Version 1.1

Revision Date: 07/7/2015

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: Fast Lacquer Thinner Product Code: FSS700 Manufacturer Address: IAMG 1505 North Hayden Rd. Suite 111 Scottsdale, AZ 85257

General Information: 480-451-4451 CH EMTREC: 800-424-9300

SECTION 2. H AZA RDS IDE NTI FICATIO N

G HS Classification	
Flammable liquids	Category 2
Acute toxicity (Oral)	Category 3
Acute toxicity (Inhalation)	Category 3
Acute toxicity (Dermal)	Category 3
Skin irritation	Category 2
Eye irritation	Category 2A
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ tox- icity - single exposure	Category 1 (Eyes, Central nervous system)

Version 1.1	Revision Date: 07/7/2015
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)
Aspiration hazard	Category 1
GHS Label element Hazard pictograms	
Signal word	Danger
Hazard statements	 H225 Highly flammable liquid and vapour. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H340 May cause genetic defects. H351 Suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child. H370 Causes damage to organs (Eyes, Central nervous system). H373 May cause damage to organs (Auditory system, Eyes) through prolonged or repeated exposure if inhaled.
Precautionary statements	 Prevention: 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/ vapours/ spray.

Version 1.1

P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area . P280 Wear protective gloves/ eye protection/ face protection.

P281 Use personal protective equipment as required. **Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair) : Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P311 IFINHALED: Remove victim to fresh air and keep at rest in a position comforta ble for breathing. Call a POISON CENTER or doctor/ physician. P305 + P351 + P338 IFIN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.

P331 Do NOT induce vomiting.

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

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Carcinogenicity:	
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ARC

Group 2B: Possibly carcinogenic to humans

Naphtha (pet), hydrotreated It

Version 1.1	Revision Date: 07/7/2015
	aliph.
ACG IH	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.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or antic- ipated carcinogen by NTP.

Emergency Overview

Appearance	liquid
Colour	clear, colourless
Hazard Summary	No information available.

SECTION 3. COM POSITIO N /IN FORM ATIO N ON ING RE DI E NTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
67-56-1	Methanol	30 - 50
108-88-3	Toluene	30 - 50
67-64-1	Acetone	10 - 20
64742-49-0	Naphtha (pet), hydrotreated It	0 - 20
64742-89-8	Solvent naphtha (pet), It aliph.	0 - 20
68410-97-9	Distillates, pet, It dist hydrotreat process,	0 - 20
	low-boil	
142-82-5	Heptane	0.1 - 1

Special Notes:

Functionally equivalent petroleum streams may be found in this preparation at varying concentrations.

SECTION 4. FI RST AI D M EASU RES

General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in atten-

Version 1.1	Revision Date: 07/7/2015
	dance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.
If inhaled	Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.
case of skin contact	If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
I case of eye contact	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious per- son. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION S. FI REFIG HTING M EASU RES

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	No hazardous combustion products a re known
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-

Version 1.1

	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-	Wear self-contained breathing apparatus for firefight-
ment for firefighters	ing if necessary.

Revision Date: 07/7/2015

NFPA Flammable and Combustible Liquids Classification: Flammable Liquid Class 1B

SECTION 6. ACCI DENTAL 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. Bewa re of vapours accumulating to form explosive concentrations. Vapours 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

Advice on safe handling	Avoid formation of aerosol. Do not breathe vapours/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 dis- charges. Provide sufficient air exchange and/or exhaust in work rooms.
	Container may be opened only under exhaust ventila - tion hood.

Version 1.1	Revision Date: 07/7/2015
	Open drum carefully as content may be under pres- sure. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe sto- rage	No smoking. Keep container tightly closed in a dry and well- ventilated place. Containers which are opened must be ca refully re- sealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comp- ly with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

CAS-No.	Components	Value type	Control parame-	Basis
		(Form of	ters / Permissi-	
1		exposure)	ble concentra-	
			tion	
67-56-1	Methanol	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm	NIOSH REL
			260 mg/m3	
		ST	250 ppm	NIOSH REL
			325 mg/m3	
		TWA	200 ppm	OSHA Z-1
<u> </u>			260 mg/m3	
		STEL	250 ppm	OSHA PO
			325 mg/m3	
		TWA	200 ppm	OSHA PO
			260 mg/m3	
108-88-3	Toluene	TWA	20 ppm	ACGIH
		TWA	100 ppm	NIOSH REL
			375 mg/m3	
	\top	ST	150 ppm	NIOSH REL
			560 mg/m3	
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm	OSHA Z-2
		TWA	100 ppm	OSHA PO
			375 mg/m3	
		STEL	150 ppm	OSHA PO
			560 mg/m3	
67-64-1	Acetone	TWA	500 ppm	ACGIH

Components with workplace control parameters

Version 1.1

Revision Date: 07/7/2015

		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
64742-49-0	Naphtha (pet), hydro- treated It	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA PO
64742-89-8	Solvent naphtha (pet), It aliph.	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA PO
142-82-5	Heptane	TWA	85 ppm 350 mq/m3	NIOSH REL
		С	440 ppm 1,800 mg/m3	NIOSH REL
		TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA PO
		STEL	500 ppm 2,000 mg/m3	OSHA PO

Biological occupational exposure limits

Components	CAS-No.	Control parame - ters	Biological specimen	Sam- piing time	Permissi- ble con- centration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after expo- sure ceases)	15 mg/l	ACGI H BEi
Toluene	108-88- 3	Toluene	∎ blood	Prior to last shift of work- week	0.02 mg/l	ACGI H BEi
		Toluene	Urine	End of shift (As soon as	0.03 mg/l	ACGI H BEi

Version 1.1

Revision Date: 07/7/2015

				possible after expo- sure ceases)		
		o-Cresol	Urine	End of shift (As soon as possible after expo- sure ceases)	0.3 mg/g Creatinine	ACGI H BEi
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after expo- sure ceases)	50 mg/l	ACGI H BEi

Personal protective equipment

Respiratory protection	No personal respiratory protective equipment normally required. In the case of vapour formation use a respirator with an approved filter.
Hand protection Remarks	The suitability for a specific workplace should be dis- cussed with the producers of the protective gloves.
Eye protection	Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing 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	Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

Version 1.1

Revision Date: 07/7/2015

SECTION 9. PHYSICAL AN D CH EM ICAL PROPERTIES

Appearance	liquid
Colour	clear, colourless
Odour	No data available
Odour Threshold	No data available
рН	No data available
Freezing Point	No data available
Boiling Point (Boiling point/boiling range)	56 - 150 OC (133 - 302 O f)
Flash point	> = -20.00 OC (-4.00 O f)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Burning rate	No data available
Upper explosion limit	7 - 36.5 %(V)
Lower explosion limit	0.8 - 6 %(V)
Vapour pressure	231 mmHg @ 25 °C (77 °F) Calculated Vapor Pressure
Relative vapour density	No data available
Relative density	0.808 @ 20 OC (68 O f)
Density	0.808 g/cm3 @ 20 °C (68 °F)
Bulk density	No data available
Water solubility	No data available
Solubility in other sol- vents	No data available
Partition coefficient: n- octanol/water	No data available

Version 1.1

Revision Date: 07/7/2015

Auto-ignition temperature No data available

Thermal decomposition No data available

SECTIO N 10. STABI LITY AN D REACTIVITY

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
Conditions to avoid	Keep away from heat, flame, sparks and other ignition sources. Extremes of temperature and direct sunlight.
∎compatible materials	Acids alkalis aluminum Amines Ammonia halogens Lead Peroxides Reducing agents Strong bases Strong oxidizing agents Zinc metal salts

SECTIO N 11. TOXICOLOGICAL IN FORMATIO N

Acute toxicity

product;	Acute toxicity estimate : 249.97 mg/kg
Acute oral toxicity	Method: Calculation method
Acute inhalation toxicity	Acute toxicity estimate : 7.5 mg/l Exposure time: 4 h Test atmosphere: vapour

Version 1.1	Revision Date: 07/7/2015
	Method: Calculation method
Acute dermal toxicity	Acute toxicity estimate : 749.98 mg/kg Method: Calculation method
components;	
67-56-1: Acute oral toxicity	LD50 (rat) : 100 mg/kg Assessment: The component/mixture is toxic after single ingestion.
Acute inhalation toxicity	LCSO (rat) : 5 mg/l Assessment: The component/mixture is toxic after short term inhalation.
Acute dermal toxicity	LD50 (rabbit) : 300 mg/kg Assessment: The component/mixture is toxic after single contact with skin.
108-88-3:	
Acute oral toxicity	LD50 (rat, male) : > 5,580 mg/kg
Acute inhalation toxicity	LCSO (rat, male and female) : 28.1 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403
Acute dermal toxicity	LD50 (rabbit) : > 5,000 mg/kg
67-64-1:	
Acute oral toxicity	LD50 (rat) : 5,800 mg/kg
Acute inhalation toxicity	LCSO (rat) : 76.0 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 : > 7,426 mg/kg
64742-49-0:	
Acute oral toxicity	LD50 (rat, male and female) : > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	Remarks: No data available
Acute dermal toxicity	LD50 (rabbit, male and female) : > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
64742-89-8:	
A cuto oral taxicity	1 D50 (rat male and female) $\cdot > 5 000 \text{ mg/kg}$

Acute oral toxicity

Version 1.1	Revision Date: 07/7/2015
	Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	Remarks: No data available
Acute derma I toxicity	LD50 (rabbit, male and female) : > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
68410-97-9:	
Acute oral toxicity	LD50 (rat) : > 5,000 mg/kg
Acute inhalation toxicity	Remarks: No data available
Acute derma I toxicity	LD50 (rabbit) : > 2,000 mg/kg
142-82-5: Acute oral toxicity	LD50 (rat, male and female) : 5,000 mg/kg Method: OECD Test Guideline 401 Symptoms: Salivation GLP: yes Remarks: Information given is based on data obtained from similar substances.
Acute inhalation toxicity	LC50 (rat, male and female) : 73.5 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403
Acute derma I toxicity	LD50 (rabbit, male and female) : > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes Remarks: Information given is based on data obtained from similar substances.

Skin corrosion/irritation

Product;

Remarks: ritating to skin.

components;

67-56-1: Species: rabbit Result: No skin irritation

108-88-3: Species: rabbit Exposure time: 4 h Result: Irritating to skin.

Version 1.1

Revision Date: 07/7/2015

67-64-1:

Species: rabbit Exposure time: 24 h Method: I vivo Result: Mild skin irritation

64742-49-0:

Species: rabbit Result: **I**ritating to skin.

64742-89-8:

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

68410-97-9: Species: rabbit Result: Iritating to skin.

142-82-5:

Species: rabbit Exposure time: 24 h Method: OECD Test Guideline 404 Result: Irritating to skin. GLP: yes Remarks: Based on a similar product formulation.

Serious eye damage/ eye irritation

Product: Remarks: Iritating to eyes.

components;

67-56-1: Species: rabbit Result: No eye irritation

108-88-3:

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

67-64-1:

Species: rabbit Result: Irritating to eyes. Exposure time: 24 h

64742-49-0: Species: rabbit

Version 1.1

Revision Date: 07/7/2015

Result: ritating to eyes.

64742-89-8:

Species: rabbit Result: **I**ritating to eyes.

68410-97-9: Species: rabbit Result: **I**ritating to eyes.

142-82-5:

Species: rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405 GLP: yes Remarks: Ilformation given is based on data obtained from similar substances.

Respiratory or skin sensitisation

components;

67-56-1: Test Type: Maximisation Test (GPMT) Species: guinea pig Method: OECD Test Guideline 406 Result: Did not cause sensitisation on laboratory animals.

108-88-3:

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

67-64-1:

Test Type: Maximization test Species: guinea pig Result: Did not cause sensitisation on laboratory animals.

64742-49-0:

Test Type: Buehler Test Species: guinea pig Result: Did not cause sensitisation on laboratory animals.

64742-89-8:

Test Type: Buehler Test Species: guinea pig Result: Did not cause sensitisation on laboratory animals.

142-82-5:

Test Type: Maximization test Species: guinea pig

Version 1.1

Revision Date: 07/7/2015

Method: OECD Test Guideline 406 Result: Does not cause skin sensitisation. Remarks: Based on a similar product formulation.

Germ cell mutagenicity

<u>Components;</u> 67-56-1:	
Genotoxicity in vitro	Test Type: DNA damage and/or repair Metabolic activation: with and without metabolic acti- vation Result: Ambiguous
Genotoxicity in vivo	Test Type: In vivo micronucleus test Test species: mouse (male and female) Cell type: Bonemarrow Application Route: Intraperitoneal Exposure time: Single Dose: 0, 1920, 3200, 4480 mg/kg Result: negative
Germ cell mutagenicity- Assessment	Tests on bacterial or mammalian cell cultures did not show mutagenic <i>effects</i> .
108-88-3: Genotoxicity in vitro	Test Type: Mammalian cell gene mutation assay Test species: Mouse lymphoma cells Metabolic activation: with and without metabolic acti- vation Method: OECD Test Guideline 476 Result: negative
Genotoxicity in vivo	Test Type: Dominant lethal assay Test species: mouse (male) Application Route: inhalation (vapour) 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 <i>effects</i> .
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 Result: negative

Version 1.1	Revision Date: 07/7/2015
	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.
64742-49-0: Germ cell mutagenicity- Assessment	Mutagenicity classification not possible from current data
64742-89-8: Germ cell mutagenicity- Assessment	Mutagenicity classification not possible from current data
68410-97-9: Genotoxicity in vitro	Test Type: Mammalian cell gene mutation assay Test species: mouse lymphoma cells Result: positive
Genotoxicity in vivo	Test Type: In vivo micronucleus test Test species: mouse Method: OECD Test Guideline 474 Result: positive
Germ cell mutagenicity- Assessment	Positive result(s) from in vivo heritable germ cell mu- tagenicity tests in mammals
142-82-5: Genotoxicity in vitro	Test Type: Chromosome aberration test in vitro Test species: Rat liver Metabolic activation : Without metabolic activation Method: OECD Test Guideline 473 Result: negative

Version 1.1

Revision Date: 07/7/2015

Test Type: Ames test Metabolic activation : with and without metabolic activation Method: OECD Test Guideline 471 Result: negative

Germ cell mutagenicity-Assessment ments.

Did not show mutagenic effects in animal experi-

Carcinogenicity

components;

67-56-1: Carcinogenicity - Assessment

Suspected human carcinogens

108-88-3:

Species : rat, (male and female) Application Route: inhalation (vapour) 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

sessment

Carcinogenicity - As- Not classifiable as a human carcinogen.

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-	Carcinogenicity classification not possible from current
sessment	data.

64742-49-0:

Carcinogenicity - Assessment

Not classifiable as a human carcinogen.

Version 1.1

Revision Date: 07/7/2015

64742-89-8:

sessment

Carcinogenicity - As- Not classifiable as a human carcinogen.

68410-97-9: Species : mouse

NOAEL: 50 mg/kg bw/day

Method: OECD Test Guideline 451 Result: evidence of carcinogenic activity

sessment

Carcinogenicity - As- : Possible human carcinogen

142-82-5:

Remarks: This information is not available.

Carcinogenicity - Assessment

Carcinogenicity classification not possible from current data.

Reproductive toxicity

Comoonents;

67-56-1:	
Effects on fertility	Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 0.013, 0.13, 1.3 mg/L Duration of Single Treatment: 20 h General Toxicity - Parent: NOAEC: 1.3 mg/l General Toxicity FI: NOAEC: 0.13 mg/l Fertility: NOAEC: 1.3 mg/l Symptoms: Effects on postnatal development. Result: Animal testing did not show any effects on fertility.
Effects on foetal devel- opment	Species: rat Application Route: inhalation (vapour) Dose: 0, 6.65, 13.3, 26.6 mg/L Duration of Single Treatment: 20 d Frequency of Treatment: 7 hr/day General Toxicity Maternal: NOAEC: 13.3 mg/L Teratogenicity : NOAEC: 6.65 mg/L Result: Teratogenic effects.
Reproductive toxicity - Assessment	Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Version 1.1

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 FI: 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 (vapour) Dose: 0, 600, 1200 ppm Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: 600 ppm Symptoms: Decreased sperm count Result: Animal testing did not show any effects on fertility.
Effects on foetal devel- opment	Species: rat Application Route: inhalation (vapour) 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
Reproductive toxicity - Assessment	Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
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 foetal devel- opment	Species: rat Application Route: Inhalation

Revision Date: 07/7/2015

Revision Date: 07/7/2015 Version 1.1 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-foetal toxicity .: NOAEC: 2,200 ppm Method: OECD Test Guideline 414 Result: No teratogenic potential. GLP: No data available Reproductive toxicity -No evidence of adverse effects on sexual function and fertility, and on development, based on animal expe-Assessment riments. 64742-49-0: Fertility classification not possible from current data. Reproductive toxicity -Assessment Embryotoxicity classification not possible from current data. 64742-89-8: Reproductive toxicity -Fertility classification not possible from current data. Assessment Embryotoxicity classification not possible from current data. 68410-97-9: Fertility classification not possible from current data. Reproductive toxicity -Assessment Embryotoxicity classification not possible from current data. 142-82-5: Effects on fertility Test Type: Two-generation study Species: rat, male and female Application Route: vapour Dose: 0, 900, 3000, 9000 ppm Frequency of Treatment: 5 days/week General Toxicity - Parent: NOAEC: 3,000 ppm General Toxicity FI: NOAEC: 3,000 ppm Fertility: NOAEC: 9,000 ppm Symptoms: Reduced maternal body weight gain. Reduced offspring weight gain. Method: OECD Test Guideline 416 Result: No reproductive effects. GLP: yes Remarks: Information given is based on data obtained from similar substances. Effects on foetal devel-Species: mouse Application Route: inhalation (vapour) opment Dose: 0, 900, 3000, 9000 ppm Duration of Single Treatment: 10 d

Frequency of Treatment: 6 hr/day

Version 1.1

Revision Date: 07/7/2015

General Toxicity Maternal: NOAEC: 900 ppm Developmental Toxicity: NOAEC: 3,000 ppm Symptoms: Skeletal malformations. Method: OECD Test Guideline 414 GLP: yes Remarks: Information given is based on data obtained from similar substances.

Reproductive toxicity -
AssessmentAnimal testing did not show any effects on fertility.
Embryotoxicity classification not possible from current
data.

STOT - single exposure

product:No data available

components; 67-56-1:

Assessment: Re	emarks:
Causes damage to	
organs., The sub-	
stance or mixture is	
classified as specific	
target organ tax-	
icant, single expo-	
sure, category 1.	
	organs., The sub- stance or mixture is classified as specific target organ tax- icant, single expo-

108-88-3 :

Exposure routes:	Target Organs:	Assessment:	Remarks:
■halation	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.	

67-64-1:

Exposure routes:	Target Organs:	Assessment:	Remarks:
●halation	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	

Version 1.1

Revision Date: 07/7/2015

l effects.

64742-49-0 :

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

64742-89-8:No data available

68410-97-9 :

Exposure routes:	Target Organs:	Assessment:	Remarks:
■halation	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.	

142-82-5 :

Exposure routes:	Target Organs:	Assessment:	Remarks:
■halation	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

Comnonents;

67-56-1:No data available

Version 1.1

Revision Date: 07/7/2015

108-88-3:

Exposure routes:	Target Organs:	Assessment:	Remarks:
■halation	Auditory system, Eyes	May cause damage to organs through prolonged or re- peated exposure., The substance or mixture is classified as specific target organ toxicant, re- peated exposure, category 2.	

67-64-1: No data available

64742-49-0: No data available

64742-89-8:No data available

68410-97-9:No data available

142-82-5:No data available

Repeated dose toxicity

Comoonents;

67-56-1:

Species: mouse, male and female NOAEL: 1.3 mg/l Application Route: Inhalation Exposure time: 12 mths Number of exposures: Continuous Dose: 0, 0.013, 0.13, 1.3 mg/L

108-88-3:

Species: rat, male and female NOAEL: 300 Application Route: inhalation (vapour) Exposure time: 6, 12, or 18 mths Number of exposures: 6 h/d, 5 d/wk

Version 1.1

Revision Date: 07/7/2015

Dose: 0, 30, 100, 300 ppm Method: OECD Test Guideline 453

Repeated dose toxicity - : Causes skin irritation. Assessment

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 -
AssessmentCauses mild skin irritation., Causes serious eye irrita-
tion.

64742-89-8:

Species: rat, male and female **NOAEL: 1402** Application Route: inhalation (vapour) Test atmosphere: vapour Exposure time: 13 weeks Number of exposures: 6 hours/day, 5 days/week Dose: 322, 1402, 9869 mg/m3 GLP: yes Target Organs: Kidney Symptoms: Nasal and ocular discharge

142-82-5:

Species: rat, male NOAEL: 12470 mg/m3 Application Route: inhalation (vapour) Exposure time: 16 wks Number of exposures: 12 h/d, 7 d/wk Dose: 0, 12470 mg/3

Repeated dose toxicity - : Causes skin irritation.

Version 1.1

Revision Date: 07/7/2015

Assessment

Aspiration toxicity

Como<u>onents;</u>

108-88-3: Aspiration Toxicity - Category 1

64742-49-0:

May be fatal if swallowed and enters airways.

64742-89-8:

May be fatal if swallowed and enters airways.

68410-97-9:

May be fatal if swallowed and enters airways.

142-82-5:

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

Comoonents; 67-56-1:

Toxicity to fish	LCSO (Lepomis macrochirus (Bluegill sunfish)) : 15,400 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic inverte-brates	ECSO (Daphnia magna (Water flea)) : > 10,000 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	ECSO (Scenedesmus capricornutum (fresh water al- gae)) : 22,000 mg/l End point: Growth rate Exposure time: 96 h

Version 1.1	Revision Date: 07/7/2015
	Test Type: static test Method: OECD Test Guideline 201
Toxicity to bacteria	IC50 (activated sludge) : > 1,000 mg/l End point: Growth rate Exposure time: 3 h Test Type: Static Method: OECD Test Guideline 209
108-88-3:	
Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) : 5.5 mg/l Exposure time: 96 h 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.
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
64742-49-0:	
Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) : 10 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic inverte-	EC50 (Daphnia magna (Water flea)) : 4.5 mg/l Exposure time: 48 h

brates	
Toxicity to algae	EC50 (Pseudokirchneriella subcapitata (green alga 3.71 mg/l Exposure time: 96 h
Ecotoxicology Assessment Acute aquatic toxicity	Toxic to aquatic life.
Chronic aquatic toxicity	Toxic to aquatic life with long lasting effects.
64742-89-8:	
Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)): 8.2 mg/l Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic inverte- brates	EC50 (Daphnia magna (Water flea)) : 4.5 mg/l Exposure time: 48 h Test Type:Immobilization Analytical monitoring: yes
Toxicity to algae	EC50 (Pseudokirchneriella subcapitata (green alga 3.7 mg/l Exposure time: 96 h Test Type: static test
Ecotoxicology Assessment Acute aquatic toxicity	Toxic to aquatic life.
Chronic aquatic toxicity	Toxic to aquatic life with long lasting effects.
68410-97-9:	
Toxicity to fish	LC50 (Pimephales promelas (fathead minnow)):8. mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic inverte-brates	EC50 (Daphnia magna (Water flea)) : 4.5 mg/l Exposure time: 48 h
Toxicity to algae	EC50 (Pseudokirchneriella subcapitata (green alga 3.1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Ecotoxicology Assessment Acute aquatic toxicity	Toxic to aquatic life.

64742-49-0:

Version 1.1

Revision Date: 07/7/2015

142-82-5:	
Toxicity to fish	LC50 (Carassius auratus (goldfish)): 4 mg/l Exposure time: 24 h Remarks: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxicity to daphnia and other aquatic inverte- brates	EC50 (Daphnia magna (Water flea)) : 1.5 mg/l Exposure time: 48 h Test Type: static test Remarks: Very toxic to aquatic organisms.
Toxicity to algae	Remarks: No data available
Ecotoxicology Assessment	
Acute aquatic toxicity	Very toxic to aquatic life.
Chronic aquatic toxicity	Very toxic to aquatic life with long lasting effects.
Persistence and degradab	bility
<u>components;</u> 67-56-1:	
Biodegradability	aerobic Result: Readily biodegradable. Biodegradation: 72 % Remarks: Readily biodegradable
Biochemical Oxygen De- mand (BOD)	600 - 1,120 mg/g
Chemical Oxygen De- mand (COD)	1,420 mg/g
BOD/COD	BOD: 600 - 1120COD: 1420
Stability in water	Hydrolysis: 91 % at19 °((72 h) Remarks: Hydrolyses on contact with water. Hydrolyses readily.
108-88-3:	
Biodegradability	Inoculum: Sewage Biodegradation: 100 % Remarks: Readily biodegradable
67-64-1:	
Biodegradability	Remarks: Readily biodegradable

rsion 1.1	Revision Date: 07/7/2015
Biodegradability	aerobic Inoculum: activated sludge Concentration: 20 mg/l Biodegradation: 74.30 % Exposure time: 56 d GLP: yes Remarks: Therently biodegradable.
64742-89-8:	
Biodegradability	Concentration: 49.2 mg/l Result: Readily biodegradable. Biodegradation: 77 % Testing period: 2 d Exposure time: 28 d GLP: yes
142-82-5:	
Biodegradability	Primary biodegradation Inoculum: activated sludge Concentration: 100 mg/l Biodegradation: 100 % Testing period: 2 d Exposure time: 25 d Remarks: Readily biodegradable
Bioaccumulative potentia	I
<u>components;</u>	
67-56-1: Bioaccumulation	Species: Cyprinus carpio (Carp) Bioconcentration factor (BCF) : 1.0 Exposure time: 72 d Temperature: 20 °C Concentration: 5 mg/I Remarks: This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
Partition coefficient: n- octanol/water	log Pow : -0.77
108-88-3: Partition coefficient: n- octanol/water	log Pow : 2.73
67-64-1: Partition coefficient: n- octanol/water	log Pow : -0.24
64742-49-0:	

Version 1.1	Revision Date: 07/7/2015
Partition coefficient: n- octanol/water	Remarks: No data available
64742-89-8: Partition coefficient: n- octanol/water	log Pow: 2.13 - 4.85 (25 °C)
Mobility in soil No data available	
Other adverse effects No data available	
Product;	
Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class ISub- stances
Remarks	This product neither contains, nor was manufactured with a Class Ior Class IIODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological in- formation	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Wasta from reaiduas	

Waste from residues	Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduc- tion, contact NEXEO's Environmental Services Group at 800-637-7922.
Contaminated packaging	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

IATA (International Air Transport Association): UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:-20.00 °((-4.00 °F)

Version 1.1

Revision Date: 07/7/2015

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

OSHA Hazards	Flammable liquid, Carcinogen, Toxic by ingestion, Toxic by skin absorption, Moderate skin irritant, Moderate eye irritant, Teratogen, Reproductive hazard, Mutagen
WHMIS Classification	B2: Flammable liquid D1B: Toxic Material Causing Immediate and Serious Toxic Effects 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

Components	CAS-No.	Component RO (lbs)	Calculated product RO (lbs)
Toluene	108-88-3	1000	2856

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312	Fire Hazard
Hazards	Chronic Health Hazard
	Acute Health Hazard

Clean Air Act

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

67-56-1	Methanol	40.0009 %
108-88-3	Toluene	35.01 %
71-43-2	Benzene	0.0457 %
100-41-4	Ethylbenzene	0.0449 %
110-54-3	Hexane	0.002 %
91-20-3	Naphthalene	0.0002 %
98-82-8	Cumene	0.0001 %

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 111SOCMI Intermediate or Final VOC's (40 CFR 60.489) :

Version 1.1

Revision Date: 07/7/2015

			_		
	67-56-1	Meth		40.0009 %	
	108-88-3	Tolue		35.01 %	
	67-64-1	Aceto		15 %	
	110-82-7	-	bhexane	0.25 % 0.0457 %	
	71-43-2 100-41-4	Benz			
	1330-20-7	-	lbenzene d xylenes	0.0449 % 0.013 %	
	98-82-8	Cum	-	0.0001 %	
		Cum		0.0001 /0	
Clean Wa	ater Act				
	ing Hazardous Fable 116.4A:	Sub	stances are listed under the U.S.	CleanWat	er Act, Sec-
	108-88-3	Tolue	ene	35.01 %	
	110-82-7		phexane	0.25 %	
	71-43-2			0.0457 %	
	100-41-4	Ethy	lbenzene	0.0449 %	
	1330-20-7	Mixe	d xylenes	0.013 %	
1	91-20-3	Napł	nthalene	0.0002 %	
The followi 311, Table		Chen	nicals are listed under the U.S. C	leanWater	Act, Section
	108-88-3	Tolue	ene	35.01 %	
	110-82-7		phexane	0.25 %	
	71-43-2	Benz		0.0457 %	
	100-41-4	Ethy		0.0449 %	
	1330-20-7	-	d xylenes	0.013 %	
	91-20-3	Napł	hthalene 0.0002 %		
This produ Act Section		follow	ving toxic pollutants listed under	the U.S. Cl	ean Water
	108-88-3	Tolu	ene	35.01 %	
		1 Olu		00.01 /0	
	Regulations				
Massach	usetts Right 1	Γ <mark>ο Κ</mark> η	IOW		
	67-56-1		Methanol		30 - 50 %
	108-88-3	5	Toluene		30 - 50 %
	67-64-1		Acetone		10 - 20 %
	71-43-2		Benzene		0 - 0.1 %
Pennsvlv	ania Right To	Kno			0 011 /0
,	67-56-1		Methanol		30 - 50 %
	108-88-3				
)	Toluene		30 - 50 %
	67-64-1		Acetone		10 - 20 %
	64742-49-0				0 - 20 %
64742-89-8					0-20 %
68410-97-9		-9	Distillates, pet, It dist hydrotrea process, low-boil	at	0 - 20 %
110-82-7			Cyclohexane		0.1 - 1%
71-43-2			Benzene		0 - 0.1 %
	100-41-4		Ethylbenzene		0 - 0.1 %
	1330-20-		Mixed xylenes		0 - 0.1 %
	1330-20-	1	WINED AVIENES		0 = 0.1 / 0

Version 1.1

Revision Date: 07/7/2015

New Jersey Right To Know

67-5	6-1	Methanol	30 - 50 %
108-	88-3	Toluene	30 - 50 %
67-6	4-1	Acetone	10 - 20 %
6474	12-49-0	Naphtha (pet), hydrotreated It	0-20 %
6474	2-89-8	Solvent naphtha (pet), It aliph.	0-20 %
6841	0-97-9	Distillates, pet, It dist hydrotreat process, low-boil	0 - 20 %
California Prop 6	5	WARNING! This product contains a chemic the State of California to cause cancer.	cal known to
71-4	3-2	Benzene	
100-	41-4	Ethylbenzene	
91-2	0-3	Naphthalene	
98-8	2-8	Cumene	
		WARNING: This product contains a chemic the State of California to cause birth defects reproductive harm.	
67-5	56-1	Methanol	
	88-3	Toluene	
71-4	3-2	Benzene	

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

· · · · · · · · · · · · · · · · · · ·	
Switzerland. New notified substances and declared preparations	y (positive listing) (The formulation contains substances listed on the Swiss ventory)
United States TSCA Inventory	y (positive listing) (On TSCA Inven- tory)
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	n (Negative listing) (Not in compliance with the inventory)
Japan. ENCS - Existing and New Chemical	n (Neqative listing)

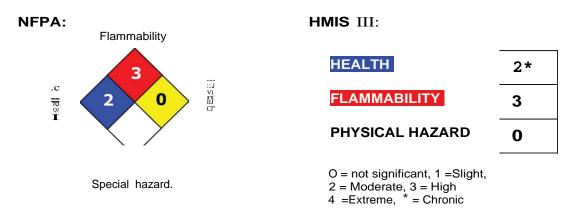
Version 1.1

Revision Date: 07/7/2015

Substances Inventory	(Not in compliance with the inventory)
Japan. ISHL - Inventory of Chemical Substances (METI}	n (Negative listing) (Not 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 Chemical Substances in China (IECSC)	y (positive listing) (On the inventory, or in compliance with the inventory)

SECTION 16. OTHER INFORMATION





The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to

Version 1.1

Revision Date: 07/7/2015

confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Legecy MSDS:

000000148128

Material number:

707948, 707692

	e end to abbreviations and a			
ACGIH	American Conference of Gov-	LDSO	Lethal Dose 50%	
	ernment Industrial Hygienists			
AICS	Australia, Inventory of Chem-	LOA EL	Lowest Observed Adverse Effect	
	ical Substances		Level	
DSL	Canada, Domestic Sub-	N FPA	National Fire Protection Agency	
	stances List			
NDSL	Canada, Non-Domestic Sub-	NIOSH	National Institute for Occupational	
	stances List		Safety & Health	
CNS	Central Nervous System	NTP	National Toxicology Program	
CAS	Chemical Abstract Service	NZloC	New Zealand ventory of Chemicals	
ECSO	Effective Concentration	NOAEL	No Observable Adverse Effect Level	
ECSO	Effective Concentration 50%	NOEC	No Observed Effect Concentration	
EG EST	EOSCA Generic Exposure	OSHA	Occupational Safety & Health Admin-	
	Scenario Tool		istration	
EOSCA	European Oilfield Specialty	PEL	Permissible Exposure Limit	
	Chemicals Association			
EINECS	European Inventory of Exist-	PICCS	Philipines Inventory of Commercial	
	ing Chemical Substances		Chemical Substances	
MAK	Germany Maximum Concen-	PRNT	Presumed Not Toxic	
	tration Values			
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act	
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit	
ICSO	hibition Concentration 50%	SARA	Superfund Amendments and Reau-	
			thorization Act.	
IARC	International Agency for Re-	TLV	Threshold Limit Value	
	search on Cancer			
IECSC	Inventory of Existing Chemi-	TWA	Time Weighted Average	
	cal Substances in China			
ENCS	Japan, Inventory of Existing	TSCA	Toxic Substance Control Act	
	and New Chemical Sub-stances			
KECI	Korea, Existing Chemical In-	UVCB	Unknown or Variable Compositon,	
	ventory		Complex Reaction Products, and	
			Biological Materials	
<=	Less Than or Equal To	WHMIS	Workplace Hazardous MaterialsIn-	
			formation System	
LCSO		Lethal Cor	Lethal Concentration 50%	