========== SECTION I - IDENTIFICATION ==========

PRODUCT NAME: HIGH SOLIDS A.D. PRIMER - ARIEL BLUE **HMIS CODES: H F R P**
PRODUCT CODE: 80-35-8446 **2*3 1 G**

MANUFACTURER'S NAME: THE CONTINENTAL PRODUCTS COMPANY
ADDRESS : 1150 East 222 Street, Euclid, OH 44117

EMERGENCY PHONE : (800)255-3924 **DATE PRINTED : 8/5/2016**
INFORMATION PHONE : (216)531-0710 **NAME OF PREPARER : John Stevens**

========== SECTION II - HAZARD(S) IDENTIFICATION ==========

EMERGENCY OVERVIEW:

APPEARANCE : BLUE LIQUID
ODOR: CHARACTERISTIC PAINT ODOR
SIGNAL WORD: DANGER!
PICTOGRAM: Flame Corrosive Health Exclamation Environmental

HAZARD STATEMENT(S):

Highly flammable liquid and vapor.

May cause cancer.

Causes skin irritation.

Harmful if swallowed.

Harmful if inhaled.

May be fatal if swallowed and enters airways.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

Harmful in contact with skin.

Causes damage to organs through prolonged or repeated exposure.

Suspected of damaging fertility or the unborn child.

Causes serious eye damage

Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S):

Keep away from flames and hot surfaces - No Smoking.

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

Wear protective gloves/eye protection/face protection.

Wear NIOSH approved respiratory protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison control center or doctor/physician.

IF SWALLOWED: Immediately call a poison control center or doctor/physician. Do not induce vomiting. May be fatal if swallowed and enters airways.

IF ON SKIN: Wash with plenty of water. If skin irritation occurs get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention.

Remove contaminated clothing and wash before reuse.

Contaminated work clothing should not be allowed out of the workplace.

Use only outdoors or in a well ventilated area.

Pressure may build in sealed containers. Do not store in direct heat, sun. Store in a well-ventilated place. Do not reuse product container unless properly cleaned.

Do not store below 40 Degrees Fahrenheit or above 120 Degrees Fahrenheit for extended periods.

Keep container tightly closed.

Store locked up.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/and other equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Collect spillage.

Dispose of contents/container to an approved waste disposal plant.

Avoid release to the environment.

OTHER PRECAUTIONS

Do not get in eyes. Avoid skin contact. Do not take internally. Containers should be grounded when pouring. Wear appropriate respiratory protection and use appropriate engineering controls to avoid breathing of vapor or spray mist.

Keep out of reach of children.

THRESHOLD LIMIT VALUE: SEE SECTION VIII

PRIMARY ROUTE(S) OF ENTRY

Inhalation and skin contact.

EFFECTS OF OVEREXPOSURE

May cause headache, nausea, eye or skin irritation.

CARCINOGENICITY

NTP CARCINOGEN: Yes IARC MONOGRAPHS: Yes OSHA REGULATED: Yes

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Respiratory difficulties or preexisting skin sensitization. Repeated exposure to emitted vapors may cause irritation to the upper respiratory tract. May aggravate an existing skin dermatitis condition.

========= SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS =========

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
BARIUM SULFATE	7727-43-7		14.7
* Xylene (mixed isomers)	1330-20-7	5.1	12.0
CALCIUM CARBONATE	1317-65-3		9.3
+ METHYL PROPYL KETONE	107-87-9	26.9	6.2
HYDRATED MAGNESIUM SILICATE; TALC; SOAPSTONE	14807-96-6		5.4
+ ACETONE	67-64-1	185	4.4
# SILICA	14808-60-7		3.84243
+* AROMATIC PETROLEUM DISTILLATES; HI-SOL 10	64742-95-6		3.7
#+* ETHYLBENZENE; PHENYL ETHANE	100-41-4		2.66453
+* 1,2,4-TRIMETHYLBENZENE	95-63-6		2.4
* ZINC PHOSPHATE	7779-90-0		2.1
#+* TITANIUM DIOXIDE	13463-67-7		1.81341
+ PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	108-65-6	3.7	1.2
+*# TOLUENE	108-88-3	22	.78877
+ n-BUTYL ACETATE	123-86-4	13	.8
# CUMENE	98-82-8		.42426
STODDARD SOLVENT	8052-41-3		.15608
# NORMAL BUTANOL	71-36-3	4.4	.08521
# NAPHTHALENE	91-20-3		.02478
# 2-ETHYLHEXANOIC ACID	149-57-5		.01639

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
+ indicates toxic chemical(s) subject to the reporting requirements of section 311 and 312 of Title III and of 40 CFR 372.

# Indicates a Chronic hazard. See warning in Section XI.

========== SECTION IV - FIRST-AID MEASURES ==========

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush immediately with large amounts of water for at least 15 minutes. Get medical attention.

INHALATION: Remove to fresh air. Administer artificial respiration or oxygen if breathing is difficult. Call for prompt medical attention.

SKIN: Wash affected area with soap and water. Remove and launder contaminated clothing. Consult a physician if irritation persists.

INGESTION: Do NOT induce vomiting. Should vomiting occur keep head lower than hip level to prevent aspiration. Never give anything by mouth to an unconscious person. If conscious rinse mouth with water. Call a physician immediately.

========== SECTION V - FIRE-FIGHTING MEASURES ==========

EXTINGUISHING MEDIA:
Carbon Dioxide, dry chemical or foam. If water, fog nozzles preferred.

SPECIAL FIRE FIGHTING PROCEDURES
Water may be used to cool closed containers to prevent pressure build-up when exposed to extreme heat. Firefighting personnel should wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Isolate from heat, electrical equipment, sparks, and open flame. Flammable liquid, can release vapors that form flammable mixtures at or above the flashpoint. This liquid is volatile and vapors may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode. Containers should be grounded and/or bonded when material is transferred. Empty containers may contain residue (liquid or vapor) and can be dangerous. Do not cut, weld, braze, solder, drill, grind, or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. Empty drums should be completely drained, properly bunged, and promptly sent to a drum reconditioner or sent for proper disposal.

========== SECTION VI - ACCIDENTAL RELEASE MEASURES ==========

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Dike spill area. Ventilate area if necessary. Recover free liquid by addition of inert absorbent to spill area. Sweep up and place material in a suitable disposal container. Wash down spill area with copious quantities of water. Wet floors may be slippery. Post appropriate warnings.

========== SECTION VII - HANDLING AND STORAGE ==========

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Keep away from heat/sparks/open flames/hot surfaces - No Smoking.

Do not store below 40 Degrees Fahrenheit or above 120 Degrees Fahrenheit for extended periods. Store in a well-ventilated place. Do not reuse product container for any purpose.

Keep container tightly closed.

========== SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION ==========

REPORTABLE COMPONENTS	CAS NUMBER
BARIUM SULFATE	7727-43-7
ACGIH TLV: 10 mg/M3 (TWA)	
OSHA PEL: 15 mg/M3 (Total Dust); 5 mg/M3 (Respirable Fraction)	
NIOSH REL: 15 mg/M3 (Total Dust); 5 mg/M3 (Respirable Fraction)	
DFG MAK: 4 mg/M3 (Inhalable); 1.5 mg/M3 (Respirable)	
* Xylene (mixed isomers)	1330-20-7
ACGIH TLV: 100ppm, 434mg/M3; (TWA); 150ppm, 651mg/M3 (STEL)	
OSHA PEL: 100ppm; 435mg/M3	
HAPS = Yes	
CALCIUM CARBONATE	1317-65-3
ACGIH TLV: 10 mg/M3 (inhalable total particulate matter containing	

no asbestos and < 1% crystalline silica TWA)
OSHA PEL: 15 mg/M3 (Total Dust); 5 mg/M3 (Respirable Fraction)

+ METHYL PROPYL KETONE 107-87-9
ACGIH TLV: 200 ppm; 705 mg/M3 (TWA); 250 ppm; 881 mg/M3 (STEL)
OSHA PEL: 200 ppm; 700 mg/M3

HYDRATED MAGNESIUM SILICATE; TALC; SOAPSTONE 14807-96-6
ACGIH TLV: 2 mg/M3 (Respirable TWA)
OSHA PEL: 20 mppcf TWA

+ ACETONE 67-64-1
ACGIH TLV: 750 ppm; 1780 mg/M3 (TWA); 1000ppm; 2380 mg/M3 (STEL)
OSHA PEL: 1000 ppm; 2400 mg/M3

SILICA 14808-60-7
ACGIH TLV: 0.025 mg/M3 (Respirable) (TWA)
OSHA PEL: 0.5 x (10 mg/M3 / %SiO2 + 2) = Respirable
OSHA PEL: (30 mg/M3 / %SiO2 + 2) = Total Dust
NIOSH RELS: 0.05 mg/M3
IARC-1, NTP-K (respirable)
CA Prop 65: CANCER

+* AROMATIC PETROLEUM DISTILLATES; HI-SOL 10 64742-95-6
ACGIH TLV: Not Established
OSHA PEL: Not Established
Manufacturers recommended TLV: 50 ppm

#+* ETHYLBENZENE; PHENYL ETHANE 100-41-4
ACGIH TLV: 20 ppm (87 mg/M3); STEL 125 ppm (543 mg/M3) BEI
OSHA PEL: 100 ppm
IARC-2B
RQ = 1000 lbs
HAPS = Yes
CWA Priority Pollutant
CA Prop 65: CANCER

+* 1,2,4-TRIMETHYLBENZENE 95-63-6
ACGIH TLV: 25 ppm; 123 mg/M3
OSHA PEL: Not Established

* ZINC PHOSPHATE 7779-90-0
ACGIH TLV: 10 mg/M3 (Total TWA); 3 mg/M3 (Respirable TWA)
OSHA PEL: 50 mppcf, 15 mg/M3 (Total Dust); 15 Mppcf, 5 mg/M3 (Respirable fraction)
This compound is reportable under SARA 313 in the Zinc Compounds category

#+* TITANIUM DIOXIDE 13463-67-7
ACGIH TLV: 10 mg/M3 (TWA)
OSHA PEL: 10 mg/M3 (Total Dust)

+ PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE 108-65-6
ACGIH TLV: Not Established
OSHA PEL: Not Established
manufacturer's recommended exposure limits:
TWA 30ppm SKIN; STEL 90ppm SKIN

+*# TOLUENE 108-88-3
ACGIH TLV: 20 ppm (TWA); 75mg/M3 BEI
OSHA PEL: 200 ppm (TWA); 300 ppm Ceiling; 500ppm Max Peak for 10 minute Maximum Duration)
CERCLA RQ 1000 lbs
HAPS = Yes
CWA Priority Pollutant
Ca Prop 65: DEVELOPMENTAL TOXICITY; FEMALE REPRODUCTIVE TOXICITY

+ n-BUTYL ACETATE 123-86-4
ACGIH TLV: 150 ppm, 713 mg/M3 (TWA); 200 ppm, 950 mg/M3 (STEL)
OSHA PEL: 150 ppm; 710 mg/M3

# CUMENE	98-82-8
ACGIH TLV: 50 ppm, 246 mg/M3 (Skin TWA)	
OSHA PEL: 50 ppm, 245 mg/M3 (Skin Notation)	
HAPS = Yes	
IARC-2B	
Ca Prop 65: CANCER	
STODDARD SOLVENT	8052-41-3
ACGIH TLV: 100 ppm; 525 mg/M3 (TWA)	
OSHA PEL: 500 ppm; 2900 mg/M3	
# NORMAL BUTANOL	71-36-3
ACGIH TLV: 20 ppm, 61 mg/M3 (Ceiling TWA)	
OSHA PEL: 100 ppm; 300 mg/M3	
# NAPHTHALENE	91-20-3
ACGIH TLV: 10 ppm, 52 mg/M3 (TWA); 15 ppm, 79 mg/M3 (STEL);	Skin; BEI
OSHA PEL: 10 ppm, 50 mg/M3	
CERCLA RQ 100 pounds	
HAPS = Yes	
IARC-2B, NTP-R	
CWA Priority Pollutant	
Ca Prop 65: CANCER	
# 2-ETHYLHEXANOIC ACID	149-57-5
ACGIH TLV: Not Established	
OSHA PEL: Not Established	
Ca Prop 65: DEVELOPMENTAL	

RESPIRATORY PROTECTION

Observe the OSHA Respiratory Protection Standard (29 CFR 1910.134) for respirator selection and use. Selection of the most appropriate respirator will depend on the specific work environment and should be made only by a person familiar with the working conditions and with the benefits and limitations of respiratory protection products.

VENTILATION

Ventilation should dilute to below LEL and TLV to be considered adequate. All applications areas should be ventilated in accordance with the applicable regulations found in 29 CFR, Part 1910.
Respiratory protection should be provided in accordance with the OSHA Standards listed above under Respiratory Protection.

PROTECTIVE GLOVES

Recommended if skin contact is likely.

EYE PROTECTION

Chemical goggles or safety eyewear with splash shields is recommended.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Avoid skin contact. Use body covering, aprons, boots, and/or impervious clothing to avoid contact with material. Barrier cremes are not recommended.

WORK/HYGENIC PRACTICES

Wash hands with soap and water before eating or using the washroom. Smoke in smoking areas only. Remove and wash contaminated clothing before reuse.

================ SECTION IX - PHYSICAL/CHEMICAL PROPERTIES ================

FLASHPOINT FLASHPOINT : 10 DEG F
FLASHPOINT METHOD USED: SETAFLASH
FLAMMABLE LIMITS IN AIR BY VOLUME:
LOWER: 0.9 UPPER: 12.8
AUTO-IGNITION TEMPERATURE: Not Determined
DECOMPOSITION TEMPERATURE: Not Determined
BOILING RANGE: 133 F - 395 F
SPECIFIC GRAVITY (H2O=1): 1.3182
VAPOR DENSITY: HEAVIER THAN AIR
VAPOR PRESSURE: Not Determined
EVAPORATION RATE: SLOWER THAN ETHER
COATING V.O.C (for EPA Permitting purposes): 3.4286 lb/gl
MATERIAL V.O.C. (all volatile content): 3.1774 lb/gl
pH : N/A
SOLUBILITY IN WATER: NOT SOLUBLE
ODOR: CHARACTERISTIC PAINT ODOR
APPEARANCE : BLUE LIQUID
ODOR THRESHOLD : Not Determined
DENSITY : 11.0 LB/GAL
MELTING POINT: N/A
VISCOSITY : 30 SEC Z2
FREEZING POINT: Approximately 40 Deg F
PARTITION COEFFICIENT: Not Determined

========== SECTION X - STABILITY AND REACTIVITY ==========

CHEMICAL STABILITY:
Stable

CONDITIONS TO AVOID
Heat, sparks, open flame and fire. Material is subject to freezing. Do not store above 120 Degrees Fahrenheit.

INCOMPATIBILITY (MATERIALS TO AVOID)
Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
BY FIRE: Normal products of incomplete combustion. May produce fumes when heated to decomposition, as in welding. Fumes may contain carbon monoxide/dioxide or oxides of nitrogen.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

========== SECTION XI - TOXICOLOGICAL INFORMATION ==========

ACUTE TOXICITY

toluene may irritate eyes, skin, respiratory system.

toluene may cause effects on the central nervous system - May cause drowsiness or dizziness.

toluene may be fatal if swallowed and enters airways.

normal butanol (71-36-3) (n-butanol; butyl alcohol):

normal butanol causes serious eye damage.

normal butanol may irritate skin at point of contact.

Inhalation of normal butanol vapor may irritate the respiratory tract - may cause drowsiness or dizziness.

Ingestion of normal butanol has caused fatty liver degeneration, kidney, ureter, bladder, and blood changes in test animals.

To the best of our knowledge the chemical, physical, and toxicological properties of normal butanol have not been thoroughly investigated.

propylene glycol monomethyl ether acetate (CAS 108-65-6) acetic acid, 2-methoxy-1-methylethyl ester):

propylene glycol monomethyl ether acetate is irritating to the eyes and the respiratory tract.

Exposure to propylene glycol monomethyl ether acetate at high levels may cause effects on the central nervous system.

n-butyl acetate (CAS 123-86-4) acetic acid, n-butyl ester):

n-butyl acetate is irritating to the eyes and the respiratory tract.

n-butyl acetate may cause effects on the central nervous system.

Overexposure to n-butyl acetate may cause lowering of consciousness.

ethylbenzene (CAS 100-41-4) (phenylethane):

ethylbenzene is irritating to the eyes, skin, mucous membranes, and the respiratory tract.

ethylbenzene may cause effects on the central nervous system, including headache, narcosis, coma.

Stoddard Solvent may cause adverse kidney effects. Avoid prolonged or repeated exposure.

Stoddard Solvent may be fatal if swallowed and aspirated into lungs. May cause chemical pneumonitis if aspirated. The symptoms of chemical pneumonitis often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are essential if Stoddard Solvent is aspirated.

Stoddard Solvent may cause serious irritation to the eyes.

Stoddard Solvent may irritate skin at point of contact.

Inhalation of Stoddard Solvent vapor may irritate the respiratory tract - May cause drowsiness or dizziness.

xylenes (mixed) (CAS 1330-20-7):

xylenes (mixed) may be fatal if swallowed.

xylenes (mixed) are irritating to the eyes and the respiratory tract. Splash accidents have produced transient, superficial injury to the eye.

xylenes (mixed) may cause effects on the central nervous system (narcosis). May cause irritation of the respiratory system and mucous membranes.

xylenes (mixed) may cause skin irritation.

Extreme overexposure by inhalation to xylenes (mixed) may result in death.

xylenes (mixed) are an Aspiration Hazard. Can enter lungs and cause damage. Vomiting increases risk of chemical pneumonia or pulmonary edema caused by aspiration.

1,2,4-trimethylbenzene (CAS 95-63-6) (pseudocumene):

1,2,4-trimethylbenzene is irritating to the eyes, skin, and respiratory tract.

1,2,4-trimethylbenzene may cause effects on the central nervous system.

Swallowing 1,2,4-trimethylbenzene may cause aspiration into the lungs with the risk of chemical pneumonitis.

cumene (98-82-8):

cumene may be fatal if swallowed and enters airways.

cumene may cause serious irritation to the eyes.

Inhalation of cumene vapor may cause respiratory irritation.

naphthalene (CAS 91-20-3) naphthalin):

naphthalene is toxic if swallowed.

Absorption of naphthalene into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis.
Onset may be delayed 2 to 4 hours or longer.

Naphthalene is retinotoxic and systemic absorption of its vapors above 15ppm, may result in: cataracts, optic neuritis, corneal injury, eye irritation.

Ingestion of naphthalene may provoke the following symptoms: hemolytic anemia, hemoglobinuria, nausea, headache, vomiting, gastrointestinal disturbance, convulsions, anemia, kidney injury may occur, seizures, coma.

2-ethylhexanoic acid (CAS 149-57-5):

2-ethylhexanoic acid causes serioius eye damage.

2-ethylhexanoic acid is harmful in contact with skin.

To the best of our knowledge the chemical, physical, and toxicological properties of 2-ethylhexanoic acid have not been thoroughly investigated.

hydrated magnesium silicate; talc; soapstone (CAS 14807-96-6):

To the best of our knowledge the chemical, physical, and toxicological properties of talc have not been thoroughly investigated.

Target Organs:
blood
cardiovascular system
central nervous system
eyes
gastrointestinal tract
kidneys
liver
lungs
respiratory system
skin

Target Organs (repeated exposure):
blood
central nervous system
kidneys
liver

lungs
skin

EYE:

n-butanol (CAS 71-36-3): Causes serious eye damage.
Rabbit - result: blindness (OECD Test Guideline 405)

propylene glycol monomethyl ether acetate (CAS 108-65-6)
LD50 Skin - Rabbit: slightly irritating

n-butyl acetate (CAS 123-86-4): Irritant dose ocular (guinea pig) = 3300 ppm 13h

stoddard solvent (Mineral Spirits) (CAS 8052-41-3) Rabbit
Result: eye irritation

naphthalene (CAS 91-20-3) Eye Irritation Rabbit = mild eye irritation
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis.
Onset may be delayed 2 to 4 hours or longer.
Napthalene is retinotoxic and systemic absorption of its vapors above 15 ppm may result in: cataracts, optic neuritis, corneal injury, eye irritation.

2-ethylhexanoic acid: (CAS 149-57-5): Severe eye irritation

INHALATION:

toluene (CAS 108-88-3) LC50 Inhalation - Rat = 12,500 - 28,800 mg/M3 4h

normal butanol (71-36-3) (n-butanol) LC50 Inhalation - Rat = 8,000 mg/L 4 hr

propylene glycol monomethyl ether acetate (CAS 108-65-6)
LC50 Inhalation - Rat = > 4,345 ppm; 6h
LC50 Inhalation - Rat = > 23.8 mg/L; 6h

n-butyl acetate (CAS 123-86-4):
LC50 Inhalation - Rat = 1,800 ppm 6h
LC50 Inhalation - guinea pig = >7,000 ppm 13h

ethylbenzene (CAS 100-41-4) LC50 Inhalation - Rat = 4,000 ppm 4 hr

Stoddard Solvent (Mineral Spirits) (CAS 8052-41-3) LC50 Inhalation - Rat = 5,500 mg/M3: 4h

xylene (CAS 1330-20-7) LC50 Inhalation - Rat = 6350 ppm 4 hr

1,2,4-trimethylbenzene (CAS 95-63-6) LC50 Inhalation - Rat = 18,000 mg/l 4h

cumene (CAS 98-82-8) LC50 Inhalation - Mouse = 10 mg/l 7h

naphthalene (CAS 91-20-3) LC50 Inhalation - Rat = 340 mg/M3 1h
Remarks: Sense organs and special senses (nose, eye, ear, and taste): Eye: lacrimation.
Behavioral: somnolence (general depressed activity)

SKIN:

toluene (CAS 108-88-3) LD50 Skin - Rabbit = 12,196 mg/kg
skin, rabbit = skin irritation 24 hr.

normal butanol (71-36-3) LD50 Skin - Rabbit = 3,400 mg/kg
Causes skin irritation.

propylene glycol monomethyl ether acetate (CAS 108-65-6)
LD50 Skin - Rat = > 5,000 mg/kg
Rabbit: non-irritant

methyl propyl ketone (CAS 107-87-9) LD50 Skin - Rabbit = 6,500 mg/kg

n-butyl acetate (CAS 123-86-4)
acute skin toxicity LD50 Skin - Rabbit = >17,600 mg/kg
irritant LD50 Skin - Rabbit = 500 mg 24 hr
n-butyl acetate is a moderate irritant

ethylbenzene (CAS 100-41-4) LD50 Skin - Rabbit = 17,800 ul/kg

Stoddard Solvent (Mineral Spirits) (CAS 8052-41-3) LD50 Skin - Rabbit > 3,000 mg/kg
Result: Moderate skin irritation

xylene (CAS 1330-20-7) LD50 Skin - Rabbit = 2,000 mg/kg

cumene (CAS 98-82-8) LD50 Skin - Rabbit = 12,300 mg/kg

solvent naphtha, petroleum, light arom. (CAS 64742-95-6) LD50 Skin - Rabbit = 3,160 mg/kg

naphthalene (CAS 91-20-3) LD50 Skin - Rabbit = 20,000 mg/kg

2-ethylhexanoic acid: (CAS 149-57-5) LD50 Skin - Rabbit = 1,142 mg/kg

INGESTION:

titanium dioxide (CAS 13463-67-7) LD50 Oral - Rat = >10,000 mg/kg

toluene (CAS 108-88-3) LD50 Oral - Rat = 5,580 mg/kg

normal butanol (71-36-3) (n-butanol) LD50 Oral - Rat = 300 - 2,000 mg/kg

propylene glycol monomethyl ether acetate (CAS 108-65-6)
LD50 Oral - Rat = > 5,000 mg/kg (male/female)
LD50 Oral - Rat = 8,532 mg/kg

methyl propyl ketone (CAS 107-87-9) LD50 Oral - Rat = 1,600 mg/kg

n-butyl acetate (CAS 123-86-4) LD50 Oral - Rat = 10,700 mg/kg

ethylbenzene (CAS 100-41-4) LD50 Oral - Rat = 3,500 mg/kg

Stoddard Solvent (Mineral Spirits) (CAS 8052-41-3) LD50 Oral - Rat > 6,000 mg/kg

xylene (CAS 1330-20-7) LD50 Oral - Rat = 4,300 mg/kg

1,2,4-trimethylbenzene (CAS 95-63-6) LD50 Oral - Rat = 5,000 mg/kg

cumene (CAS 98-82-8) LD50 Oral - Rat - male = 2,260 mg/kg

solvent naphtha, petroleum, light arom. (CAS 64742-95-6) LD50 Oral - Rat = 3,000 mg/kg

naphthalene (CAS 91-20-3) LD50 Oral - Rat = 490 mg/kg
Ingestion may provoke the following symptoms: hemolytic anemia, hemoglobinuria, nausea, headache, vomiting, gastrointestinal disturbance, convulsions, anemia, kidney injury may occur, seizures, coma.

2-ethylhexanoic acid: (CAS 149-57-5) LD50 Oral - Rat = 3,000 mg/kg

CHRONIC/CARCINOGENICITY:

Cumene - IARC concludes that there is inadequate evidence for the carcinogenicity of cumene in humans and sufficient evidence for the carcinogenicity of cumene in experimental animals. IARC's overall evaluation is that cumene is possibly carcinogenic to humans. Cumene has been classified by the IARC as a Group 2B carcinogen. (IARC Monographs VOL 101(2012) A REVIEW OF HUMAN CARCINOGENS: SOME CHEMICALS IN INDUSTRIAL AND CONSUMER PRODUCTS. FOOD CONTAMINANTS AND FLAVOURINGS, AND WATER CHLORINATION BY-PRODUCTS. CUMENE).

Ethyl Benzene - IARC concludes that there is inadequate evidence for the carcinogenicity of ethyl benzene in humans and sufficient evidence for the carcinogenicity of ethyl benzene in experimental animals. IARC's overall evaluation is that ethyl benzene is possibly carcinogenic to humans. Ethyl benzene has been classified by the IARC as a Group 2B carcinogen. (IARC Monographs VOL 77(2000) SOME INDUSTRIAL CHEMICALS).

Naphthalene - IARC concludes that there is inadequate evidence for the carcinogenicity of naphthalene in humans and sufficient evidence for the carcinogenicity of naphthalene in experimental animals. IARC's overall evaluation is that naphthalene is possibly carcinogenic to humans (Group 2B). (IARC Monographs VOL 82(2002) SOME TRADITIONAL HERBAL MEDICINES, SOME MYCOTOXINS, NAPHTHALENE AND STYRENE)

NTP lists Naphthalene as reasonably anticipated to be a carcinogen.

Silica (Crystalline) - The IARC has concluded that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite from occupational sources. Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1). (IARC Monographs VOL 68(1997) SILICA)

NTP lists crystalline silica in the form of quartz or cristobalite as a known human carcinogen.

Titanium Dioxide - IARC concludes there is inadequate evidence for the carcinogenicity of titanium dioxide in humans and sufficient evidence for the carcinogenicity of titanium dioxide in experimental animals. IARC's overall evaluation is titanium dioxide is possibly carcinogenic to humans (Group 2B). (IARC Monographs VOL 93(2006) TITANIUM DIOXIDE)

In lifetime inhalation studies rats were exposed for 2 years to respectively 10, 50, and 250 mg/M3 of respirable TIO2. Slight lung fibrosis was observed at 50 and 250 mg/M3 levels. Microscopic lung tumours were also observed in 13 percent of the rats exposed to 250 mg/M3, an exposure level that caused lung overloading and impairment of rat lungs clearnace mechanisms.

In further studies, these tumours were found to occur only under particle overload conditions in a uniquely sensitive species, the rat, and have little or no relevance for humans. The pulmonary inflammatory response to TIO2 particles exposure was also found to be much more severe in rats that in other rodent species.

In February 2006, IARC has re-evaluated Titanium Dioxide as pertaing to Group 2B: "Possibly carcinogenic to humans", based upon inadequate evidence in humans snd sufficient evidence in experimental animals for the carcinogenicity of titanium dioxide. IARC evaluation guidelines consider the generation of tumours, in 2 different studies within the same animal species, to be adequate criteria for an assessment of sufficient evidence.

The conclusions of several epidemiology studies on more than 20000 TIO2 industry workers in Europe and the USA did not suggest a carcinogenic effect of TIO2 dust on the human lung. Mortality from other chronic diseases, including other respiratory diseases, was also not associated with exposure to TIO2 dust.

Based upon all available study results, DuPont scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.

TOLUENE - Chronic effects: Warning! Concentrated, prolonged or deliberate inhalation of this product may cause brain and nervous system damage. Prolonged and repeated exposure of pregnant animals to Toluene (levels greater than approximately 1500 ppm) has been reported to cause adverse fetal development effects.

Xylenes (mixed) (CAS 1330-20-7) - Chronic exposure to xylenes may cause liver and kidney effects.

TERATOLOGY:

toluene (CAS 108-88-3): Developmental toxicity - rat - oral
Effects on embryo or fetus: fetotoxicity (except death, e.g., stunted fetus).
Damage to fetus possible.
Suspected human reproductive toxicant.

n-butanol: reported to cause teratogenic effects in laboratory animals

n-butyl acetate (CAS 123-86-4) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

ethylbenzene: reported to cause teratogenic effects in laboratory animals.
rat, female, inhalation, gestation, daily, NOAEL (teratogenicity): 100 ppm, NOAEL (maternal).
Teratogenic effects seen only with maternal toxicity.
Fetotoxicity effects seen only with maternal toxicity.
rabbit, female, inhalation, gestation, daily,
NOAEL (teratogenicity): < 1,000 mg/M3
NOAEL (maternal): < 1,000 mg/M3
Teratogenic effects seen only with maternal toxicity.
Fetotoxicity effects seen only with maternal toxicity.

xylenes (mixed): reported to cause reproductive effects in laboratory animals on the developing embryo/fetus. These effects were often observed at levels toxic to the mother. The significance of these findings to humans has not been determined.

2-ethylhexanoic acid: reported to cause teratogenic effects in laboratory animals.
Developmental toxicity - rat - oral: Fetotoxicity, Specific Developmental Abnormalities: musculoskeletal system, cardiovascular system, urgenital system.

REPRODUCTION:

toluene: reproductive toxicity - rat - inhalation
Paternal effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).
Experiments have shown reproductive toxicity effects in male and female laboratory animals

n-butanol: reported to cause reproductive effects in laboratory animals

ethylbenzene: reported to cause reproductive effects in laboratory animals

Teratogenic NOAEL 250 mg/kg (2-ethylhexanoic acid)
2-ethylhexanoic acid: reported to cause reproductive effects in laboratory animals.
Suspected human reproductive toxicant.

MUTAGENICITY:

toluene (CAS 108-88-3) germ cell mutagenicity = Genotoxicity in vitro - rat - liver
DNA damage

2-ethylhexanoic acid: (CAS 149-57-5) germ cell mutagenicity; human lymphocyte - sister chromatid exchange - 630 umol/L

========== SECTION XII - ECOLOGICAL INFORMATION ==========

ECOTOXICITY:

zinc phosphate (CAS 7779-90-0):
toxicity to fish: LC50 (oncorhynchus mykiss (rainbow trout)): 0.09 mg/l; 96h
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

toluene (CAS 108-88-3):
Acute toxicity to fish:
LC50 Lepomis macrochirus (Bluegill): 74.00 - 340.00 mg/L; 96 h
LC50 Oncorhynchus mykiss (Rainbow Trout): 7.63 mg/L; 96 h
LC50 Pimephales promelas (NOEC): 5.44 mg/L; 7 d
LC50 Pimephales promelas (LOEC): 8.04 mg/L; 7 d
Acute toxicity to aquatic invertebrates:
EC50 Daphnia magna Water flea): 8.00 mg/L; 24 h
Immobilization EC50 Daphnia magna Water flea): 6 mg/L; 48 h
Toxicity to aquatic plants:
EC50 Chlorella bulgaris (Fresh water algae): 245.00 mg/L; 24 h
EC50 Pseudokirchneriella subcapitata: > 10.00 mg/L; 24 h
toluene is a clean water act priority pollutant.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to Microorganisms:
Toxic to aquatic life.

n-butanol:
toxicity to fish: LC50 Pimephales promelas: 1,730 mg/L; 96 h
toxicity to daphnia: EC50 Daphnia magna: 1,983 mg/L; 48h

propylene glycol monomethyl ether acetate:
Acute toxicity to fish:
LC50 Oryzias latipes: > 100 mg/L; 96 h
LC50 Pimephales promelas: 161 mg/L; 96 h
Acute toxicity to aquatic invertebrates:
EC50 Daphnia magna: 408 mg/L; 48h
Toxicity to aquatic plants:
EC50 Pseudokirchneriella subcapitata: > 1,000 mg/L; 72 h
Toxicity to Microorganisms:
EC20 activated sludge: > 1,000 mg/L; 0.5 h
Biodegradation: > 90% exposure time 28 days: readily biodegradable. Aerobic, 100%, exposure time: 8 days: degradable

methyl propyl ketone (CAS 107-87-9):
toxicity to fish: pimephales promelas (fathead minnow) LC50 = 1,240 mg/l 96h

n-butyl acetate:
toxicity to fish: LC50 fathead minnow: 18 mg/L; 96h

Environmental Fate: n-Butyl Acetate is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase n-butyl acetate is degraded in the atmosphere by reaction with photochemically-produced hydoxyl radicals. n-Butyl Acetate is expected to have moderate mobility in soils. This compound is expected to biodegrade in both soils and aquatic environments. In water, n-butyl acetate is not expected to adsorb to sediment or particulate matter. It is expected to volatalize from water surfaces. The potential for bioconcentration in aquatic organisms is considered low.

ethylbenzene:
toxicity to fish: LC50 trout: 14 mg/L; 96h
toxicity to fish: LC50 fathead minnow: 12.1 mg/L; 96h
toxicity to fish: LC50 blue Gill/sunfish: 150 mg/L; 96h
toxicity to fish: LC50 sheepshead minnow: 42.3 mg/L: 96h
Biodegradation: Aerobic: 50%, exposure time: 28 days
Biochemical Oxygen Demand (BOD): 5 days, 2.8%; 35 days, 1,780 mg/g
Bioaccumulation: Cyprinus carpio (carp): 15 BCF
ethylbenzene is a clean water act priority pollutant.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

1,2,4-trimethylbenzene (CAS 95-63-6):
toxicity to fish: pimephales promelas (fathead minnow) LC50 = 7.72 mg/l 96h
toxicity to aquatic invertebrates: daphnia magna (water flea) immobilization EC50 = 3.6 mg/l 48h
1,2,4-trimethylbenzene (CAS 95-63-6): Toxic to aquatic life.

naphthalene (CAS 91-20-3):
toxicity to fish:
LC50 rainbow trout (Oncorhynchus mykiss): 0.9 - 9.8 mg/l; 96h
LC50 fathead minnow (Pimephales promelas): 1 - 6.5 mg/l; 96h
NOEC other fish: 1.8 mg/l; 3d
LOEC - other fish: 3.2 mg/l; 3d
toxicity to daphnia: EC50 water flea (Daphnia magna): 1.00 - 3.40 mg/L; 48h
toxicity to algae: EC50 no information available: 33 mg/l 24h
biodegradability: naphthalene is not readily biodegradable.
bioaccumulation: bioconcentration factor (BCF): 427 - 1,158
Harmful to aquatic life.
naphthalene is a clean water act priority pollutant.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

========== SECTION XIII - DISPOSAL CONSIDERATIONS ==========

WASTE DISPOSAL METHOD

Disposal must be made in accordance with Local, State, and Federal regulations. Incineration is recommended. Do not incinerate closed containers.

========== SECTION XIV - TRANSPORT INFORMATION ==========

DOT REGULATORY STATUS:

UN1263, Paint, 3, PGII

MARINE POLLUTANT:

Not Applicable

========== SECTION XV - REGULATORY INFORMATION ==========

U.S. FEDERAL, CANADIAN, INTERNATIONAL REGULATIONS:

All components of this product are listed in the TSCA inventory.

All components of this product are listed on the Canadian DSL, the nDSL, or exempt.
(Note: Canada has begun adoption of GHS. CPR or HPR can be used until June 1, 2017. HPR will be in effect for importers after June 1, 2017. Canadian employers may continue to use CPR until December 1,2018.)

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPS)

toluene, CAS 108-88-3
ethylbenzene, CAS 100-41-4
xylene, CAS 1330-20-7
cumene, CAS 98-82-8
naphthalene, CAS 91-20-3

Clean Water Act Priority Pollutants

toluene, CAS 108-88-3
ethylbenzene, CAS 100-41-4
naphthalene, CAS 91-20-3

SARA 313 (see Chemical Information Section III)

CANADIAN WHMIS: B2; D2

WHMIS STATUS: Controlled

STATE REGULATIONS:

California Proposition 65

WARNING. The following chemical(s) are known to the State of California to cause cancer, birth defects, or other reproductive harm.

SILICA	14808-60-7
ACGIH TLV: 0.025 mg/M3 (Respirable) (TWA)	
OSHA PEL: 0.5 x (10 mg/M3 / %SiO2 + 2) = Respirable	
OSHA PEL: (30 mg/M3 / %SiO2 + 2) = Total Dust	
NIOSH RELS: 0.05 mg/M3	
IARC-1, NTP-K (respirable)	
CA Prop 65: CANCER	
ETHYLBENZENE; PHENYL ETHANE	100-41-4
ACGIH TLV: 20 ppm (87 mg/M3); STEL 125 ppm (543 mg/M3) BEI	
OSHA PEL: 100 ppm	
IARC-2B	

RQ = 1000 lbs
HAPS = Yes
CWA Priority Pollutant
CA Prop 65: CANCER

TOLUENE 108-88-3
ACGIH TLV: 20 ppm (TWA); 75mg/M3 BEI
OSHA PEL: 200 ppm (TWA); 300 ppm Ceiling; 500ppm Max Peak for 10 minute Maximum Duration)
CERCLA RQ 1000 lbs
HAPS = Yes
CWA Priority Pollutant
Ca Prop 65: DEVELOPMENTAL TOXICITY; FEMALE REPRODUCTIVE TOXICITY

CUMENE 98-82-8
ACGIH TLV: 50 ppm, 246 mg/M3 (Skin TWA)
OSHA PEL: 50 ppm, 245 mg/M3 (Skin Notation)
HAPS = Yes
IARC-2B
Ca Prop 65: CANCER

NAPHTHALENE 91-20-3
ACGIH TLV: 10 ppm, 52 mg/M3 (TWA); 15 ppm, 79 mg/M3 (STEL); Skin; BEI
OSHA PEL: 10 ppm, 50 mg/M3
CERCLA RQ 100 pounds
HAPS = Yes
IARC-2B, NTP-R
CWA Priority Pollutant
Ca Prop 65: CANCER

2-ETHYLHEXANOIC ACID 149-57-5
ACGIH TLV: Not Established
OSHA PEL: Not Established
Ca Prop 65: DEVELOPMENTAL

BENZENE 71-43-2
ACGIH TLV (SKIN): 0.5 ppm, 1.6 mg/M3
ACGIH STEL/CEILING: 2.5 ppm, 8 mg/M3
OSHA PEL: 1 ppm (TWA); 5 ppm (STEL)
HAP = Yes
Ca Prop65: CANCER; Male Reproductive toxicity; Developmental Reproductive toxicity

ARSENIC 7440-38-2
ACGIH TLV: 0.01mg/M3 TWA (BEI)
OSHA PEL: 10ug/M3 TWA
see 29 CFR 1910.1018
IARC-1, NTP-K, OSHA-Ca
Clean Water Act Priority Pollutant = Yes
Ca Prop 65: CANCER

N-Nitrosodimethylamine 62-75-9
ACGIH TLV: Not Established (Skin Notation)
OSHA PEL: Not Established
see 29 CFR 1910.1003
IARC-2A; NTP-R; OSHA-Ca
SARA Extremely Hazardous Substance = Yes
RQ = 10 lbs
HAPS = Yes
CA Prop 65: CANCER

VOLATILE ORGANIC COMPOUNDS (EPA Method 24)

3.4286 lb/gl

========== SECTION XVI - OTHER INFORMATION ==========

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CORRECT. HOWEVER NO GUARANTY OR WARRENTY OF ANY KIND, EXPRESSED OR IMPLIED, IS MADE WITH RESPECT TO THE INFORMATION ABOVE.

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