye: 500 mg/24H Mild; Draize test, rabbit, skin: 20 mg/24H Moderate; Inhalation, mouse: LC50 = 39 gm/m³/4H; Inhalation, rat: LC50 = 100 ppm/10H; Oral, mouse: LD50 = 3450 mg/kg; Oral, rabbit: LD50 = 2300 mg/kg; Oral, rat: LD50 = 9000 mg/kg; Oral, rat: LD50 = 7060 mg/kg.

CAS# 67-56-1: Draize test, rabbit, eye: 40 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 20 mg/24H Moderate; Inhalation, rabbit: LC50 = 81000 ppm/3 1/4H; Inhalation, rat: LC50 = 64000 ppm/4H; Oral, mouse: LD50 = 7300 mg/kg; Oral, rabbit: LD50 = 14200 mg/kg; Oral, rat: LD50 = 5600 mg/kg; Skin, rabbit: LD50 = 15800 mg/kg.

CAS# 67-63-0: Draize test, rabbit, eye: 100 mg Severe; Draize test, rabbit, eye: 10 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 500 mg Mild; Inhalation, mouse: LC50 = 53000 mg/m³; Inhalation, rat: LC50 = 72600 mg/m³; Inhalation, rat: LC50 = 16000 ppm/8H; Oral, mouse: LD50 = 3600 mg/kg; Oral, rabbit: LD50 = 3600 mg/kg; Oral, rabbit: LD50 = 6410 mg/kg; Oral, rat: LD50 = 6410 mg/kg; Oral, rat: LD50 = 6410 mg/kg.

rat: LD50 = 5000 mg/kg; Oral, rat: LD50 = 5045 mg/kg; Skin, rabbit:
LD50 = 12800 mg/kg.
CAS# 67-64-1: Dermal, guinea pig: LD50 = >9400 uL/kg; Draize test,
rabbit, eye: 10 uL Mild; Draize test, rabbit, eye: 20 mg Severe;
skin: 500 mg/24H Mild; Draize test, rabbit, eye: 20 mg Severe;
skin: 500 mg/24H Mild; Inhalation, mouse: LD50 = 5000 mg/kg;
Inhalation, rat: LD50 = 50100 mg/m³/8H; Oral, mouse: LD50 = 3 gm/kg;
Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg;
CAS# 71-43-2: Dermal, guinea pig: LD50 = >9400 uL/kg; Draize test,
rabbit, eye: 88 mg Moderate; Draize test, rabbit, eye: 2 mg/24H
Severe; Draize test, rabbit, skin: 20 mg/24H Moderate; Inhalation,
mouse: LD50 = 980 ppm; Inhalation, rat: LD50 = 10000 ppm/7H; Oral,
mouse: LD50 = 4700 mg/kg; Oral, rat: LD50 = 930 mg/kg; Skin, rabbit:
LD50 = 20400 uL/kg;
LD50 = 7500 uL/kg; Draize test, rabbit, eye: 40 mg Severe; Inhalation,
mouse: LD50 = 20300 mg/m³/2H; Inhalation, rat: LD50 = 2300 mg/kg/4H;
Inhalation, mouse: LD50 = 13300 ppm/4H; Oral, mouse: LD50 = 900 mg/kg/4H;
Oral, rat: LD50 = 1930 mg/kg; Oral, rat: LD50 = 661 mg/kg; Skin,
rabbit: LD50 = 3540 mg/kg.
CAS# 108-10-1: Draize test, rabbit, eye: 40 mg Severe; Draize test,
rabbit, eye: 100 uL/24H Moderate; Draize test, rabbit, skin: 500
mg/24H Mild; Inhalation, mouse: LD50 = 23300 mg/m³; Inhalation, rat:
LD50 = 100 mg/m³; Oral, mouse: LD50 = 1900 mg/kg; Oral, rat: LD50 =
1080 mg/kg; Draize test, rabbit, eye: 870 ug Mild; Draize test,
rabbit, eye: 2 mg/24H Severe; Draize test, rabbit, skin: 500 mg/24H
Moderate; Inhalation, mouse: LD50 = 400 ppm/24H;
Skin: 20 mg/24H Moderate; Inhalation, mouse: LD50 = 400 ppm/24H;
Inhalation, rat: LD50 = 49 gm/m³/4H; Oral, rat: LD50 = 636 mg/kg;
Skin, rabbit: LD50 = 14100 uL/kg.
CAS# 141-78-6: Inhalation, mouse: LD50 = 45 gm/m³/2H; Inhalation,
rat: LD50 = 200 gm/m³; Oral, mouse: LD50 = 4100 mg/kg; Oral, rabbit:
LD50 = 4935 mg/kg; Oral, rat: LD50 = 5620 mg/kg; Skin, rabbit: LD50 =
220 mL/kg; 18-5; Oral, rat: LD50 = >90 mL/kg.
CAS# 64742-89-8
CAS# 308082-09-9.

Carcinogenicity:

Ethyl alcohol -
ACGIH: A4 - Not Classifiable as a Human Carcinogen
Methyl alcohol -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Isopropyl alcohol -
ACGIH: A4 - Not Classifiable as a Human Carcinogen
IARC: Group 3 carcinogen

Acetone -
ACGIH: A4 - Not Classifiable as a Human Carcinogen

Benzene -
ACGIH: A1 - Confirmed Human Carcinogen
California: carcinogen; Initial date 2/27/87
NIOSH: potential occupational carcinogen
NTP: Known carcinogen
OSHA: Select carcinogen
IARC: Group 1 carcinogen

Acetaldehyde -
ACGIH: A3 - Animal Carcinogen
California: carcinogen; Initial date 4/1/88
NIOSH: potential 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 -
ACGIH: A4 - Not Classifiable as a Human Carcinogen
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.

Gasoline, aviation -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: 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 mental retardation, and motor dysfunction, and mental retardation. Not all affected
children have motor dysfunction, and mental retardation. This syndrome has
been associated with alcoholic women who drank heavily and
chronically during pregnancy.

Neurotoxicity:

Chemical waste generators must determine whether a discarded chemical
is classified as a hazardous waste.

US EPA guidelines for the classification determination are listed in
40 CFR Parts 261.3. Additionally, waste generators must consult state
and local hazardous waste regulations to ensure complete and accurate
classification.

RCRA P-Series: None listed.
RCRA U-Series: CAS# 67-56-1: waste number U154
(Ignitable waste). CAS# 67-64-1: waste number U002
(Ignitable waste). CAS# 71-43-2: waste number U019
(Ignitable waste, Toxic waste). CAS# 75-07-0: waste

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

Ecotoxicity:
Fish: Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through @
24-24.3°C; Fish: Rainbow trout: LC50 = 11200 mg/L; 24 Hr; Fingering
(Unspecified) Bacteria: Phytobacterium phosphoreum: EC50 = 34900
mg/L; 5-30 min; Microtox test: 250 ppm/6hr/goldfish/lethal/fresh water

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

US DOT Shipping Name: ETHANOL
Hazard Class: 3
UN Number: UN1170
Canadian TDG Packing Group: II
Shipping Name: ALCOHOLS FLAMMABLE TOXIC NOS (ETHANOL, METHANOL
MIXTURE)
Hazard Class: 3.61
UN Number: UN1986
Other Information: FP 18C

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

US 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# 141-78-6 is listed on the TSCA inventory.
CAS# 308082-09-9 is listed on the TSCA inventory.
It is for research and development use only.
Health & Safety Reporting List
CAS# 67-63-0: Effective Date: 12/15/86; Sunset Date: 12/15/96
CAS# 108-10-1: Effective Date: 10/4/82; Sunset Date: 10/4/92
CAS# 108-88-3: Effective Date: 10/4/82; Sunset Date: 10/4/92
Chemical Test Rules
CAS# 67-63-0: Testing required by manufacturers, importers, processors
Section 12b
CAS# 67-64-1: 4/12b
CAS# 108-10-1: 4/12b Applies only to signatories of the ECA
CAS# 141-78-6: 4/12b
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA
CERCLA Hazardous Substances and corresponding RQs
CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ
CAS# 67-64-1: 5000 lb final RQ; 2270 kg final RQ
CAS# 71-43-2: 10 lb final RQ (receives an adjustable RQ of 10 lbs base
CAS# 108-10-1: 5000 lb final RQ; 2270 kg final RQ
CAS# 108-88-3: 1000 lb final RQ; 454 kg final RQ
CAS# 141-78-6: 5000 lb final RQ; 2270 kg final RQ
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPO.
SARA Codes
CAS # 64-17-5: acute, chronic, flammable.
CAS # 67-56-1: acute, chronic, flammable.
CAS # 67-63-0: acute, chronic, flammable.
CAS # 71-43-2: acute, chronic, flammable.
CAS # 75-07-0: acute, chronic, reactive.

No data available.
Mutagenicity:
No data available.
Other Studies:
No data available.

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

Ecotoxicity:
Fish: Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through @
24-24.3°C; Fish: Rainbow trout: LC50 = 11200 mg/L; 24 Hr; Fingering
(Unspecified) Bacteria: Phytobacterium phosphoreum: EC50 = 34900
mg/L; 5-30 min; Microtox test: 250 ppm/6hr/goldfish/lethal/fresh water

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

Chemical waste generators must determine whether a discarded chemical
is classified as a hazardous waste.

US EPA guidelines for the classification determination are listed in
40 CFR Parts 261.3. Additionally, waste generators must consult state
and local hazardous waste regulations to ensure complete and accurate
classification.

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

US DOT Shipping Name: ETHANOL
Hazard Class: 3
UN Number: UN1170
Canadian TDG Packing Group: II
Shipping Name: ALCOHOLS FLAMMABLE TOXIC NOS (ETHANOL, METHANOL
MIXTURE)
Hazard Class: 3.61
UN Number: UN1986
Other Information: FP 18C

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

US 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# 141-78-6 is listed on the TSCA inventory.
CAS# 308082-09-9 is listed on the TSCA inventory.
It is for research and development use only.
Health & Safety Reporting List
CAS# 67-63-0: Effective Date: 12/15/86; Sunset Date: 12/15/96
CAS# 108-10-1: Effective Date: 10/4/82; Sunset Date: 10/4/92
CAS# 108-88-3: Effective Date: 10/4/82; Sunset Date: 10/4/92
Chemical Test Rules
CAS# 67-63-0: Testing required by manufacturers, importers, processors
Section 12b
CAS# 67-64-1: 4/12b
CAS# 108-10-1: 4/12b Applies only to signatories of the ECA
CAS# 141-78-6: 4/12b
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs
CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ
CAS# 67-64-1: 5000 lb final RQ; 2270 kg final RQ
CAS# 71-43-2: 10 lb final RQ (receives an adjustable RQ of 10 lbs base
CAS# 108-10-1: 5000 lb final RQ; 2270 kg final RQ
CAS# 108-88-3: 1000 lb final RQ; 454 kg final RQ
CAS# 141-78-6: 5000 lb final RQ; 2270 kg final RQ
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPO.
SARA Codes
CAS # 64-17-5: acute, chronic, flammable.
CAS # 67-56-1: acute, chronic, flammable.
CAS # 67-63-0: acute, chronic, flammable.
CAS # 71-43-2: acute, chronic, flammable.
CAS # 75-07-0: acute, chronic, reactive.

CAS # 108-10-1: acute, chronic, flammable, reactive.
CAS # 108-88-3: acute, flammable.
CAS # 75-66-1: acute, flammable.
CAS # 64742-89-8: acute, 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 372.
This material contains Isopropyl alcohol (CAS# 67-63-0, 25%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
This chemical is not at a high enough concentration to be reportable under Section 313.
This material contains Acetaldehyde (CAS# 75-07-0, 10%) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
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 372.
This chemical is not at a high enough concentration to be reportable under Section 313.

Clean Air Act:
CAS# 71-43-2 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.
CAS# 108-88-3 is listed as a Toxic Pollutant under the Clean Water Act.

Clean Water Act:
CAS# 71-43-2 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.
CAS# 108-88-3 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
Ethyl Alcohol can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Methyl Alcohol can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Isopropyl Alcohol can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Acetone can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Benzene can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Acetaldehyde can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Methyl isobutyl ketone can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Toluene can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Ethyl acetate can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
Water is not present on state lists from CA, PA, MN, MA, FL, or NJ.
Solvent naphtha (petroleum), light aliphatic is not present on state lists from CA, PA, MN, MA, FL, or NJ.
Gasoline, aviation is not present on state lists from CA, PA, MN, MA, FL, or NJ.
WARNING: This product contains Benzene, a chemical known to the state of California to cause cancer.
WARNING: This product contains Benzene, a chemical known to the state of California to cause birth defects or other reproductive harm.
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.
California No Significant Risk Level:
CAS# 71-43-2: 90 ug/day NSRL (inhalation)
CAS# 75-07-0: 90 ug/day NSRL (inhalation)
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: F

Risk Phrases: R 11 Highly flammable.

Safety Phrases: S 2 Keep out of reach of children.
S 7 Keep container tightly closed.
S 16 Keep away from sources of ignition - No smoking

WCK (Water Danger/Protection)

CAS# 64-17-5: 0
CAS# 67-56-1: 1
CAS# 67-63-0: 1
CAS# 71-43-2: 3
CAS# 75-07-0: 1
CAS# 108-10-1: 1
CAS# 108-88-3: 1
CAS# 141-78-6: 1
CAS# 7732-18-5: No information available.
CAS# 64742-89-8: No information available.
CAS# 308052-09-9: No information available.
Kingdom Occupational Exposure Limits
CAS# 64-17-5: OES-United Kingdom, TWA 1000 ppm TWA; 1920 mg/m³ TWA
CAS# 67-56-1: OES-United Kingdom, TWA 200 ppm TWA; 266 mg/m³ TWA
CAS# 67-63-0: OES-United Kingdom, STEL 250 ppm STEL; 333 mg/m³ STEL
CAS# 71-43-2: OES-United Kingdom, STEL 400 ppm STEL; 500 mg/m³ STEL
CAS# 75-07-0: OES-United Kingdom, STEL 500 ppm STEL; 625 mg/m³ STEL
CAS# 108-10-1: OES-United Kingdom, TWA 500 ppm TWA; 1210 mg/m³ TWA
CAS# 67-64-1: OES-United Kingdom, STEL 1500 ppm STEL; 3620 mg/m³ STEL

United Kingdom Maximum Exposure Limits

CAS# 71-43-2: MEL-United Kingdom, TWA 3 ppm TWA

Canada

CAS# 64-17-5 is listed on Canada's DSL List.
CAS# 67-56-1 is listed on Canada's DSL List.
CAS# 67-63-0 is listed on Canada's DSL List.
CAS# 71-43-2 is listed on Canada's DSL List.
CAS# 75-07-0 is listed on Canada's DSL List.
CAS# 108-10-1 is listed on Canada's DSL List.
CAS# 108-88-3 is listed on Canada's DSL List.
CAS# 141-78-6 is listed on Canada's DSL List.
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 64742-89-8 is listed on Canada's DSL List.
This chemical is listed on Canada's DSL 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# 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 listed on Canada's Ingredient Disclosure List.
CAS# 64742-89-8 is not listed on Canada's Ingredient Disclosure List.
CAS# 308052-09-9 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)
OEL-FRANCE: TWA 1000 ppm (1900 mg/m³)
OEL-GERMANY: TWA 1000 mg/m³; STEL 5000 pp
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 (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 ACGIH TLV
CAS# 67-56-1: OEL-ARAB REPUBLIC of Egypt: TWA 200 ppm (260 mg/m³); Skin
CAS# 67-63-0: OEL-Australia: TWA 400 ppm (980 mg/m³); STEL 500 ppm (1225 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-THE NETHERLANDS: TWA 400 ppm (980 mg/m³); Skin
OEL-THE PHILIPPINES: TWA 400 ppm (980 mg/m³)
OEL-RUSSIA: STEL 400 ppm (10 mg/m³)
OEL-SWEDEN: TWA 150 ppm (350 mg/m³); STEL 250 ppm (600 mg/m³)

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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)
OEL-FRANCE: TWA 300 ppm (1100 mg/m³)
OEL-GERMANY: TWA 400 ppm (1400 mg/m³)
OEL-HUNGARY: TWA 400 ppm (1400 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)
OEL-POLAND: TWA 200 ppm
OEL-RUSSIA: TWA 400 ppm (500 mg/m³); 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)
OEL-UNITED KINGDOM: TWA 400 ppm (1400 mg/m³)
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGI 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 JAN9
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: Skin; 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 1 ppm (3 mg/m³); STEL 5 ppm (16 mg/m³); Skin; CAR
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 ACGI 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 25 ppm (90 mg/m³); STEL 75 ppm (13 mg/m³)
OEL-FRANCE: TWA 100 ppm (180 mg/m³); Carcinogen JAN9
OEL-GERMANY: TWA 100 ppm (300 mg/m³); Carcinogen
OEL-HUNGARY: STEL 25 ppm (90 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)
OEL-THE PHILIPPINES: TWA 200 ppm (360 mg/m³)
OEL-POLAND: TWA 5 mg/m³
OEL-RUSSIA: STEL 5 mg/m³; Skin
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 (270 mg/m³)
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGI TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

CAS# 108-10-1: Not available.
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 (560 mg/m³)
OEL-GERMANY: TWA 100 ppm (338 mg/m³); STEL 150 ppm (560 mg/m³)
OEL-HUNGARY: TWA 100 ppm (380 mg/m³); STEL 400 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 ppm
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-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 ACGI TLV

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

MSDS Creation Date: 10/12/1998 Revision #4 Date: 12/03/2002

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