CERAMIC INDUSTRIAL COATINGS

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product ID: CX-553020

Product Name: CANGUARD PLUS 20

Revision Date: Feb 11, 2025

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Version: 1.0

Supersedes Date: N.A.

Manufacturer's Name: Ceramic Industrial Coatings

Address: 325 Highway 81 Osseo, MN, US, 55369

Emergency Phone: Chemtrec: 1.800.424.9300

Information Phone Number: 763-424-2044

Fax:

Product/Recommended Uses: Paint or paint additive

SECTION 2) HAZARDS IDENTIFICATION

Classification

Flammable Liquids - Category 1

Acute toxicity Dermal - Category 5

Acute toxicity Inhalation Vapor - Category 4

Acute toxicity Oral - Category 4

Carcinogenicity - Category 1B

Germ Cell Mutagenicity - Category 1B

Reproductive Toxicity - Category 2

Serious Eye Damage - Category 1

Skin Irritation - Category 2

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Specific Target Organ Toxicity -Single Exposure (Narcotic Effects) - Category 3

Acute aquatic toxicity - Category 2

Chronic aquatic toxicity - Category 2

Safety data sheet prepared in accordance to the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Pictograms

Signal Word

Danger

Hazardous Statements - Physical

H224 - Extremely flammable liquid and vapor

Hazardous Statements - Health

H313 - May be harmful in contact with skin

H332 - Harmful if inhaled

H302 - Harmful if swallowed

H350 - May cause cancer.

H340 - May cause genetic defects.

H361 - Suspected of damaging fertility or the unborn child

H318 - Causes serious eye damage

H315 - Causes skin irritation

H373 - May cause damage to organs through prolonged or repeated exposure.

H336 - May cause drowsiness or dizziness

Hazardous Statements - Environmental

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P273 - Avoid release to the environment.

P271 - Use only outdoors or in a well-ventilated area.

P264 - Wash hands and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves, protective clothing, eye protection/face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating and lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take action to prevent static discharges.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

Precautionary Statements - Response

P312 - Call a POISON CENTER or doctor if you feel unwell.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P330 - Rinse mouth.

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P391 - Collect spillage.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P370 + P378 - In case of fire: Use material listed in SDS section 5 to extinguish.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P321 - Specific treatment (see details on this label).

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

Precautionary Statements - Storage

P405 - Store locked up.

P403 + P235 - Store in a well-ventilated place. Keep cool.

P403 + P405 - Store in a well-ventilated place. Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents/container to disposal recycling center. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

See recommendations in section 7 for handling and disposal of contaminated articles.

Acute toxicity of 26.75% of the mixture is unknown

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
NA_ERAEnviro	alkyd polymer	20% - 33%
0001330-20-7	XYLENE	12% - 26%
0000123-86-4	BUTYL ACETATE	10% - 21%
0000064-17-5	ETHYL ALCOHOL	5% - 11%
0000078-83-1	ISOBUTYL ALCOHOL	0.3% - 3.7%
0068002-18-6	Urea, polymer with formaldehyde, isobutylated	0.3% - 3.2%
0009004-36-8	CELLULOSE ACETATE BUTYRATE	0.2% - 2.6%
0000067-63-0	ISOPROPYL ALCOHOL	0.2% - 2.4%
0068002-25-5	1,3,5-TRIAZINE-2,4,6-TRIAMINE, POLYMER WITH FORMALDEHYDE, BUTYLATED	0.2% - 2.4%
0064742-89-8	ALIPHATIC, LIGHT HYDROCARBON SOLVENT	0.1% - 1.4%
0064742-49-0	VM & P NAPHTHA	0.1% - 1.4%
0068410-97-9	LACQUER DILUENT NAPTHA	0.1% - 1.4%
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	0.1% - 1.0%
0064742-95-6	AROMATIC HYDROCARBON MIXTURE >C9	0.1% - 0.7%
0000622-96-8	P-ETHYL TOLUENE	0.1% - 0.5%
0000095-63-6	1,2,4-TRIMETHYLBENZENE	0.1% - 0.5%
0000100-41-4	ETHYLBENZENE	0.0% - 0.5%
0000071-36-3	N-BUTYL ALCOHOL	0.0% - 0.4%
0000108-67-8	MESITYLENE	0.0% - 0.3%
0000108-65-6	PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	0.0% - 0.2%
0000103-65-1	BENZENE, PROPYL	0.0% - 0.2%
0000109-60-4	N-PROPYL ACETATE	Trace
0000098-82-8	CUMENE	Trace
0000108-38-3	M-XYLENE	Trace
0000106-42-3	P-XYLENE	Trace
0000095-47-6	O-XYLENE	Trace
0000067-56-1	METHANOL	Trace
0000108-88-3	TOLUENE	Trace
0000050-00-0	FORMALDEHYDE	Trace
0000057-55-6	PROPYLENE GLYCOL	Trace

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Take precautions to ensure your own safety. (e.g. wear appropriate protective equipment. Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

Immediately call a POISON CENTER or doctor.

Take precautions to ensure your own safety (e.g. wear appropriate protective equipment).

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for 15-20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Store contaminated clothing under water and wash before re-use.

Rinse with lukewarm, gently flowing water for 5 minutes or until product is removed.

Store contaminated clothing under water and wash before re-use or discard.

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts).

Rinse skin with lukewarm, gently flowing water/shower for a duration of 30 minutes or until medical aid is available.

Immediately call a POISON CENTER or doctor.

Eye Contact

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open.

Remove contact lenses, if present and easy to do.

Continue rinsing for a duration of 30 minutes or until medical aid is available.

Take care not to rinse contaminated water into the unaffected eye or onto the face.

Immediately call a POISON CENTER or doctor.

Ingestion

Rinse mouth. If you feel unwell/concerned: Get medical advice/attention.

Rinse mouth.

Do NOT induce vomiting.

Immediately call a POISON CENTER or doctor.

If vomiting occurs naturally, lie on your side, in the recovery position.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use dry chemical, foam or carbon dioxide to extinguish fire.

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam.

Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Not available.

Do not use straight stream of water.

Specific Hazards Arising from the Chemical

Runoff may pollute waterways

Most vapors are heavier than air.

Vapors may form explosive mixtures with air

Vapors will spread along ground and collect in low or confined areas (sewers, basements, tanks)

Vapors may travel to source of ignition and flash back.

Many liquids are lighter than water.

Containers may explode in fire.

May form an ignitable vapor/air mixture in closed tanks or containers.

Fire will produce irritating, toxic and corrosive gases.

Precautions for Firefighters

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done so safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel.

Isolate immediate hazard area and keep unauthorized personnel out.

Stop spill/release if it can be done safely.

Move undamaged containers from immediate hazard area if it can be done safely.

Cool containers with flooding quantities of water until well after fire is out.

Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Equipment

Care should always be exercised in dust/mist areas.

Use water to keep fire-exposed containers and the surroundings cool.

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Protective Equipment

Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Breathing protection is required.

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Do not breathe vapor or mist.

Do not get on skin, eyes or clothing.

Emergency Procedure

Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material.
Collect with absorbent, non-combustible material into suitable containers.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Stay uphill and/or upstream.

Ventilate closed spaces before entering.

Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Evacuate and isolate hazard area and keep unauthorized personnel away.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

All equipment used when handling the product must be grounded.

A vapor-suppressing foam may be used to reduce vapors.

Environmental Precautions

Do not flush to sewer or waterways. Prevent release to the environment if possible.

Stop spill/release if it can be done safely.

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Ventilate area after clean-up is complete.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Use clean, non-sparking tools to collect absorbed material.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.
Do not get in eyes, on skin or on clothing.
Do not breathe vapors or mists.
Use good personal hygiene practices.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.
Eyewash stations and showers should be available in areas where this material is used and stored.

Wash hands after use.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

All containers must be properly labelled.

Eyewash stations and showers should be available in areas where this material is used and stored

Do not breathe vapor or mist.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not get in eyes, on skin, or on clothing.

Ventilation Requirements

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Use only with adequate ventilation to control air contaminants to their exposure limits.

The use of local ventilation is recommended to control emissions near the source.

Report ventilation failures immediately.

Storage Room Requirements

Keep in a cool, dry, well-ventilated area, away from any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Keep containers securely sealed when not in use.

Containers that have been opened must be carefully resealed to prevent leakage.

Indoor storage should meet OSHA standards and appropriate fire codes.

Empty containers retain residue and may be dangerous.

Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers.

Store in approved containers and protect against physical damage.

Take precautionary measures against electrostatic discharge.

To avoid fire or explosion, dissipate static electricity during transfer by ground and bonding containers and equipment before transferring material.

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Dust-proof goggles or safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

Wear eye protection with side shields or goggles.

Wear indirect-vent, impact and splash resistant goggles when working with liquids.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. To prevent skin contact wear protective clothing covering all exposed areas. Avoid unnecessary skin contact.

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves.

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity.

Always seek advice from glove suppliers.

Contaminated gloves should be replaced.

Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber.

Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed.

Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
1,2,4-TRIMETHYLBENZENE								25
ALIPHATIC, LIGHT HYDROCARBON SOLVENT	500	2000			1			
AROMATIC HYDROCARBON MIXTURE >C9	500	2000			1			
BUTYL ACETATE	150	710			1			150
CUMENE	50	245			1		1	50
ETHYL ALCOHOL	1000	1900			1			1000
ETHYLBENZENE	100	435			1			100

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
ETHYLENE GLYCOL MONOBUTYL ETHER	50	240			1		1	5
FORMALDEHYDE	0.75 (a)		2 / 15minutes		1,2	1		0.016b
ISOBUTYL ALCOHOL	100	300			1			50
ISOPROPYL ALCOHOL	400	980			1			400
LACQUER DILUENT NAPTHA	500	2000			1			
MESITYLENE								25
METHANOL	200	260			1			200
M-XYLENE	100	435			1			100
N-BUTYL ALCOHOL	100	300			1			
N-PROPYL ACETATE	200	840			1			200
O-XYLENE	100	435			1			100
P-XYLENE	100	435			1			100
SILICA - PRECIPITATED	20 (b)	80 mg/m3 percent SiO2+2			1,3			
SILICA, CRYSTALLINE	a	[10 mg/m3 percent SiO2+2 / 250 percent SiO2+5 mppcf]; [30 mg/m3 percent SiO2+2];			[1,3]; [3];			
TOLUENE	200 (a)/ 300 ceiling	0.2	500ppm /10 minutes (a)		1,2			100
VM & P NAPHTHA	500	2000			1			
XYLENE	100	435			1			100

Chemical Name	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
1,2,4-TRIMETHYLBENZENE	125				10			
ALIPHATIC, LIGHT HYDROCARBON SOLVENT					(L)[N159](L)[N800]	[(L)[N159](L)[N800]]; [5 (I)[N159]5 (I)[N800]];		
AROMATIC HYDROCARBON MIXTURE >C9					(L)	[(L)]; [5 (I)];		
BUTYL ACETATE	710	200	950		50		150	
CUMENE	245				5			
ETHYL ALCOHOL	1900						1000	
ETHYLBENZENE	435	125	545		20			

Chemical Name	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
ETHYLENE GLYCOL MONOBUTYL ETHER	24				20			
FORMALDEHYDE				1	0.1		0.3	
ISOBUTYL ALCOHOL	150				50			
ISOPROPYL ALCOHOL	980	500	1225		200		400	
LACQUER DILUENT NAPTHA								
MESITYLENE	125				10			
METHANOL	260	250	325		200		250	
M-XYLENE	435	150	655		20			
N-BUTYL ALCOHOL					20			
N-PROPYL ACETATE	840	250	1050		100		150	
O-XYLENE	435	150	655		20			
P-XYLENE	435	150	655		20			
SILICA - PRECIPITATED	6							
SILICA, CRYSTALLINE	0.05e			1		0.025 (R)		
TOLUENE	375	150	560		20			
VM & P NAPHTHA	350				(L)	[(L)]; [5 (I)];		
XYLENE	435	150	655		20			

Chemical Name	ACGIH Carcinogen	ACGIH Notations	ACGIH TLV Basis
1,2,4-TRIMETHYLBENZENE	A4		CNS impair; hematologic eff
ALIPHATIC, LIGHT HYDROCARBON SOLVENT	[A2[N159]A2 [N800]]; [A4 [N159]A4 [N800]];	[A2[N159]A2 [N800]]; [A4 [N159]A4 [N800]];	URT irr [N159]URT irr [N800]
AROMATIC HYDROCARBON MIXTURE >C9	[A2]; [A4];	[A2]; [A4];	URT irr
BUTYL ACETATE			Eye & URT irr
CUMENE	A3	A3	URT adenoma; neurological eff
ETHYL ALCOHOL	A3	A3	URT irr
ETHYLBENZENE	A3	OTO;BEI	URT & eye irr; ototoxicity; kidney eff; CNS impair
ETHYLENE GLYCOL MONOBUTYL ETHER	A3	A3; BEI	Eye & URT irr

Chemical Name	ACGIH Carcinogen	ACGIH Notations	ACGIH TLV Basis
FORMALDEHYDE	A1	DSEN; RSEN; A1	URT & eye irr; URT cancer
ISOBUTYL ALCOHOL			Skin & eye irr
ISOPROPYL ALCOHOL	A4	A4; BEI	Eye & URT irr; CNS impair
LACQUER DILUENT NAPTHA			
MESITYLENE			CNS impair; hematologic eff
METHANOL		Skin; BEI	Headache; eye dam; dizziness; nausea
M-XYLENE			Eye irr & URT irr, hemotologic effects; CNS impair
N-BUTYL ALCOHOL			Eye & URT irr
N-PROPYL ACETATE			Eye & URT irr; CNS impair
O-XYLENE			Eye irr & URT irr, hemotologic effects; CNS impair
P-XYLENE	A4		Eye irr & URT irr, hemotologic effects; ototoxicity; CNS impair
SILICA - PRECIPITATED			
SILICA, CRYSTALLINE	A2	A2	Pulmonary fibrosis; lung cancer
TOLUENE	A4	OTO; A4; BEI	CNS, visual, & hearing impair; female repro system eff; pregnancy loss
VM & P NAPHTHA	[A2]; [A4];	[A2]; [A4];	URT irr
XYLENE			Eye irr & URT irr, hemotologic effects; CNS impair

(L) - Exposure by all routes should be carefully controlled to levels as low as possible, (R) - Respirable fraction, A1 - Confirmed Human Carcinogen, A2 - Suspected Human Carcinogen, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, dam - Damage, DSEN - Dermal sensitization, eff - Effects, impair - Impairment, irr - Irritation, repro - reproductive, RSEN - Respiratory sensitization, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

% Solids By Weight	42.69%

% VOC	57.35%
Density	8.23 lb/gal

Appearance	Liquid
Odor Description	Solvent
Odor Threshold	N.A.
pH	N.A.
Melting Point	N.A.
Freezing Point	N.A.
Low Boiling Point	N.A.
High Boiling Point	N.A.
Flash Point Symbol	N.A.
Flash Point	less than 50 °F
Evaporation Rate	N.A.
Flammability	N/A
Upper Explosion Level	N.A.
Lower Explosion Level	N.A.
Vapor Pressure	N.A.
Vapor Density	N.A.
Water Solubility	N.A.
Coefficient Water/Oil	N.A.
Auto Ignition Temp	N.A.
Decomposition Pt	N.A.
Viscosity	N.A.

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical Stability

Stable under normal conditions and use.

Stable under normal storage and handling conditions.

Hazardous Polymerization

Will not occur.

Possibility of Hazardous Reactions/Polymerization

Will not occur.

Conditions To Avoid

Avoid temperature above maximum storage temperature.

Avoid great heat, sparks, flame, build up of static electricity and contact with incompatible materials.

Avoid all possible sources of ignition, heat, sparks, flame, build up of static electricity and contact with incompatible materials.

Incompatible Materials

Not available.

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

No data available.

Oxides of carbon.

Skin Corrosion/Irritation

Causes skin irritation

0000057-55-6 PROPYLENE GLYCOL

Contact can irritate the skin.

0000064-17-5 ETHYL ALCOHOL

Contact can irritate the skin. Prolonged or repeated exposure can cause drying and cracking of the skin with peeling, redness and itching.

0000067-63-0 ISOPROPYL ALCOHOL

Contact can irritate and burn the skin. Prolonged or repeated contact can cause a skin rash, itching, dryness and redness.

0000071-36-3 N-BUTYL ALCOHOL

Can irritate and burn the skin.

0000108-88-3 TOLUENE

Contact can irritate the skin.

0000109-60-4 N-PROPYL ACETATE

Contact can irritate the skin.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can irritate the skin.

May affect the central nervous system, blood, kidneys and liver. Exposure can cause headache, dizziness and lighheadedness.

0000123-86-4 BUTYL ACETATE

May cause effects on the central nervous system.

Potential Health Effects - Miscellaneous

0000064-17-5 ETHYL ALCOHOL

The following medical conditions may be aggravated by exposure: liver disease. Tests in some laboratory animals indicate this compound may have embryotoxic activity. Tests in animals demonstrate reproductive toxicity. Ingestion may cause any of the following: stupor (central nervous system depression), gastrointestinal irritation. If absorbed through the skin, may be: harmful.

0000067-56-1 METHANOL

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, kidneys, liver, skin. Excessive human exposure to methanol may lead to: fatigue, headache, anaesthetic, neurologic effects, and visual difficulties including blindness or death. Recurrent overexposure may result in liver and kidney injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. Ingestion may cause any of the following: blindness. Eye contact may cause any of the following: conjunctivitis, mild irritation, corneal opacity.

0000067-63-0 ISOPROPYL ALCOHOL

The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

0000071-36-3 N-BUTYL ALCOHOL

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

0000078-83-1 ISOBUTYL ALCOHOL

Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause irritation of the mucous membranes. May cause abnormal liver function. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: bone marrow, liver. Prolonged skin contact may cause chemical burns. Liquid splashes in the eye may result in chemical burns.

0000100-41-4 ETHYLBENZENE

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects. WARNING: This chemical is known to the State of California to cause cancer.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

Recurrent overexposure may result in liver and kidney injury.

0000108-88-3 TOLUENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central

nervous system, kidneys, liver, respiratory system, skin. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

0000123-86-4 BUTYL ACETATE

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

0001330-20-7 XYLENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

0064742-89-8 ALIPHATIC, LIGHT HYDROCARBON SOLVENT

Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

0064742-95-6 AROMATIC HYDROCARBON MIXTURE >C9

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Serious Eye Damage/Irritation

Causes serious eye damage

0000050-00-0 FORMALDEHYDE

Contact can severely irritate and burn the skin and eyes wih possible eye damage.

0000057-55-6 PROPYLENE GLYCOL

Contact can irritate the eyes.

0000067-56-1 METHANOL

Can irritate the eyes and can cause blurred vision and blindness.

0000067-63-0 ISOPROPYL ALCOHOL

Liquid irritates eyes and may cause injury.

0000071-36-3 N-BUTYL ALCOHOL

Can irritate and burn the eyes.

0000078-83-1 ISOBUTYL ALCOHOL

Contact with eyes is extremely irritating and may cause burns.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

Can irritate the eyes.

0000108-88-3 TOLUENE

Contact can irritate the eyes.

0000109-60-4 N-PROPYL ACETATE

Contact can irritate the eyes.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can irritate the eyes.

Can irritate the skin.

0000123-86-4 BUTYL ACETATE

Can severely irritate and burn the skin.

Respiratory/Skin Sensitization

0000050-00-0 FORMALDEHYDE

Inhaling can irritate the lungs. May cause a skin allerhgy and an asthma-like allergy.

0000057-55-6 PROPYLENE GLYCOL

Prolonged or repeated contact can cause a skin rash dryness and redness.

0000067-56-1 METHANOL

Prolonged or repeated contact can cause a skin rash, dryness, redness and cracking of the skin.

0000071-36-3 N-BUTYL ALCOHOL

Can irritate the nose, throat and lungs. May cause dryness or cracking.

0000078-83-1 ISOBUTYL ALCOHOL

Can irritate the skin causing a rash. Breathing can irritate the nose, mouth and throat causing coughing and wheezing.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

Can irritat the respiratory tract.

0000108-88-3 TOLUENE

Inhaling can irritate the nose and throat.

0000109-60-4 N-PROPYL ACETATE

The vapour is milding irritating to the respiratory tract.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can irritate the eyes.

Can irritate the respiratory tract.

0000123-86-4 BUTYL ACETATE

Can severely irritate and burn the eyes.

Germ Cell Mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

Reproductive Toxicity

Suspected of damaging fertility or the unborn child

0000064-17-5 ETHYL ALCOHOL

High concentration may damage the fetus.

0000067-56-1 METHANOL

May be a teratogen in humans since it is a teratogen in animals.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can irritate the respiratory tract.

0000123-86-4 BUTYL ACETATE

Can irritate the respiratory tract.

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness

0000050-00-0 FORMALDEHYDE

Exposure can irritate the nose, mouth and throat.

0000057-55-6 PROPYLENE GLYCOL

Exposure can cause headache, dizziness, lightheadedness, and passing out.

0000064-17-5 ETHYL ALCOHOL

Exposure can cause headache, drowsiness, nausea and vomiting, and unconsciousness. It can also affect concentration and vision.

0000067-56-1 METHANOL

May damage the liver, kidneys and nervous system.

0000067-63-0 ISOPROPYL ALCOHOL

Vapors cause mild irritation of upper respiratory tract; high concentrations may be anesthetic.

0000071-36-3 N-BUTYL ALCOHOL

Exposure can cause headache, dizziness, nausea and vomiting. Can damange the liver and kidneys.

0000078-83-1 ISOBUTYL ALCOHOL

Exposure can cause headache, dizziness, drowsiness, confusion and loss of coordination. It may affect the liver.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

Exposure at high levels could cause depression of the central nervous system. (Short-term exposure).

0000108-88-3 TOLUENE

May affect the nervous system causing headache, dizziness and passing out.

0000109-60-4 N-PROPYL ACETATE

May cause effects on the central nervous system and the liver. Exposure can cause headache, dizziness, lightheadedness and loss of consciousness.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

May affect the central nervous system, blood, kidneys and liver. Exposure can cause headache, dizziness and lighheadedness.

Specific Target Organ Toxicity - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

0000057-55-6 PROPYLENE GLYCOL

Repeated high exposure may affect the kidneys.

0000064-17-5 ETHYL ALCOHOL

Repeated high exposure may affect the liver and the nervous system. Chronic ingestion of ethanol may cause liver cirrhosis.

0000067-63-0 ISOPROPYL ALCOHOL

Repeated high exposure can cause headache, dizziness, confusion, loss of coordination, unconsciousness and even death.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

The substance defats the skin, which may cause dryness or cracking (Repeated exposure).

0000108-88-3 TOLUENE

Repeated exposure may cause liver, kidney and brain damage.

0064742-49-0 VM & P NAPHTHA

Repeated exposure may cause skin dryness or cracking. Repeated exposure affects the nervous system

Aspiration Hazard

0000078-83-1 ISOBUTYL ALCOHOL

If swallowed, aspiration into the lungs may result in chemical pneumonitis.

0064742-49-0 VM & P NAPHTHA

Harmful by ingestion (may cause lung damage by aspiration).

Acute Toxicity

May be harmful in contact with skin

Harmful if inhaled

Harmful if swallowed

0000064-17-5 ETHYL ALCOHOL

Inhalation can irritate the nose, throat and lungs.

0000067-56-1 METHANOL

Inhalation can irritate the nose, throat and lungs causing coughing, wheezing and/or shortness of breath. Can cause nausea, vomiting, diarrhea and abdominal pain. Exposure to high concentrations can cause headache, dizziness, drowsiness, fatigue, loss of consciousness and death. Methanol is readily absorbed by inhalation, ingestion and dermal exposure and is rapidly distributed to tissues according to the distribution of body water.

0000067-63-0 ISOPROPYL ALCOHOL

If ingested causes drunkenness and vomiting. Inhalation can irritate the nose and throat.

LC50 (Rat, Inhalation) = 16,000 ppm/8H Reference : Registry of Toxic Effects of Chemical Substances If ingested causes drunkenness and vomiting. Inhalation can irritate the nose and throat.

0000078-83-1 ISOBUTYL ALCOHOL

If swallowed, aspiration into the lungs may result in chemical pneumonitis.

0000109-60-4 N-PROPYL ACETATE

Inhaling can irritate the nose and throat causing coughing and wheezing.

0064742-49-0 VM & P NAPHTHA

May cause Central Nervous System (CNS) depression

Chronic Exposure

0000050-00-0 FORMALDEHYDE

Formaldehyde has caused cancer in test animals at high concentrations (5-15ppm).

Formaldehyde is classified as a Suspected Human Carcinogen (A2) by ACGIH, and as Probably Carcinogenic to Humans (Group 2A) by IARC. Formaldehyde has caused cancer in test animals.

0000098-82-8 CUMENE

TERATOGENIC EFFECTS:Cumene has been Classified as POSSIBLE for humans.

0000100-41-4 ETHYLBENZENE

CARCINOGENIC EFFECTS: Ethyl Benzene has been listed by IARC as Group 2B, Possibly Carcinogenic to Humans.

TERATOGENIC EFFECTS: Ethyl Benzene has been Classified as POSSIBLE for humans.

0000108-88-3 TOLUENE

TERATOGENIC EFFECTS:Toluene has been Classified as POSSIBLE for humans.

0001330-20-7 XYLENE

High exposure to Xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus.

Xylene in high concentrations has caused embryotoxic effects in laboratory animals.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

0000050-00-0 FORMALDEHYDE

The substance can be absorbed into the body by inhalation.

0000064-17-5 ETHYL ALCOHOL

The substance can be absorbed into the body by inhalation of its vapor or by ingestion.

0000067-63-0 ISOPROPYL ALCOHOL

The substance can be absorbed into the body by inhalation of its vapour.

0000071-36-3 N-BUTYL ALCOHOL

Can be absorbed into the body by inhalation of its vapour and by ingestion.

0000078-83-1 ISOBUTYL ALCOHOL

The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

The substance can be absorbed into the body by inhalation of its aerosol or vapour and by ingestion.

0000108-88-3 TOLUENE

The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

0064742-49-0 VM & P NAPHTHA

Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.

0000050-00-0 FORMALDEHYDE

LC50 (rat): 8000 ppm (4-hour exposure) (24)

LD50 (oral, male rat): 2500 mg/kg (25)
LD50 (oral, rat): 2920 mg/kg (26)
LD50 (dermal, guinea pig): greater than 15000 mg/kg (cited as greater than 0.94 mL/kg) (27)
LD50 (dermal, rat): 5070 mg/kg (28, unconfirmed)

0000064-17-5 ETHYL ALCOHOL

LC50 (mouse): Approximately 21000 ppm (4-hour exposure); cited as 39 g/m3 (4-hour exposure) (1, unconfirmed)

LD50 (oral, rat): 7060 mg/kg (41); 10600 mg/kg (41); 13660 mg/kg (37)
LD50 (oral, mouse): 3450 mg/kg (1, unconfirmed)
LD50 (oral, guinea pig): 5560 mg/kg (37)

0000067-63-0 ISOPROPYL ALCOHOL

LC50 (rat): 17000 ppm (4-hour exposure); cited as 12000 ppm (8-hour exposure) (18)

LD50 (oral, male rat): 4710 mg/kg (cited as 6.0 mL/kg) (19)
LD50 (oral, mouse): 3600 mg/kg (20, unconfirmed)
LD50 (dermal, rabbit): 12870 mg/kg (cited as 16.4 mL/kg) (14)

0000071-36-3 N-BUTYL ALCOHOL

LC50 (rat): greater than 8000 ppm (4-hour exposure) (14)

LD50 (oral, rat): 2510 mg/kg (15)
LD50 (oral, male rat): 790 mg/kg (16)*
LD50 (oral, female rat): 2020 mg/kg (16)* *(Note: the rats used in this study appear to have been very young (60-100 grams).)
LD50 (oral, hamster): 1200 mg/kg (11, original

0000078-83-1 ISOBUTYL ALCOHOL

LD50 (oral, rat): 2460 mg/kg.(7)
LD50 (oral, rabbit): 3000 mg/kg (reported as 41 mmoL/kg) (8)
LD50 (dermal, rabbit): 3400 mg/kg (reported as 4.24 mL/kg).(7)

0000100-41-4 ETHYLBENZENE

LC50 (inhalation, rat): 4000 ppm; 4-hour exposure (3)

LD50 (oral, rat): 3.5 g/kg (1,3,5,10)
LD50 (oral, rat): 4.72 g/kg (3,5,7,8)
LD50 (dermal, rabbit): 17.8 g/kg (11)

0000108-88-3 TOLUENE

LC50 (rat): 8800 ppm (4-hour exposure) (2)
LC50 (rat): 6000 ppm (6-hour exposure) (3)

LD50 (oral, rat): 2600 to 7500 mg/kg (3,5,11,17)
LD50 (oral, neonatal rat): less than 870 mg/kg (3)
LD50 (dermal, rabbit): 12,225 mg/kg (reported as 14.1 ml/kg) (1)

0000123-86-4 BUTYL ACETATE

LC50 (rat): 1802 mg/m3; 4-hour exposure (aerosol)(9) Note: A lower LC50 (aerosol) value of 760 mg/m3 (160 ppm); 4-hour exposure has been reported.(11,27) Extensive research has failed to confirm this value.

LD50 (oral, rat): 10770 mg/kg (12, unconfirmed)
LD50 (oral, mouse): 7100 mg/kg (5)
LD50 (oral, rabbit): 7400 mg/kg (cited as 64 millimols/kg) (13)
LD50 (dermal, rabbit): Greater than 5000 mg/kg (3, unconfirmed)

0001330-20-7 XYLENE

LC50 (rat): 6350 ppm (4-hour exposure) (unspecified isomers and ethylbenzene) (1)LC50 (rat): 6700 ppm (4-hour exposure) (65% m-xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene) (2) ethylbenzene) (1)
LC50 (rat): 6700 ppm (4-hour exposure) (65% m-xylene, 7.6% o-xylene, 7.8% p-xylene, 19.3% ethylbenzene)(2)

LD50 (oral, rat): 5400 mg/kg (52% m-, 19% o-, 24% p-) (1)LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)
LD50 (oral, female mouse): 5251 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (oral, male mouse): 5627 mg/kg (60.2% m-, 9.1% o-, 14.6% p-, 17.0% ethylbenzene) (4)
LD50 (dermal, rabbit): 12180 mg/kg (m-xylene); greater than 1700 mg/kg (mixed xylenes - undefined composition) (3)

0000067-56-1 METHANOL

LC50 (rat): 64000 ppm (4-hour exposure) (14, unconfirmed)

LD50 (oral, rat): 5628 mg/kg (14, unconfirmed)
LD50 (oral, 14-day old rat): 5850 mg/kg (cited as 7.4 mL/kg) (15)
LD50 (oral, young adult rat): 10280 mg/kg (cited as 13.0 mL/kg) (15)
LD50 (oral, monkey): 3000 mg/kg (1/1 animal died) (16) LD50 (dermal, rabbit): 15800 mg/kg (cited as 20 mL/kg) (17 citing unpublished information)

0000095-63-6 1,2,4-TRIMETHYLBENZENE

LC50 (rat): 18 g/m3 (4-hour exposure) (1)

LD50 (oral, rat): 5 g/kg (1)

0000098-82-8 CUMENE

LC50 (inhalation, mouse): 10 mg/L; (2000 ppm); 7-hr exposure (1,3)

LC50 (inhalation, rat): 39 mg/L (8000 ppm); 4-hr exposure (1,3,6)
LD50 (oral, rat): Reported as 1.4 g/kg and 2.26 g/kg (1,3,4)
LD50 (skin, rabbit): 10627 mg/kg (4)

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

LC50 (female rat): 450 ppm (4-hour exposure) (2)
LC50 (male rat): 486 ppm (4-hour exposure) (2)

LD50 (oral, male weanling rat): 3000 mg/kg (1)
LD50 (oral, 6-week old male rat): 2400 mg/kg (1)
LD50 (oral, yearling male rat): 560 mg/kg (1)
LD50 (oral, female rat): 530 mg/kg; 2500 mg/kg (1)LD50 (oral, male mouse): 1230 mg/kg (1)
LD50 (oral, rabbit): 320 mg/kg (1)
LD50 (dermal, male rabbit): 406 mg/kg (cited as 0.45 mL/kg) (1)

0000108-67-8 MESITYLENE

LC50 (rat): 24 g/m3 (4-hour exposure) (2)

0000108-38-3 M-XYLENE

LC50 (rat): 7330 ppm (4-hour exposure); cited as 5984 ppm (6-hour exposure) (3,17)
LC50 (mouse): 6450 ppm (4-hour exposure); cited as 5267 ppm (6-hour exposure) (3)

LD50 (oral, rat): 5011 mg/kg (3); 6660 mg/kg (3)
LD50 (dermal, rabbit): 12180 mg/kg (3,17)

0000106-42-3 P-XYLENE

LC50 (rat): 4740 ppm (4-hour exposure) (3)
LC50 (mouse): 4800 ppm (4-hour exposure); cited as 3900 ppm (6-hour exposure) (1,4,6)

LD50 (oral, rat): 4030 mg/kg (3); 4550 mg/kg (10)

0000095-47-6 O-XYLENE

LC50 (rat): 5300 ppm (4-hour exposure); cited as 4330 ppm (6-hour exposure) (3)
LC50 (mouse): 5630 ppm (4-hour exposure); cited as 4595 ppm (6-hour exposure) (3,4)

LD50 (oral, rat): 3608 mg/kg (3,16)
LD50 (dermal, rabbit): 20000 mg/kg (3)

0000109-60-4 N-PROPYL ACETATE

LD50 (oral, rat): 8700 mg/kg; cited as 9.8 mL/kg (4)
LD50 (oral, mouse): 8300 mg/kg (5)
LD50 (oral, rabbit): 6600 mg/kg; cited as 65 mmols/kg (6)
LD50 (dermal, rabbit): Greater than 17700 mg/kg; cited as 20 mL/kg (4)

SECTION 12) ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

0000064-17-5 ETHYL ALCOHOL

S gairdneri: 13.0g/l (96hr LC50) Nauplii : 858 g/l (48hr EC50) Ceriodaphnia dubia : 9.6mg/l (10 day NOEC) Freshwater Fish 250mg/l (NOEC) Reference: REACH registration Dossier.

0000123-86-4 BUTYL ACETATE

Readily biodegradable

Persistence and Degradability

0000064-17-5 ETHYL ALCOHOL

Readily biodegradable. Half-life in air = 38 h

0000067-56-1 METHANOL

72% aerobic biodegradability.

Readily biodegradable.

0000067-63-0 ISOPROPYL ALCOHOL

Readily biodegradable

0000071-36-3 N-BUTYL ALCOHOL

Readily biodegradable.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

Readily biodegradable.

0000109-60-4 N-PROPYL ACETATE

Readily biodegradable.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Readily biodegradable

Readily biodegradable.

0000123-86-4 BUTYL ACETATE

Readily biodegradable

0001330-20-7 XYLENE

50% of applied radiolabelled o-xylene was mineralised in 23 days, and 50% p-xylene was mineralised in 13 days.

0064742-49-0 VM & P NAPHTHA

Expected to be readily biodegradable

Bioaccumulative Potential

0000064-17-5 ETHYL ALCOHOL

Substance has a low potential for bioaccumulation (log Kow3),

0000067-63-0 ISOPROPYL ALCOHOL

Substance is not expected to bioaccumulate.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

Substance has a low potential for bioaccumulation, Log Kow < 1.

Substance has a low potential for bioaccumulation, Log Kow = 1.2.

0064742-49-0 VM & P NAPHTHA

Has the potential to bioaccumulate.

Mobility in Soil

0000067-56-1 METHANOL

Will not adsorb on soil.

0000109-60-4 N-PROPYL ACETATE

The substance is not PBT / vPvB.

0064742-49-0 VM & P NAPHTHA

If it enters soil, it will adsorb to soil particles and will not be mobile

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

0000067-56-1 METHANOL

The substance is not PBT / vPvB.

0000067-63-0 ISOPROPYL ALCOHOL

Substance is readily biodegradable and therefore not considered to be persistent. It is not expected to bioaccumulate as it has a Log Kow < 4.5 and aquatic acute toxicity greatly exceeds the screening criteria of EC50 < 0.1 mg/l.

0000071-36-3 N-BUTYL ALCOHOL

The substance is not PBT / vPvB.

0000108-65-6 PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

The substance is not PBT / vPvB.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

The substance is not PBT / vPvB.

0000123-86-4 BUTYL ACETATE

The substance is not PBT / vPvB.

0064742-49-0 VM & P NAPHTHA

The substance is not PBT / vPvB.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste.

Waste management should be in full compliance with national, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN number:	UN1263	UN1263	UN1263
Proper shipping name:	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base
Hazard class:	3	3	3
Packaging group:	I	I	I
Hazardous substance (RQ):	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	
Note / Special Provision:	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	No Data Available		

SECTION 15) REGULATORY INFORMATION

WARNING: This product can expose you to chemicals including CUMENE, ETHYLBENZENE, FORMALDEHYDE, SILICA, CRYSTALLINE which are known to the State of California to cause cancer and METHANOL, TOLUENE which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

CAS	Chemical Name	% By Weight	Regulation List
NA_ERAEnviro	alkyd polymer	20% - 33%	SARA312
0001330-20-7	XYLENE	12% - 26%	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, MI_TOX, MN_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000123-86-4	BUTYL ACETATE	10% - 21%	CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS

CAS	Chemical Name	% By Weight	Regulation List
0000064-17-5	ETHYL ALCOHOL	5% - 11%	SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX, ND_TOX, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000078-83-1	ISOBUTYL ALCOHOL	0.3% - 3.7%	CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, MI_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS
0068002-18-6	Urea, polymer with formaldehyde, isobutylated	0.3% - 3.2%	SARA312, TSCA - Toxic Substances Control Act (TSCA)
0009004-36-8	CELLULOSE ACETATE BUTYRATE	0.2% - 2.6%	SARA312, TSCA - Toxic Substances Control Act (TSCA)
0000067-63-0	ISOPROPYL ALCOHOL	0.2% - 2.4%	SARA313, SARA312, TSCA - Toxic Substances Control Act (TSCA), CA_TOX, MI_TOX, ND_TOX
0068002-25-5	1,3,5-TRIAZINE-2,4,6-TRIAMINE, POLYMER WITH FORMALDEHYDE, BUTYLATED	0.2% - 2.4%	SARA312, TSCA - Toxic Substances Control Act (TSCA)
0112926-00-8	SILICA - PRECIPITATED	0.1% - 1.4%	SARA312, MI_TOX
0064742-89-8	ALIPHATIC, LIGHT HYDROCARBON SOLVENT	0.1% - 1.4%	SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX
0064742-49-0	VM & P NAPHTHA	0.1% - 1.4%	SARA312, TSCA - Toxic Substances Control Act (TSCA), ND_TOX
0068410-97-9	LACQUER DILUENT NAPTHA	0.1% - 1.4%	SARA312, TSCA - Toxic Substances Control Act (TSCA)
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	0.1% - 1.0%	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), CA_TAC_TOX, CA_TAC_Carcinogen, CA_TOX, MI_TOX, MN_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0064742-95-6	AROMATIC HYDROCARBON MIXTURE >C9	0.1% - 0.7%	SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX
0000611-14-3	O-ETHYL TOLUENE	0.1% - 0.5%	SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX
0000622-96-8	P-ETHYL TOLUENE	0.1% - 0.5%	SARA312, TSCA - Toxic Substances Control Act (TSCA), MN_ChemHighConcern - Minnesota Chemicals of High Concern list
0000095-63-6	1,2,4-TRIMETHYLBENZENE	0.1% - 0.5%	SARA313, SARA312, TSCA - Toxic Substances Control Act (TSCA), CA_TOX, MI_TOX, MN_TOX
0000100-41-4	ETHYLBENZENE	0.0% - 0.5%	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), CA_TAC_TOX, CA_TOX, CA_Carcinogen, MI_TOX, MN_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000071-36-3	N-BUTYL ALCOHOL	0.0% - 0.4%	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TOX, MI_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS
0000108-67-8	MESITYLENE	0.0% - 0.3%	SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX, MN_TOX
NA-ERAEnviro	hydrocarbon wax	0.0% - 0.3%	SARA312
0000620-14-4	ETHYLTOLUENE, M-	0.0% - 0.3%	SARA312
0000108-65-6	PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	0.0% - 0.2%	SARA312, TSCA - Toxic Substances Control Act (TSCA), CA_TOX, MI_TOX
0000103-65-1	BENZENE, PROPYL	0.0% - 0.2%	SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX
0009002-88-4	POLYETHYLENE	Trace	SARA312, TSCA - Toxic Substances Control Act (TSCA)

CAS	Chemical Name	% By Weight	Regulation List
0000109-60-4	N-PROPYL ACETATE	Trace	SARA312, TSCA - Toxic Substances Control Act (TSCA), ND_TOX
0000098-82-8	CUMENE	Trace	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, CA_TOX, CA_Carcinogen, MI_TOX, MN_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000108-38-3	M-XYLENE	Trace	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, CA_TOX, MI_TOX, MN_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000106-42-3	P-XYLENE	Trace	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, CA_TOX, MI_TOX, MN_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS
0007732-18-5	WATER	Trace	TSCA - Toxic Substances Control Act (TSCA)
0000095-47-6	O-XYLENE	Trace	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, CA_TOX, MI_TOX, MN_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS
0000067-56-1	METHANOL	Trace	CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, CA_TOX, MI_TOX, MN_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Develop - CA_Proposition65_Type_Toxicity_Developmental, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000108-88-3	TOLUENE	Trace	CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, CA_TOX, MI_TOX, MN_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Develop - CA_Proposition65_Type_Toxicity_Developmental, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000050-00-0	FORMALDEHYDE	Trace	SARA313, CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act, SARA312, TSCA - Toxic Substances Control Act (TSCA), RCRA, CA_TAC_TOX, CA_TAC_Carcinogen, CA_TOX, CA_Carcinogen, MI_TOX, MN_TOX, ND_TOX, WI_NR438 - WI_NR438 - AIR CONTAMINANT EMISSION INVENTORY REPORTING REQUIREMENTS, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume
0000057-55-6	PROPYLENE GLYCOL	Trace	SARA312, TSCA - Toxic Substances Control Act (TSCA), MI_TOX
0014808-60-7	SILICA, CRYSTALLINE	Trace	SARA312, TSCA - Toxic Substances Control Act (TSCA), CA_TOX, CA_Carcinogen, ND_TOX, CA_Prop65 - California Proposition 65, CA_Prop65_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer, MN_ChemHighConcern - Minnesota Chemicals of High Concern list, MN_ChemHighConcern_HPV - Minnesota - Chemicals High Concern -High Production Volume, DoNotUseMN_ChemHighConcern_HPV_Inorganic - DoNotUse_Minnesota - Chemicals of High Concern - High Production Volume, Reported at 1 million or more pounds on the 2006 and 2012 report cycles

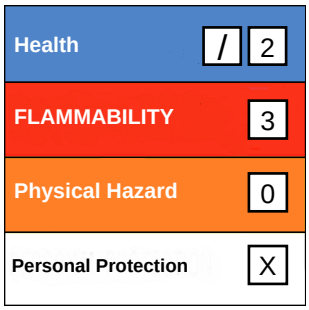
SECTION 16) OTHER INFORMATION

Glossary

ACGIH: American Conference of Governmental Industrial Hygienists
ANSI: American National Standards Institute
Canadian TDG: Canadian Transportation of Dangerous Goods
CAS: Chemical Abstract Service
Chemtrec: Chemical Transportation Emergency Center (US)
CHIP: Chemical Hazard Information and Packaging
DSL: Domestic Substances List
EC: Equivalent Concentration
EH40 (UK): HSE Guidance Note EH40 Occupational Exposure Limits
EPCRA: Emergency Planning and Community Right-To-Know Act
HMIS: Hazardous Material Information Service
LC: Lethal Concentration
LD: Lethal Dose
NFPA: National Fire Protection Association
OEL: Occupational Exposure Limits OSHA: Occupational Safety and Health Administration, US Department of Labor
PEL: Permissible Exposure Limit
SARA (Title III): Superfund Amendments and Reauthorization Act
SARA 313: Superfund Amendments and Reauthorization Act, Section 313
SCBA: Self-Contained Breathing Apparatus
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TSCA: Toxic Substances Control Act Public Law 94-469
TWA: Time Weighted Value
US DOT: US Department of Transportation
WHMIS: Workplace Hazardous Materials Information System

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

HMIS



(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

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