SDS No: 4039-1 Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013) Date of last Revision: 12/07/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Lacquer Thinner
Product Use Descrip- tion	:	Thinner

Manufacturer or supplier's details

Company Address: J.B.Chemical Co., Inc.

14803 S. Spring Street Gardena, CA 90248, USA 310-532-3021 800-522-2468

Emergency telephone number:

J.B.Chemical Co., Inc.: (310) 532-3021, (800) 522-2468 Monday - Friday, 7:00am - 3:00pm PST Chemtrec: (800) 424-9300 - Outside the continental U.S.: (703) 527-3887 24 Hours

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	: Category 2
Eye irritation	: Category 2A
Reproductive toxicity	: Category 2
Specific target organ tox- icity - single exposure	: Category 3 (Central nervous system)
Specific target organ tox- icity - repeated exposure (Inhalation)	: Category 2 (Auditory system, Eyes)

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GHS Label element

Hazard pictograms

:

Signal word

: Danger

Hazard statements	: H225 Highly flammable liquid and vapor. H319 Causes serious eye
	irritation.
	H336 May cause drowsiness or
	dizziness.
	H361 Suspected of damaging
	fertility or the unborn child.
	H373 May cause damage to
	organs through prolonged or
	repeated exposure if inhaled.

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Precautionary statements		Prevention:
Trecationary statements	•	P201 Obtain special instructions
		before use.
		P202 Do not handle until all safety
		precautions have been read and
		understood.
		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/ lighting/ equipment.
		P242 Use only non-sparking tools.
		P243 Take precautionary
		measures against static discharge.
		P260 Do not breathe dust/ fume/
		gas/ mist/ vapors/ spray.
		P264 Wash skin thoroughly after
		handling.
		P271 Use only outdoors or in a well-ventilatedarea. P280 Wear
		protective gloves/ eye protection/
		face protection.
		P281 Use personal protective
		equipment as required.
		Response:
		P303 + P361 + P353 IF ON SKIN
		(or hair): Remove/ Take off
		immediately all contaminated clothing. Rinse skin with water/
		shower.
		P304 + P340 + P312 IF INHALED:
		Remove victim to
		fresh air and keep at rest in a
		position comfortable for
		breathing. Call a POISON CENTER
		or doctor/ physicianif you feel unwell.
		P305 + P351 + P338 IF IN EYES:
		Rinse cautiously with water for
		several minutes. Remove contact
		lenses, if present and easy to do.
		Continue rinsing.
		P308 + P313 IF exposed or
		concerned: Get medical advice/
		attention. P337 \pm P313 If ove irritation
		P337 + P313 If eye irritation persists: Get medical advice/
		attention.
		P370 + P378 In case of fire: Use
		dry sand, dry chemical or alcohol-
		resistant foam for extinction.

	Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.
Potential Health Effects	
Carcinogenicity:	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
ΝΤΡ	No component of this product present at levels greater than or equal to 0.1% is identified as a known orantici- pated carcinogen by NTP.

Emergency Overview

Appearance	liquid
Color	clear, colorless
Hazard Summary	No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
67-64-1	Acetone	90 - 100
108-88-3	Toluene	1 - 5
123-86-4	n-Butyl acetate	1 - 5

SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area. Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled

: Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical

Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Carbon oxides Nitrogen oxides (NOx)

Specific extinguishing methods

: Use a water spray to cool fully closed containers.

Further information: Collect contaminated fire extinguishing water sepa-
rately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing wa-
ter must be disposed of in accordance with local regu-
lations.
For safety reasons in case of fire, cans should be
stored separately in closed containments.

Special protective equip- ment for firefighters

: Wear self-contained breathing apparatus for fire- fighting if necessary.

NFPA Flammable and Combustible Liquids Classification:

Flammable Liquid Class IB

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas.

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precau- tions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
-----------------------------	---

Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non- combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in con- tainer for disposal according to local / national regula- tions (see section
		13).

SECTION 7. HANDLING AND STORAGE

	Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharg- es. Provide sufficient air exchange and/or exhaustin work rooms. Container may be opened only under exhaust ventila- tion hood. Open drum carefully as content may be under pres- sure. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe stor- age	

: No smoking.

Keep container tightly closed in a dry and well- ventilated place.

Containers which are opened must be carefully re- sealed and kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must com- ply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

		na control parall			
CAS-No.	Components	Value type	Control parame-	Basis	

		(Form of exposure)	ters / Permissi- ble concentra- tion	
67-64-1	Acetone	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m3	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m3	OSHA Z-1

		TWA	750 ppm 1,800 mg/m3	OSHA PO
		STEL	1,000 ppm 2,400 mg/m3	OSHA PO
108-88-3	Toluene	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m3	NIOSH REL
		ST	150 ppm 560 mg/m3	NIOSH REL
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm	OSHA Z-2
		TWA	100 ppm 375 mg/m3	OSHA PO
		STEL	150 ppm 560 mg/m3	OSHA PO
123-86-4	n-Butyl acetate	TWA	150 ppm	ACGIH
		STEL	200 ppm	ACGIH
		ST	200 ppm 950 mg/m3	NIOSH REL
		TWA	150 ppm 710 mg/m3	NIOSH REL
		TWA	150 ppm 710 mg/m3	OSHA Z-1
		TWA	150 ppm 710 mg/m3	OSHA PO
		STEL	200 ppm 950 mg/m3	OSHA PO

Biological occupational exposure limits Biological Permissi-Basis Sam-Component CAS-No. Control specimen pling time ble conparames centration ters End of shift ACGIH BEI 67-64-1 Acetone Acetone Urine 50 mg/l (As soon as possible . after expo-

				sure ceases)		
Toluene	108-88- 3	Toluene	In blood	Prior to last shift of work- week	0.02 mg/l	ACGIH BEI
		Toluene	Urine	End of shift (As soon as possible after expo- sure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As soon as possible after expo- sure ceases)	0.3 mg/g Creatinine	ACGIH BEI

Personal protective equipment

Respiratory protection	 No personal respiratory protective equipment normally required. In the case of vapor formation use a respirator with an approved filter.
Hand protection	: The suitability for a specific workplace should be dis-
Remarks	cussed with the producers of the protectivegloves.

Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal pro- cessing problems.
Skin and body protection	:	impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: clear, colorless
Odor	: No data available
Odor Threshold	: No data available
PH Freezing Point (Melting po	: No data available int/freezing point)

Boiling Point (Boiling point/boiling range) : < -70 °C (< -94 °F)

: 56 - 125 °C (133 - 257 °F)

Flash point

: -20 °C (-4 °F)

Evaporation rate

Flammability (solid, gas)	:	No data available
Burning rate	:	No data available
Upper explosion limit	•	No data available
Lower explosion limit	 _	No data available

	Vapor pressure	: 230.969 mmHg @ 25 °C (77 °F)
	Relative vapor density Relative density	: No data available : 0.792 @ 20 °C (68 °F)
	Density	: 0.793 g/cm3 @ 20 °C (68 °F)
	Bulk density	: No data available
: No data a	Solubility(ies) Water solubility Solubility in other sol- ve available	: soluble ents

Partition coefficient: n- : No data available SDS No: 4039-1 Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013) Date of last Revision: 12/07/2016

octanol/water

Auto-ignition temperature	:	No data available
Thermal decomposition	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Bases Oxidizing agents Reducing agents strong bases

Hazardous decomposition products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:

67-64-1: Acute oral toxicity	: LD50 (rat): 5,800 mg/kg
Acute inhalation toxicity	: LC50 (rat): 76.0 mg/l
	Exposure time: 4 h
Acute dermal toxicity	: LD50: > 7,426 mg/kg
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108-88-3: Acute oral toxicity	: LD50 (rat, male) > 5,580mg/kg
Acute inhalation toxicity	: LC50 (rat, male and female): 28.1 mg/l Exposure time: 4 h Test atmosphere: vapor
	Method: OECD Test Guideline 403
Acute dermal toxicity 123-86-4:	: LD50 (rabbit) > 5,000 mg/kg
Acute oral toxicity	: LD50 (rat) > 5,000 mg/kg Method: OECD Test Guideline 423 GLP: no
Acute inhalation toxicity	: LC50 (rat, male and female) > 21 mg/l Exposure time: 4 h Test atmosphere: vapor Method: OECD Test Guideline 403 GLP: yes
Acute dermal toxicity	: LD50 (rabbit, male and female) > 5,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

67-64-1: Species: rabbit Exposure time: 24 h Method: In vivo Result: Mild skin irritation

108-88-3:

Species: rabbit Exposure time: 4 h Result: Irritating to skin.

123-86-4:

Species: rabbit Method: OECD Test Guideline 404 Result: No skin irritation GLP: no

SDS No: 4039-1 Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013) Date of last Revision: 12/07/2016

Serious eye damage/eye irritation

<u>Product:</u>

Result: Irritating to eyes.

Components:

67-64-1: Species: rabbit Result: Irritating to eyes. Exposure time: 24 h

108-88-3:

Species: rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405

123-86-4:

Species: rabbit Result: No eye irritation GLP: yes

Respiratory or skin sensitization

Components:

67-64-1: Test Type: Maximization test Species: guinea pig Result: Did not cause sensitization on laboratory animals.

108-88-3:

Test Type: Maximization Test (GPMT) Species: guinea pig Result: Did not cause sensitization on laboratory animals. GLP: yes

123-86-4:

Species: guinea pig Result: Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Components:

67-64-1: Genotoxicity in vitro : Test Type: Mammalian cell gene mutation assay Test species: Mouse lymphoma cells Metabolic activation: Without metabolic activation

Method: OECD Test Guideline 476

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	Result: negative
:	Test Type: Ames test Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 471 Result: negative
:	Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 473 Result: negative

Genotoxicity in vivo	:	Test Type: In vivo micronucleus test Test species: mouse Application Route: Oral Exposure time: 13 wk Dose: 5,000, 10,000, 20,000 ppm Result: negative
Germ cell mutagenicity- Assessment	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

108-88-3:

Genotoxicity in vitro

: Test Type: Mammalian cell gene mutation assay Test species: Mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative

Genotoxicity in vivo	: Test Type: Dominant lethal assay Test species: mouse (male) Application Route: inhalation (vapor) Exposure time: 6 h/d, 5 d/wk for 8 wks Dose: 0, 100, 400 ppm Method: OECD Test Guideline 478 Result: negative
Germ cell mutagenicity- Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

123-86-4:

Genotoxicity in vitro

: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster lung fibroblasts Metabolic activation: Without metabolic activation Method: OECD Test Guideline 473 Result: negative

SDS No: 4039-1 Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013) Date of last Revision: 12/07/2016

GLP: No data available

Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: mouse (male and female) Application Route: Oral Dose: 500, 1000, 2000 mg/kg bw Method: OECD Test Guideline 474 Result: negative GLP: yes Test substance: Information given is based on data obtained from similar substances.
Germ cell mutagenicity- Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Components:

67-64-1: Species: mouse, (female) Application Route: Dermal Exposure time: 365 d (90%) or 424 d (100%) Dose: 0.1ml 90(71mg) or 100% (79mg) Frequency of Treatment: 3 times per wk NOAEL: 79

Result: did not display carcinogenic properties

Carcinogenicity - As- sessment

108-88-3:

: Carcinogenicity classification not possible from current data. Species: rat, (male and female) Application Route: inhalation (vapor) Exposure time: 103 wks Dose: 0, 600, 1200 ppm Frequency of Treatment: 6.5 h/d, 5 d/wk NOAEL: No observed adverse effect level: 1,200 ppm

> Method: OECD Test Guideline 453 Result: did not display carcinogenic properties Symptoms: Erosion of nasal epithelium GLP: yes Carcinogenicity - As- sessment

123-86-4:

: Not classifiable as a human carcinogen. Remarks: This information is not available. SDS No: 4039-1 Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

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Carcinogenicity - As- sessment

: No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Components:

67-64-1: Effects on fertility

: Species: rat, male Application Route: oral Dose: 0, 5000, 10000 mg/L Frequency of Treatment: 7 days/week General Toxicity - Parent: LOAEL: 10,000 Fertility: 10,000

Effects on fetal devel- opment

Reproductive toxicity - Assessment

: Species: rat

Application Route: Inhalation Dose: 0, 440, 2200, 11000 ppm Frequency of Treatment: 7 days/week General Toxicity Maternal: NOAEC: 2,200 ppm Teratogenicity: NOAEC: 11,000 ppm Embryo-fetal toxicity.: NOAEC: 2,200 ppm Method: OECD Test Guideline 414 Result: No teratogenic potential. GLP: No data available : No evidence of adverse effects on sexual function and fertility, and on development, based on animal exper- iments.

108-88-3:	
Effects on fertility	 Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 500 ppm General Toxicity F1: NOAEC: 500 ppm Fertility: NOAEC: 2,000 ppm Symptoms: Reduced maternal body weight gain. Re- duced offspring weight gain. Method: OECD Test Guideline 416 Result: Animal testing did not show any effects on fertility. GLP: yes
	Test Type: Fertility Species: rat, male and female Application Route: inhalation (vapor) Dose: 0, 600, 1200 ppm

Frequency of Treatment: 7 days/week

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Effects on fetal devel- opment

Reproductive toxicity - Assessment

General Toxicity - Parent: NOAEC: 600 ppm Symptoms: Decreased sperm count Result: Animal testing did not show any effects on fertility.

: Species: rat

Application Route: inhalation (vapor) Dose: 0, 250, 750, 1500, 3000 ppm Duration of Single Treatment: 10 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 750 ppm Developmental Toxicity: NOAEC: 750 ppm Symptoms: Maternal toxicity, Reduced body weight, Skeletal malformations. GLP: yes

: Some evidence of adverse effects on sexual function and fertility, and/or on development,

based on animal experiments.

123-86-4:	
Effects on fertility	: Species: rat, male and female Application Route: Inhalation Dose: 0, 750, 1500, 2000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 750 ppm General Toxicity F1: NOAEC: 750 ppm Fertility: NOAEC: 2,000 ppm Early Embryonic Development: NOAEC: 750 ppm Symptoms: Effect on reproduction capacity. Method: OECD Test Guideline 416 GLP: yes

Effects on fetal devel- opment

Reproductive toxicity - Assessment : Species: rat, male and female Application Route: vapor Dose: 500, 1500, 3000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 5 days/week GLP: yes

: Fertility classification not possible from current data.

Embryo toxicity classification not possible from current data.

STOT - single exposure

Product:No data available Components: 67-64-1:

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Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsi- ness or dizziness., The substance or mixture is classified as specific target organ toxicant, sin- gle exposure, cate- gory 3 with narcotic effects.	

108-88-3:

200 00 0.			
Exposure routes:	Target Organs:	Assessment:	Remarks:

Inhalation	Central nervous system	May cause drowsi- ness or dizziness., The substance or mixture is classified as specific target organ toxicant, sin- gle exposure, cate-	
		gory 3 with narcotic effects.	

123-86-4:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsi- ness or dizziness., The substance or mixture is classified as specific target organ toxicant, sin- gle exposure, cate- gory 3 with narcotic effects.	

STOT - repeated exposure

Product: No data available

Components:

67-64-1: No data available

108-88-3:

Exposure routes:	Target Organs:	Assessment:	Remarks:
Inhalation	Auditory system,	May cause damage	

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Eyes	to organs through prolonged or re- peated exposure., The substance or mixture is classified as specific target organ toxicant	
	target organ toxicant,	
	re- peated exposure,	
	category 2.	

123-86-4: No data available

Repeated dose toxicity

Components:

67-64-1: Species: mouse, male NOAEL: 20000 Application Route: Oral Exposure time: 13 wk Number of exposures: daily Dose: 1250, 2500, 5000, 10000, 20000 Method: OECD Test Guideline 408 GLP: No data available

Species: mouse, female NOAEL: 20000 LOAEL: 50000 Application Route: Oral Exposure time: 13 wk Number of exposures: daily Dose: 2500, 5000, 10000, 20000, 5000 Method: OECD Test Guideline 408 GLP: No data available Repeated dose toxicity - Assessment

108-88-3:

: Causes mild skin irritation, Causes serious eye irrita- tion. Species: rat, male and female NOAEL: 300 Application Route: inhalation (vapor) Exposure time: 6, 12, or 18 mths Number of exposures: 6 h/d, 5 d/wk Dose: 0, 30, 100, 300 ppm Method: OECD Test Guideline 453

Repeated dose toxicity - : Causes skin irritation.

SDS No: 4039-1 Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013) Date of last Revision: 12/07/2016

Assessment

123-86-4:

Species: rat, male and female NOAEL: 500 Application Route: inhalation (vapor) Exposure time: 13 wk Number of exposures: 6 h/d, 5d/wk Dose: 500, 1500, 3000 ppm GLP: yes Symptoms: oral or nasal discharge

Aspiration toxicity

Product:

No aspiration toxicity classification

Components:

108-88-3: Aspiration Toxicity - Category 1

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting, Concentrations substantially above the TLV value may cause narcotic effects, Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

67-64-1:

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): 6,100 mg/l Exposure time: 48 h

Toxicity to daphnia and other aquatic inverte- brates	:	EC50 (Daphnia magna (Water flea)): 7,630 mg/l Exposure time: 48 h Test substance: Acetone
Toxicity to algae	:	Remarks: No data available

108-88-3:

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Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 5.5 mg/l Exposure time: 96 h Test Type: flow-through test
	Test Type: flow-through test

Toxicity to daphnia and other aquatic inverte- brates	:	EC50 (Ceriodaphnia dubia): 3.78 mg/l Exposure time: 48 h Test Type: Renewal
Toxicity to algae	:	EC50 (Chlorella vulgaris (Fresh water algae)): 134 mg/l Exposure time: 3 h Test Type: static test

Toxicity to bacteria

: IC50 (Bacteria): 84 mg/l Exposure time: 24 h Test Type: Static

Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic to aquatic life.	
Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.	

123-86-4:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 18 mg/l Exposure time: 96 h Test Type: flow-through test Method: OECD Test Guideline 203 GLP: no

Toxicity to daphnia and other aquatic inverte- brates	:	EC50 (Daphnia magna (Water flea)): 44 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l End point: Growth rate Exposure time: 72 h

Toxicity to daphnia and other aquatic inverte- brates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 23 mg/l Exposure time: 21 d

Toxicity to bacteria

: EC 50 (Tetrahymena pyriformis (Ciliate)): 356 mg/l Exposure time: 40 h Test Type: Static

Ecotoxicology Assessment Acute aquatic toxicity : Harmful to aquatic life.

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Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

<u>Components:</u>	
67-64-1:	
Biodegradability	: Remarks: Readily biodegradable
108-88-3:	
Biodegradability	: Inoculum: Sewage Biodegradation: 100 % Remarks: Readily biodegradable
123-86-4:	
Biodegradability	: Biodegradation: 83 % Exposure time: 28 d Method: OECD Test Guideline 301D
Chemical Oxygen De- mai	nd (COD)

: 0.00169 mg/g

BOD/COD : BOD/COD: 72 % Theoritical Oxygen De- mand (ThOD)

: 0.0022 mg/g

Bioaccumulative potential <u>Components:</u> 67-64-1: Partition coefficient, p. octano

Partition coefficient: n- octanol/water : log Pow: -0.24

108-88-3:

Partition coefficient: n- octanol/water

: log Pow: 2.73

123-86-4:

Bioaccumulation : Species: Fish Bioconcentration factor (BCF): 15 Partition coefficient: n- octanol/water

: log Pow: 1.82

Mobility in soil

No data available

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Other adverse effects

No data available

Product:

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Sub-
Remarks	stances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S.
	Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological in- formation

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	: Dispose of in accordance with all
	applicable local, state and federal
	regulations.

Contaminated packaging	Di nc Di	mpty remaining contents. ispose of as unused product. Do ot re-use empty containers. o not burn, or use a cutting orch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

IATA (International Air Transport Association): UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:-20 °C(-4 °F)

IMDG (International Maritime Dangerous Goods): UN1263, PAINT RELATED MATERIAL, 3, II

DOT (Department of Transportation): UN1263, PAINT RELATED MATERIAL, 3, II

SECTION 15. REGULATORY INFORMATION

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OSHA Hazards	: Flammable liquid, Moderate eye irritant, Teratogen, Reproductive hazard, Specific target organ toxicity - single exposure, Specific target organ toxicity - repeated exposure
WHMIS Classification	: B2: Flammable liquid D2A: Very Toxic Material Causing Other Toxic Effects D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity This material does not contain any components with a section 304 EHS RQ. SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard Chronic Health Hazard

SARA 302	: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	: The following components are subject to reporting levels established by SARA Title III, Section 313:

108-88-3 Toluene

1.7338 %

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

108-88-3	Toluene	1.7338 %		
100-41-4	Ethylbenzene	0.0346 %		
71-43-2	Benzene	0.0065 %		
67-56-1	Methanol	0.0059 %		
98-82-8	Cumene	0.0866 PPM		
This product does not contain any chemicals listed under the U.S. Clean Air Act				

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

67-64-1	Acetone	96.9318 %
108-88-3	Toluene	1.7338 %
123-86-4	n-Butyl acetate	1.3344 %

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100-41-4	Ethylbenzene	0.0346 %
71-43-2	Benzene	0.0065 %
67-56-1	Methanol	0.0059 %
98-82-8	Cumene	0.0866 PPM

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Sec-

tion 311,	Table 116.4A:	
108-88-3	Toluene	1.7338 %
123-86-4	n-Butyl acetate	1.3344 %
100-41-4	Ethylbenzene	0.0346 %
71-43-2	Benzene	0.0065 %
The follow 311, Table	ving Hazardous Chemicals are listed unde e 117.3:	er the U.S. CleanWater Act, Section
108-88-3	Toluene	1 7338 %

	T I ·	 	 C 11	•			1	 	 ~	 	
71-43-2			Benze	ene						0.0065	%
100-41-4			Ethyll	benze	ene					0.0346	%
123-86-4			n-But	yl ac	etate					1.3344 (%
108-88-3			Tolue	ne						1.7338 9	%

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

108-88-3 Toluene

1.7338 %

US State Regulations

Massachusetts Right To Know

Pennsylvania Right To Know

67-64-1	Acetone	90 - 100 %
108-88-3	Toluene	1 - 5 %
123-86-4	n-Butyl acetate	1 - 5 %
100-41-4	Ethylbenzene	0 - 0.1 %

New Jersey Right To Know

California

67-64-1	Acetone	90 - 100 %
108-88-3	Toluene	1 - 5 %
123-86-4	n-Butyl acetate	1 - 5 %

Prop 65	WARNING! This product contains a chemical known to the State of California to cause cancer.
100-41-4	Ethylbenzene
71-43-2	Benzene
98-82-8	Cumene WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
108-88-3	Toluene

71-43-2	Benzene
67-56-1	Methanol

The components of this product are reported in the following inventories:

United States TSCA Inventory	:	y (positive listing) (On TSCA Invento- ry)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)

China. Inventory of Existing	:	y (positive listing) (On the
Chemical Substances in China		inventory, or in compliance with
(IECSC)		the inventory)

SECTION 16. OTHER INFORMATION **Further information**

NFPA:

Flammability

HMIS III:

Special hazard.

0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 =Extreme, * = Chronic

LEGAL DISCLAIMER:

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Prepared by: J.B.Chemical Regulatory Affairs

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Key or legend to abbreviations and acronyms used in the safety data sheet				
ACGIH	American Conference of Gov- ernment Industrial Hygienists	LD50	Lethal Dose 50%	
AICS	Australia, Inventory of Chem- ical Substances	LOAEL	Lowest Observed Adverse Effect Level	
DSL	Canada, Domestic Substanc- es List	NFPA	National Fire Protection Agency	
NDSL	Canada, Non-Domestic Sub- stances List	NIOSH	National Institute for Occupational Safety & Health	
CNS	Central Nervous System	NTP	National Toxicology Program	
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals	
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level	
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration	
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Admin- istration	
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit	

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EINECS	European Inventory of Exist- ing Chemical Substances	PICCS	Philipines Inventory of Commercial Chemical Substances
МАК	Germany Maximum Concen- tration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reau- thorization Act.
IARC	International Agency for Re- search on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemi- cal Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substanc- es	TSCA	Toxic Substance Control Act

KECI	Korea, Existing Chemical In- ventory	UVCB	Unknown or Variable Compositon, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials In- formation System
LC50		Lethal Concentration 50%	