DANLIN

Safety Data Sheet

Date Authored: July 25, 2012 **Date Issued:** July 8, 2013

Section I - Chemical Product and Company Identification

Material Name:	CLEAN 3350	**HMIS:**	3-3-0-C
Chemical Family:	None		
CAS Reg. No.:	None		
Function:	Emulsion Breaker		
Distributor:	Danlin Industries Corporation		
Physical Address:	23737 Hwy 47 Thomas, OK 73669	**Mailing Address:**	P. O. Box 307 Thomas, OK 73669
Phone Number:	(580) 661-3248	**Emergency Number:**	**(800) 424-9300 CHEMTREC**
Prepared By:	Danlin Industries Corporation		

Section II - Hazards Identification

Emergency Overview: DANGER

HIGHLY FLAMMABLE LIQUID AND VAPOR
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS
CAUSES SKIN IRRITATION
CAUSES SERIOUS EYE DAMAGE
MAY CAUSE GENETIC DEFECTS
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
HARMFUL TO AQUATIC LIFE

Primary Routes of Exposure: EYE CONTACT, SKIN ABSORPTION AND CONTACT, INGESTION, INHALATION

Precautionary Overview:

Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces - No Smoking.
Ground/bond container and receiving equipment.
Use explosion-proof equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
In case of fire: Use agents approved for Class B hazards (i.e. water fog, foam, dry chemical, carbon dioxide) for extinction.
Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional regulation.

Eye Contact: May cause eye irritation, burns.
Skin Contact: May cause skin irritation, sensitization.
Inhalation: May cause irritation of respiratory tract, decreased breathing capacity.
Ingestion: May be poisonous or fatal if swallowed.
Target(Organs): CNS, Liver, Kidneys
Systems(Affected): CNS, Liver, Kidneys, Skin, Respiratory
Carcinogenicity: **NTP:** No **IARC Monographs:** No **OSHA Regulated:**No

Section III -Hazardous Ingredients

Components	Wt. %	CAS #	OSHA PEL	OSHA STEL	ACGIH TWA	ACGIH STEL	OTHER
Petroleum distillates	<65	64742-95-6	NA	NA	100ppm	NA	
1,2,4-Trimethylbenzene	<20	95-63-6	25ppm	NA	25ppm	NA	
Cumene	<1	98-82-8	50ppm	NA	50ppm	NA	RQ 5000
Xylene	<1	1330-20-07	100ppm	NA	100ppm	150ppm	RQ 100
Dioctyl Sodium Sulfosuccinate	<10	577-11-7	NA	NA	NA	NA	
Ethanol	<5	64-17-5	1000ppm	NA	NA	1000ppm	
Methanol	<5	67-56-1	200ppm	NA	200ppm	250ppm	RQ 5000
2-Ethyl Hexanol	<1	104-76-7	NA	NA	NA	NA	
Isopropanol	<1	67-63-0	400ppm	NA	200ppm	400ppm	

Section IV - First Aid Measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Get immediate medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing, including shoes. Thoroughly clean clothing and shoes before reuse. Get medical attention.

Inhalation: Remove to fresh air. Give artificial respiration if not breathing. Give oxygen if breathing is difficult. Keep victim warm and Get immediate medical attention.

Ingestion: If swallowed, do **not** induce vomiting. Keep victims head below knee level to prevent vomit from aspiration into lungs. Get immediate medical attention. ***NOTE***: Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN:

For Methanol: Western Journal of Medicine, March 1985, page 337 reports that when plasma methanol concentrations are higher than 20 mg/deciliter, when ingested doses are greater than 30 milliliters, and when there is evidence of acidosis or visual abnormalities, a 10% solution of ethanol in 5% aqueous dextrose, administered intravenously, is a safe and effective antidote.

Section V - Fire Fighting Measures

Extinguishing Media. Agents approved for Class B hazards, (i.e.. water fog, foam, dry chemical, carbon dioxide).

Special Fire Fighting Procedures. Do not enter confined space without full bunker gear and self contained breathing apparatus. Treat as Class B oil fire. Keep sealed containers cool with water spray.

Unusual Fire and Explosion Hazards. **Flammable liquid.** Vapor may explode if ignited in enclosed area. Containers may explode from internal pressure if confined to fire. Cool with water.

Section VI - Accidental Release Measures

Steps To Be Taken In Case Material is Released or Spilled: Responders should wear PPE. Evacuate all unnecessary personnel from area. Remove or shut off all sources of ignition. Increase ventilation if possible. Stop leak if possible. Spilled material should be contained and removed by mechanical means, such as, absorbing with inert material and placing it in a properly labeled waste receptacle. Do not let run off water go to lakes, streams, etc.

Section VII - Handling and Storage

Precautions To Be Taken In Handling and Storing: Use appropriate PPE as outlined in Section VIII. Keep away from ignition sources (e.g.., heat, sparks, flames, etc.). Keep container closed. Ground and bond containers when transferring liquids. Use with adequate ventilation. Do not breathe vapors. Do not cut, puncture, or weld on or near this container.

Store away from oxidizer or other materials bearing a yellow "D.O.T." label.

Section VIII - Exposure Controls/Personal Protective Measures

Components	List	Type	Value
Petroleum distillates	ACGIH	TWA	100ppm
1,2,4-Trimethylbenzene	ACGIH	TWA	25ppm
	OSHA	TWA	25ppm
Ethanol	ACGIH	STEL	1000ppm
	OSHA	TWA	1000ppm
Methanol	ACGIH	TWA	200ppm
	ACGIH	STEL	250ppm
	ACGIH	Notation:	End of shift, Methanol in urine 15 mg/L; SKIN
	OSHA	TWA	200ppm
Cumene	ACGIH	TWA	50ppm
	OSHA	TWA	50ppm
	OSHA	Notation	Skin
Isopropanol	ACGIH	TWA	200ppm
	ACGIH	STEL	400ppm
	OSHA	TWA	400ppm
Xylene	ACGIH	TWA	100ppm
	ACGIH	STEL	150ppm
	ACGIH	Notation:	Not Classifiable as a Human Carcinogen; End of shift, Methylhippuric acids in urine 1.5 g/g creatinie
	OSHA	TWA	100ppm

Respiratory Protection: Use OSHA/NIOSH/MSHA approved air supplied respirator for organic vapors. Entry into confined space requires self contained positive breathing apparatus.

Ventilation: **Local Exhaust:** Yes, equal to fresh air
Mechanical Exhaust: Exhaust fan recommended to control exposure levels.
Special: Control airborne concentrations below exposure guidelines.

Personal Protective Equipment: Chemical resistant gloves (polyvinyl alcohol or Buna-N), chemical splash goggles, chemical resistant footwear, and chemical resistant aprons are recommended when handling the product.

Other Protective Equipment: Eye wash and safety showers should be readily available

Work and Hygienic Practices: Avoid breathing chemicals, wash hands before eating, drinking or smoking

Section IX - Physical and Chemical Properties

Appearence/Odor:	Clear Light Amber/Pungunt		
State:	Liquid	**pH:**	NA
Specific Gravity (g/ml):	0.868 to 0.948	**Solubility in Water:**	Not Soluble
Boiling Point:	161.7°F	**Pour Point:**	<- 40°F
Flash Point:	60.0°F	**Viscosity(cps):**	N/D
UEL (Calculated):	25.8%	**Vapor Pressure:**	N/D
LEL (Calculated):	161.7%	**Evaporation Rate:**	N/D
Auto-ignition Temperature:	N/D	**Vapor Density:**	N/D
Decomposition Temperature:	N/D	**n-Octanol/Water**	N/D

Section X - Stability and Reactivity

Chemical Stability	Stable
Conditions to Avoid	Ignition sources, eg., sparks and flame
Incompatible Materials	Strong oxidizing agents (bromine, chlorine, hydrogen peroxide, etc.) and strong bases
Decomposition Products	Thermal Decomposition: Carbon dioxide, carbon monoxide, smoke and oxides of nitrogen
Hazardous Polymerization	Will not occur

Section XI - Toxicological Information

No specific toxicity tests have been conducted on this product. Components have shown to be toxic.

1,2,4-TRIMETHYL BENZENE - Moderately toxic by intraperitoneal route. Mildly toxic by inhalation. Can cause central nervous system depression, anemia, bronchitis.

TOXICITY DATA:

Oral-Rat LD50: 5 g/kg; ***Inhalation-Rat*** LC_{50}: 18 g/m^3/4H; ***Intraperitoneal-Rat*** LDLo: 1752 mg/kg; ***Intraperitoneal-Guinea Pig***, adult LDLo:1788 mg/kg

2-ETHYLHEXANOL- Moderately toxic by ingestion, skin contact, intraperitoneal, subcutaneous, and parenteral routes. An experimental teratogen. Other experimental reproductive effects. A severe eye and moderate skin irritant. Mutation data reported.

TOXICITY DATA

Skin-Rabbit, adult 415 mg open Mild irritation effects; ***Skin-Rabbit***, adult 500 mg/24H Moderate irritation effects; ***Eye effects-Rabbit***, adult 4165 mg Severe irritation effects; ***Eye effects-Rabbit***, adult 20 mg/24H Moderate irritation effects; ***Oral-Mouse*** TDLo:12 g/kg (female 7-14D post):Reproductive effects ; ***Oral-Rat*** TDLo:1628 mg/kg (female 12D post):Teratogenic effects; ***Oral-Rat*** LD50:2049 mg/kg; ***Intraperitoneal-Rat*** LD50:500 mg/kg; ***Subcutaneous-Rat*** LD50:650 Parenteral-Rat LD50:4600 mg/kg; ***Oral-Mouse*** LD50:2500; ***Intraperitoneal-Mouse*** LD50:759 mg/kg; ***Parenteral-Mouse*** LD50:1670 mg/kg; ***Oral-Rabbit***, adult LD50:1180 mg/kg; ***Skin-Rabbit***, adult LD50:1970 mg/kg; ***Oral-Guinea Pig***, adult LD50:1860 mg/kg

CUMENE - Moderately toxic by ingestion. Mildly toxic by inhalation and skin contact. Human systemic effects by inhalation: an antipsychotic, unspecified changes in the sense of smell and respiratory system. An eye and skin irritant. Potential narcotic action. Central nervous system depressant. There is no apparent difference between the toxicity of natural cumene and that derived from petroleum

TOXICITY DATA:

Skin-Rabbit, adult 10 mg/24H open Mild irritation effects; ***Skin-Rabbit***, adult 100 mg/24H Moderate irritation effects; ***Eye effects-Rabbit***, adult 86 mg Mild irritation effects; ***Eye effects-Rabbit***, adult 500 mg/24H Mild irritation effects; ***Inhalation-Human*** TCLo:200 ppm:NOSE,Central nervous system effects,Pulmonary system effects; ***Oral-Rat*** LD50:1400 mg/kg; ***Inhalation-Rat*** LC50:8000 ppm/4H; ***Inhalation-Mouse*** LC50:24,700 mg/m3/2H

DI-(2-ETHYLHEXYL) SODIUM SULFOSUCCINATE - Poison by intravenous route. Moderately toxic by ingestion and intraperitoneal routes. A skin and severe eye irritant.

TOXICITY DATA:

Skin-Rabbit, adult 10 mg/24H Moderate irritation effects; ***Eye effects-Rabbit***, adult 250 mg Mild irritation effects; ***Eye effects-Rabbit***, adult 1% Severe irritation effects; ***Oral-Rat*** LD50:1900 mg/kg; ***Intraperitoneal-Rat*** LD50:590 mg/kg; ***Oral-Mouse*** LD50:2643 mg/kg; ***Intravenous-Mouse*** LD50:60 mg/kg

ETHYL ALCOHOL (ETHANOL) - Confirmed human carcinogen for ingestion of beverage alcohol. Experimental tumorigenic and teratogenic data. Moderately toxic to humans by ingestion. Moderately toxic experimentally by intravenous and intraperitoneal routes. Mildly toxic by inhalation and skin contact. Human systemic effects by ingestion and subcutaneous routes: sleep disorders, hallucinations, distorted perceptions, convulsions, motor activity changes, ataxia, coma, antipsychotic, headache, pulmonary changes, alteration in gastric secretion, nausea or vomiting, other gastrointestinal changes, menstrual cycle changes, and body temperature decrease. Can also cause glandular effects in humans. Human reproductive effects by ingestion, intravenous, and intrauterine routes: changes in female fertility index. Effects on newborn include: changes in Apgar score, neonatal measures or effects, and drug dependence. Experimental reproductive effects. Human mutation data reported. An eye and skin irritant.

The systemic effect of ethanol differs from that of methanol. Ethanol is rapidly oxidized in the body to carbon dioxide and water, and, in contrast to methanol, no cumulative effect occurs. Though ethanol possesses narcotic properties, concentrations sufficient to produce this effect are not reached in industry. Concentrations below 1000 ppm usually produce no signs of intoxication. Exposure to concentrations over 1000 ppm may cause headache, irritation of the eyes, nose, and throat, and, if continued for an hour, drowsiness and lassitude, loss of appetite, and inability to concentrate. There is no concrete evidence that repeated exposure to ethanol vapor results in cirrhosis of the liver. Ingestion of large doses can cause alcohol poisoning. Repeated ingestions can lead to alcoholism. It is a central nervous system depressant.

TOXICITY DATA:

Skin-Rabbit, adult 20 mg/24H Moderate irritation effects; ***Skin-Rabbit***, adult 500 mg/24H Severe irritation effects; ***Eye effects-Rabbit***, adult 500 mg/24H Mild irritation effects; ***Eye effects-Rabbit***, adult 100 mg/24H Moderate irritation effects; ***Eye effects-Rabbit***, adult 100 mg/4S rns Moderate irritation effects; ***Mutation in Microorganisms-Escherichia coli*** 140 g/L; ***DNA Inhibition-Human:*** lymphocyte 220 mmol/L *Cytogenetic Analysis-Mouse-Oral* 40 g/kg; ***Oral-Woman*** TDLo:41 g/kg (41W preg): Reproductive effects; ***Oral-Rat*** TDLo:4 g/kg (13D preg): Teratogenic effects; ***Oral-Mouse*** TDLo:320 mg/kg/50W-I: Equivocal tumorigenic agent; ***Rectal-Mouse*** TDLo:120 g/kg/18W-I: Equivocal tumorigenic agent; ***Oral-Mouse*** TD: 400 g/kg/57W-I: Equivocal tumorigenic agent; ***Oral-Child*** LDLo: 2000 mg/kg; ***Oral-cld*** TDLo: 14,400 mg/kg/30M-I; *Oral-Man* TDLo: 700 mg/kg; ***Oral-Human*** LDLo: 1400 mg/kg; ***Oral-Man*** TDLo: 50 mg/kg: Gastrointestinal tract effects; ***Oral-Man*** TDLo: 1430 mg/kg: Central nervous system effects; ***Oral-Woman*** TDLo: 256 g/kg/12W: Central nervous system effects, END ***Subcutaneous-Infant*** LDLo: 19,440 mg/kg: Central nervous system effects, MET; ***Oral-Rat*** LD_{50}: 7060 mg/kg; ***Inhalation-Rat*** LC_{50}: 20,000 ppm/10H; ***Intraperitoneal-Rat*** LD_{50}: 3750 mg/kg; ***Intravenous-Rat*** LD_{50}: 1440 mg/kg; ***Oral-Mouse*** LD_{50}: 3450 mg/kg; ***Inhalation-Mouse*** LC_{50}: 39 g/m3/4H; ***Intraperitoneal-Mouse*** LD_{50}: 933 mg/kg; ***Subcutaneous-Mouse*** LD_{50}: 8285 mg/kg; ***Intravenous-Mouse*** LD_{50}: 1973 mg/kg; ***Oral-Dog***, adult LDLo: 5500 mg/kg; ***Intraperitoneal-Dog***, adult LDLo: 3000 mg/kg; ***Subcutaneous-Dog***, adult LDLo: 6000 mg/kg

ISOPROPYL ALCOHOL (2 PROPANOL, sec-PROPYL ALCOHOL) - Moderately toxic to humans by an unspecified route. Moderately toxic experimentally by intravenous and intraperitoneal routes. Mildly toxic by skin contact. Human systemic effects by ingestion or inhalation: flushing, pulse rate decrease, blood pressure lowering, anesthesia, narcosis, headache, dizziness, mental depression, hallucinations, distorted perceptions, dyspnea, respiratory depression, nausea or vomiting, coma. Experimental teratogenic and reproductive effects. Mutation data reported. An eye and skin irritant. Questionable carcinogen.
The single lethal dose for a human adult is about 250 mL, although as little as 100 mL can be fatal. It can cause corneal burns and eye damage. Acts as a local respiratory irritant and in high concentration as a narcotic. It has good warning properties because it causes a mild irritation of the eyes, nose, and throat at a concentration level of 400 ppm. It may induce a mild narcosis, the effects of which are usually transient, and it is somewhat less toxic than the normal isomer, but twice as volatile.
There is some evidence that humans can acquire a slight tolerance to this material. It is absorbed by the skin, but single or repeated applications on the skin of rats, rabbits, dogs, or human beings induced no untoward effects. It acts very much like ethanol in regard to absorption, metabolism, and elimination but with a stronger narcotic action. Chronic injuries have been detected in animals. Workers producing isopropanol show an excess of sinus and laryngeal cancers. This may be caused, completely or in part, by the by-product, isopropyl oil. Humans have ingested up to 20 mL diluted with water and noticed only a sensation of heat and slight lowering of the blood pressure. There are, however, reports of serious illness from as little as 10 mL taken internally.
TOXICITY DATA:
Skin-Rabbit, adult 500 mg Mild irritation effects; ***Eye effects-Rabbit,*** adult 16 mg; ***Eye effects-Rabbit***, adult 10 mg Moderate irritation effects;***Cytogenetic Analysis-Saccharomyces cerevisiae*** 200 mmol/tube; ***Cytogenetic Analysis-Rat-Inhalation*** 1030 mg/m3/16W-I; ***Oral-Rat*** TDLo:6480 mg/kg (male 26W pre):Reproductive effects; ***Inhalation-Rat*** TCLo: 10,000 ppm/7H (female 1-19D post): Teratogenic effects;***Oral-Man*** TDLo: 14,432 mg/kg: Central nervous system effects, Cardiovascular effects, Pulmonary system effects; ***Oral-Human*** TDLo: 223 mg/kg: Central nervous system effects, Cardiovascular effects; ***Oral-Man*** LDLo: 5272 mg/kg; ***Oral-Human*** LDLo: 3570 mg/kg: Central nervous system effects, Pulmonary system effects, Gastrointestinal tract effects; ***Unreported-Man*** LDLo: 2770 mg/kg; ***Oral-Rat*** LD_{50}: 5045 mg/kg; ***Inhalation-Rat*** LCLo: 16,000 ppm/4H; ***Intraperitoneal-Rat*** LD_{50}: 2735 mg/kg; ***Intravenous-Rat*** LD_{50}: 1099 mg/kg; ***Oral-Mouse*** LD_{50}: 3600 mg/kg; ***Inhalation-Mouse*** LCLo: 12,800 ppm/3H; ***Intraperitoneal-Mouse*** LD_{50}: 4477 mg/kg; ***Subcutaneous-Mouse*** LDLo: 6000 mg/kg;***Intravenous-Mouse*** LD_{50}: 1509 mg/kg; ***Oral-Dog***, adult LD_{50}: 4797 mg/kg; ***Intravenous-Dog***, adult LDLo: 5120 mg/kg; ***Intravenous-Cat***, adult LDLo: 1963 mg/kg; ***Oral-Rabbit***, adult LD_{50}: 6410 mg/kg; ***Skin-Rabbit***, adult LD_{50}: 12,800 mg/kg

METHYL ALCOHOL (METHANOL) - A human poison by ingestion. Poison experimentally by skin contact. Moderately toxic experimentally by intravenous and intraperitoneal routes. Mildly toxic by inhalation. Human systemic effects: changes in circulation, cough, dyspnea, headache, lachrymation, nausea or vomiting, optic nerve neuropathy, respiratory effects, visual field changes. An experimental teratogen. Experimental reproductive effects. An eye and skin irritant. Human mutation data reported. A narcotic. Its main toxic effect is exerted upon the nervous system, particularly the optic nerves and possibly the retinae. The condition can progress to permanent blindness. Once absorbed, methanol is only very slowly eliminated. Coma resulting from massive exposures may last as long as 2-4 days. In the body, the products formed by its oxidation are formaldehyde and formic acid, both of which are toxic. Because of the slow elimination, methanol should be regarded as a cumulative poison. Though single exposures to fumes may cause no harmful effect, daily exposure may result in the accumulation of sufficient methanol in the body to cause illness. Death from ingestion of less than 30 mL has been reported. A common air contaminant.
TOXICITY DATA:
Skin-Rabbit, adult 20 mg/24H Moderate irritation effects; ***Eye effects-Rabbit***, adult 100 mg/24H Moderate irritation effects; ***DNA Inhibition-Human:*** lymphocyte 300 mmol/L; ***Microsomal Mutageniticity Assay-Mouse:*** lymphocyte 7900 mg/L; ***Oral-Rat*** TDLo: 7500 mg/kg (17-19D preg):Reproductive effects; ***Inhalation-Rat*** TCLo: 10,000 ppm/7H (7-15D preg):Teratogenic effects; ***Oral-Man*** LDLo: 6422 mg/kg: Central nervous system effects, Pulmonary system effects, Gastrointestinal tract effects; ***Oral-Man*** TDLo: 3429 mg/kg: Eye effects; ***Oral-Human*** LDLo: 428 mg/kg: Central nervous system effects, Pulmonary system effects; ***Oral-Human*** LDLo: 143 mg/kg: Eye effects, Pulmonary system effects, Gastrointestinal tract effects; ***Oral-Woman*** TDLo: 4 g/kg: Eye effects, Pulmonary system effects, Gastrointestinal tract effects; ***Inhalation-Human*** TCLo:86,000 mg/m^3: Eye effects, Pulmonary system effects; ***Inhalation-Human*** TCLo: 300 ppm: Eye effects, Central nervous system effects, Pulmonary system effects; ***Oral-Woman*** TDLo: 4 g/kg; ***Oral-Rat*** LD_{50}: 5628 mg/kg; ***Inhalation-Rat*** LC_{50}: 64,000 ppm/4H; ***Intraperitoneal-Rat*** LD_{50}: 7529 mg/kg; ***Intravenous-Rat*** LD_{50}: 2131 mg/kg; ***Oral-Mouse*** LD_{50}: 7300 mg/kg; ***Intraperitoneal-Mouse*** LD_{50}: 10,765 mg/kg; ***Subcutaneous-Mouse*** LD_{50}: 9800 mg/kg; ***Intravenous-Mouse*** LD_{50}: 4710 mg/kg; ***Oral-Monkey*** LDLo: 7000 mg/kg; ***Inhalation-Monkey*** LCLo: 1000 ppm; ***Skin-Monkey*** LDLo: 393 mg/kg

PETROLEUM DISTILLATES - Experimental reproductive effects reported.
TOXICITY DATA:
Inhalation-Mouse TCLo:1500 ppm/6H (female 6-15D post)

XYLENE - Moderately toxic by intraperitoneal and subcutaneous routes. Mildly toxic by ingestion and inhalation. An experimental teratogen. Human systemic effects by inhalation: olfactory changes, conjunctiva irritation, and pulmonary changes. Experimental reproductive effects. Mutation data reported. A human eye irritant. An experimental skin and severe eye irritant. Some temporary corneal effects are noted, as well as some conjunctival irritation by instillation (adding drops to the eyes one drop at a time). Irritation can start @ 200 ppm.
TOXICITY DATA:
Eye effects-Human 200 ppm; ***Skin-Rabbit***, adult 100% Moderate irritation effects; ***Skin-Rabbit***, adult 500 mg/24H Moderate irritation effects; ***Eye effects-Rabbit***, adult 87 mg Mild irritation effects; ***Eye effects-Rabbit***, adult 5 mg/24H Severe irritation effects; Cytogenetic Analysis-Saccharomyces cerevisiae 1 mmol/tube; ***Inhalation-Rat*** TCLo: 50 mg/m^3/6H (female 1-21D post):Reproductive effects; ***Inhalation-Rat*** TCLo: 50 mg/m3/6H (female 1-21D post):Teratogenic effects; ***Oral-Human*** LDLo: 50 mg/kg; ***Inhalation-Man*** LCLo: 10,000 ppm/6H; ***Inhalation-Human*** TCLo: 200 ppm: NOSE, Eye effects, Pulmonary system effects; ***Oral-Rat*** LD_{50}: 4300 mg/kg; ***Inhalation-Rat*** LC_{50}: 5000 ppm/4H; ***Intraperitoneal-Rat*** LD_{50}: 2459 mg/kg; ***Oral***-Unspecified effects LD_{50}: 4300 mg/kg; ***Inhalation***-Unspecified effects LC_{50}: 30 g/m^3

Section XII - Ecological Considerations

Ecological testing has not been conducted on this product. Material should be considered hazardous to aquatic life.

Section XIII - Disposal Considerations

Waste Classification: Material should be disposed of by incineration or in an approved landfill in accordance with all federal, state, and local regulations. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the products meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting material hazardous.

The container of this product can present physical or health hazards, even when emptied! To avoid risk of injury, do not cut, puncture, or weld on or near this container. Since emptied containers retain product residue, follow label warnings even after container is emptied.

Section XIV - Transportation Information

DEPARTMENT OF TRANSPORTATION:

DOT Identification Number:	UN1993
DOT Proper Shipping Name:	UN1993, Flammable liquid, n.o.s., (Contains Petroleum distillates and Methanol), 3, PGII
DOT Hazard Class:	3
DOT Identification Name:	Flammable liquid, n.o.s.
DOT Packaging Group:	PGII
RQ:	Xylene (5,048 lbs or 667 gallons)
2012 ERG Number:	**128**

Section XV - Regulatory Information

TSCA: Components of this product are listed on the TSCA Inventory.

CERCLA: If reportable quantity of this product is accidentally spilled the incident is subject to the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act and must be reported to the National Response Center by calling (800) 424-8802.

CERCLA Component	CAS #	Wt. %	RQ, lbs	Product RQ Value
Methanol	67-56-1	3.1	5000	159,535 lbs (21,097 gallons)
Xylene	1330-20-07	2.0	100	5,048 lbs (667 gallons)
Cumene	98-82-8	0.7	5000	706,564 lbs (93,434 gallons)

SARA TITLE III:

This product contains the following Extremely Hazardous Substance under EPCRA section 302/304 lists.

EHS Component	CAS #	Wt. %	RQ, lbs	TPQ, lbs
None				

Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:

Immediate (Acute) Health: X Delayed (Chronic) Health: X Fire: X Pressure: ___ Reactive: ___

This product contains the following Section 313 Reportable Ingredients:

313 Component	CAS #	Wt. %
1,2,4-Trimethylbenzene	95-63-6	20.6
Methanol	67-56-1	3.1
Xylene	1330-20-07	2.0
Cumene	98-82-8	0.7

Section XVI - Other Information

Hazardous Material Identification System Category Rating:

Health:	**3**
Flammability:	**3**
Reactivity:	**0**
Personal Protection:	**C**

This rating scheme rates health, fire, and reactivity on a scale of 0 to 4.
0 = No significant hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = High Hazard 4 = Extreme Hazard

Personal Protective Equipment Guide:

A = Safety Glasses
B = Safety Glasses, Gloves
C = Safety Glasses/Goggles, Gloves, Apron
D = Gloves, Apron, Faceshield
E = Safety Glasses, Gloves, Dust Respirator
F = Safety Glasses, Gloves, Apron, Dust Respirator
G = Safety Glasses, Gloves, Vapor Respirator
H = Safety Goggles, Gloves, Apron, Vapor Respirator
I = Safety Glasses, Gloves, Apron, Dust & Vapor Respirator
J = Splash Goggles, Gloves, Apron, Dust & Vapor Respirator
K = Air Line Hood/Mask, Gloves, Full Suit, Boots
X = Ask supervisor for special handling instructions

Component data taken from Sax's Dangerous properties of Industrial Materials, 10th Edition, John Wiley & Sons; Vendor's MSDS Sheets, NIOSH "Pocket Guide to CHEMICAL HAZARDS", U.S. Department of Health and Human Resources, 2007; The Merck Index, 9th Edition, Merck & Co., Inc.; "ACGIH 2004 TLVs and BEIs", American Conference of Governmental Industrial Hygienists; "Quick Selection Guide to CHEMICAL PROTECTIVE CLOTHING", 3RD Edition, John Wiley & Sons, Inc. ,1997.

Definitions

ACGIH:	American Conference of Governmental & Industrial Hygienists
ANSI:	American National Standard Institute
BEI:	Biological Exposure Indices - individual tests via urine or exhaled air
CERCLA:	Comprehensive Emergency Response, Compensation, and Liability Act
DOT:	U.S.Department of Transportation
EPA:	U.S. Environmental Protection Agency
HMIS:	Hazardous Materials Identification System
IARC:	International Agency For Research On Cancer
LC_{50}:	Lethal Concentration 50: A calculated concentration of the substance which is expected to cause death in 50% of an entire defined experimental animal population.
LCLo:	Lethal Concentration Low: The lowest concentration of a material in air (other than LC50) that has been reported to have caused death in humans or animals.
LD_{50}:	Lethal Dose 50: A calculated concentration of the substance which is expected to cause death in 50% of an entire defined experimental animal population.
LDLo:	Lethal Dose Low: the lowest dose (other than LD_{50}) of a material introduced by any route, other than inhalation, over any given period of time in one or more divided portions and reported to have caused death in humans or animals.
MSHA:	Mine Safety and Health Administration
N/A:	Not Applicable
N/D:	Not Determined
NE:	Not Established
NFPA:	National Fire Protective Association
NIOSH:	National Institute for Occupational Safety & Health
NSF:	National Sanitation Foundation
NTP:	National Toxicology Program
OSHA:	U.S. Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
PPE:	Personal Protective Equipment
RCRA:	Resource Conservation and Recovery Act
REL:	Recommended Exposure Limit (NIOSH)
RQ:	Reportable Quantity
SARA:	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA:	Self Contained Breathing Apparatus
STEL:	Short Term Exposure Limit
TCLo:	Toxic Concentration Low: The lowest concentration of a material in air to which humans or animals have been exposed for any given period of time that has produced any toxic effect in humans or produced a carcinogenic, neoplastigenic, or teratogenic effect in animals or humans.

TLV:	Threshold Limit Value: A recommended upper limit or TWA concentration of a substance to which most workers can be exposed without adverse effects.
TSCA:	Toxic Substances Control Act
TWA:	Time Weighted Average
Wt:	Weight
<:	Less Than
>:	Greater Than

DISCLAIMER OF LIABILITY

The information contained herein relates only to the specific material identified. Danlin Industries Corporation believes that such information is accurate and reliable as of the date of this material safety data sheet. **NO REPRESENTATION, GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION.**

The condition or methods of handling, use and disposal of the product are beyond our control and may be beyond our knowledge. **FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE, OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.**

Danlin Industries Corporation urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.