

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SW1 LACQUER THINNER
Product Use Description : THINNER

Manufacturer or supplier's details

Company : Nexeo Solutions LLC
Address : 3 Waterway Square Place Suite 1000
Woodlands, Tx. 77380
United States of America

Emergency telephone number:

Health North America: 1-855-NEXEO4U (1-855-639-3648)

Health International: 1-855-NEXEO4U (1-855-639-3648)

Transport North America: CHEMTREC 800.424.9300

Additional Information: : Responsible Party: Product Safety Group
E-Mail: msds@nexeosolutions.com
SDS Requests: 1-855-429-2661
SDS Requests Fax: 1-281-500-2370
Website: www.nexeosolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Skin irritation : Category 2

Eye irritation : Category 2A

Germ cell mutagenicity : Category 1B

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Specific target organ toxicity - repeated exposure : Category 2 (Liver, Kidney, Central nervous system, Auditory system)

Specific target organ toxicity - repeated exposure (Inhalation) : Category 2 (Auditory system, Eyes)

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Aspiration hazard : Category 1

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
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.
H373 May cause damage to organs (Liver, Kidney, Central nervous system, Auditory system) through prolonged or repeated exposure.
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.
P264 Wash skin thoroughly after handling.
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.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

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/ physician if 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.
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 + P378 In 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:

IARC

Group 2B: Possibly carcinogenic to humans

64742-49-0 Naphtha (petroleum), hydrotreated light

64742-89-8 Solvent naphtha (petroleum), light aliph.

100-41-4 Ethylbenzene

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.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Emergency Overview

Physical state	liquid
Colour	white
Hazard Summary	No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
108-88-3	Toluene	50 - 70
67-64-1	Acetone	10 - 20
64742-49-0	Naphtha (petroleum), hydrotreated light	10 - 20
64742-89-8	Solvent naphtha (petroleum), light aliph.	10 - 20
68410-97-9	Distillates (petroleum), light distillate hydrotreating process, low-boiling	10 - 20
67-63-0	Isopropyl alcohol	5 - 10
1330-20-7	Mixed xylenes	1 - 5
100-41-4	Ethylbenzene	1 - 5
78-93-3	Methyl ethyl ketone	0.1 - 1
142-82-5	Heptane	0.1 - 1

Special Notes:

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

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

	If unconscious place in recovery position and seek medical advice.
In case of skin contact	: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In 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	: Clean mouth with water and drink afterwards plenty of water. Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

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	: No hazardous combustion products are known
Specific extinguishing methods	: Use a water spray to cool fully closed containers.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Special protective equipment 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 vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	: 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 container for disposal according to local / national regulations (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 discharges. Provide sufficient air exchange and/or exhaust in work rooms. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
-------------------------	---

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Conditions for safe storage : 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 comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
108-88-3	Toluene	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m ³	NIOSH REL
		ST	150 ppm 560 mg/m ³	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/m ³	OSHA P0
		STEL	150 ppm 560 mg/m ³	OSHA P0
67-64-1	Acetone	TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		TWA	250 ppm 590 mg/m ³	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m ³	OSHA Z-1
		TWA	750 ppm 1,800 mg/m ³	OSHA P0
		STEL	1,000 ppm 2,400 mg/m ³	OSHA P0
64742-49-0	Naphtha (petroleum), hydrotreated light	TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
		TWA	400 ppm 1,600 mg/m ³	OSHA P0
64742-89-8	Solvent naphtha (petroleum), light aliph.	TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
		TWA	400 ppm	OSHA P0

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

			1,600 mg/m ³	
67-63-0	Isopropyl alcohol	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		ST	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z-1
		TWA	400 ppm 980 mg/m ³	OSHA P0
		STEL	500 ppm 1,225 mg/m ³	OSHA P0
1330-20-7	Mixed xylenes	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		TWA	100 ppm 435 mg/m ³	OSHA Z-1
100-41-4	Ethylbenzene	TWA	20 ppm	ACGIH
		STEL	125 ppm	ACGIH
		TWA	100 ppm 435 mg/m ³	NIOSH REL
		ST	125 ppm 545 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	OSHA Z-1
		TWA	100 ppm 435 mg/m ³	OSHA P0
		STEL	125 ppm 545 mg/m ³	OSHA P0
78-93-3	Methyl ethyl ketone	TWA	200 ppm	ACGIH
		STEL	300 ppm	ACGIH
		TWA	200 ppm 590 mg/m ³	NIOSH REL
		ST	300 ppm 885 mg/m ³	NIOSH REL
		TWA	200 ppm 590 mg/m ³	OSHA Z-1
		TWA	200 ppm 590 mg/m ³	OSHA P0
		STEL	300 ppm 885 mg/m ³	OSHA P0
142-82-5	Heptane	TWA	85 ppm 350 mg/m ³	NIOSH REL
		C	440 ppm 1,800 mg/m ³	NIOSH REL
		TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
		TWA	400 ppm 1,600 mg/m ³	OSHA P0

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

		STEL	500 ppm 2,000 mg/m ³	OSHA P0
--	--	------	------------------------------------	---------

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
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 exposure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g Creatinine	ACGIH BEI
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	50 mg/l	ACGIH BEI
Isopropyl alcohol	67-63-0	Acetone	In urine	End of shift at end of work-week	40 mg/l	ACGIH BEI
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift at end of work-week	0.7 g/g creatinine	ACGIH BEI

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Methyl ethyl ketone	78-93-3	MEK	In urine	End of shift (As soon as possible after exposure ceases)	2 mg/l	ACGIH 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 discussed 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

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : white

Odour : No data available

Odour Threshold : No data available

pH : No data available

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Freezing Point	: No data available
Boiling Point (Boiling point/boiling range)	: 56 - 142 °C (133 - 288 °F)
Flash point	: -16 °C (3 °F)
Evaporation rate	: 2.1 n-Butyl Acetate
Flammability (solid, gas)	: No data available
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: 1.6 %(V)
Vapour pressure	: 60.2 mmHg @ 20 °C (68 °F)
Relative vapour density	: 2.8(Air = 1.0)
Relative density	: 0.829 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: No data available
Bulk density	: No data available
Solubility(ies)	
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 290 °C
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.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: temperature extremes Extremes of temperature and direct sunlight. excessive heat Exposure to sunlight.
Incompatible materials	: Avoid contact with: Acids Aldehydes Bases Chlorine Ethylene oxide halogens isocyanates metal salts Oxidizing agents Reducing agents

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

Components:

108-88-3:

Acute oral toxicity	: LD50 (rat, male): > 5,580 mg/kg
Acute inhalation toxicity	: LC50 (rat, male and female): 28.1 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Acute dermal toxicity : LD50 (rabbit): > 5,000 mg/kg

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

64742-49-0:

Acute oral toxicity : LD50 (rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
Symptoms: abnormal stools, incoordination
GLP: yes
Remarks: No mortality observed at this dose.

Acute inhalation toxicity : LC50 (rat, male and female): > 5610 mg/ m3
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: yes
Remarks: Not classified

Acute dermal toxicity : LD50 (rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

64742-89-8:

Acute oral toxicity : LD50 (rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : LC50 (rat, male and female): 7.6 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

68410-97-9:

Acute oral toxicity :
Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

67-63-0:

Acute oral toxicity : LD50 (rat): 5,500 mg/kg

Acute inhalation toxicity : LC50 (rat, male and female): > 10000 ppm
Exposure time: 6 h
Test atmosphere: vapour
GLP: yes
Assessment: The component/mixture is low toxic after short term inhalation.

Acute dermal toxicity : LD50 (rabbit): > 12,800 mg/kg

1330-20-7:

Acute oral toxicity : LD50 (rat, male): 3,523 mg/kg
Method: EU Method B.1 (Acute Toxicity, Oral)
GLP: no

Acute inhalation toxicity : LC50 (rat, male): 6700 ppm
Exposure time: 4 h
Method: Directive 67/548/EEC, Annex V, B.2.
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (rabbit): 1,100 mg/kg
Assessment: The component/mixture is moderately toxic after single contact with skin.

100-41-4:

Acute inhalation toxicity : LC50 (Mouse, Male): 10 mg/l
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (rabbit): 15,433 mg/kg

78-93-3:

Acute oral toxicity : LD50 (rat): 2,737 mg/kg

Acute inhalation toxicity : LC50 (mouse): 320 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (rabbit): 6,480 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.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

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 dermal 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

Components:

108-88-3:

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

67-64-1:

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

64742-49-0:

Species: rabbit
Exposure time: 24 h
Classification: Irritating to skin
Result: Skin irritation
GLP: yes
Remarks: Skin irritation, Category 2

64742-89-8:

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

68410-97-9:

Result: Irritating to skin.
Remarks: No data available

67-63-0:

Species: rabbit
Exposure time: 4 h
Method: In vivo
Result: No skin irritation

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

1330-20-7:

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

100-41-4:

Species: rabbit
Result: Mild skin irritation

78-93-3:

Species: rabbit
Exposure time: 24 h
Result: Mild skin irritation

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

Components:

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
Result: Not irritating to eyes
Exposure time: 1 s
Classification: Not irritating to eyes
Method: In vivo
GLP: yes
Remarks: No eye irritation

64742-89-8:

Species: rabbit
Result: Irritating to eyes.
Exposure time: 1 - 2 s
GLP: yes
Remarks: No eye irritation

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

68410-97-9:

Result: Irritating to eyes.

Remarks: No data available

67-63-0:

Species: rabbit

Result: Irritating to eyes.

Exposure time: 24 h

Method: In vivo

1330-20-7:

Species: rabbit

Result: Irritating to eyes.

100-41-4:

Species: rabbit

Result: Mild eye irritation

Remarks: No data available

78-93-3:

Species: rabbit

Result: Irritating to eyes.

Exposure time: 24 h

142-82-5:

Species: rabbit

Result: Irritating to eyes.

Method: OECD Test Guideline 405

GLP: yes

Remarks: Information given is based on data obtained from similar substances.

Respiratory or skin sensitisation

Components:

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

Assessment: Does not cause skin sensitisation.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Method: In vivo
 Result: Did not cause sensitisation on laboratory animals.
 GLP: yes
 Remarks: not sensitising

64742-89-8:

Test Type: Buehler Test
 Species: guinea pig
 Assessment: Does not cause skin sensitisation.
 Result: Did not cause sensitisation on laboratory animals.
 GLP: yes
 Remarks: not sensitising

67-63-0:

Test Type: Buehler Test
 Species: guinea pig
 Method: OECD Test Guideline 406
 Result: Did not cause sensitisation on laboratory animals.
 GLP: yes

1330-20-7:

Remarks: No data available

100-41-4:

Remarks: No data available

78-93-3:

Test Type: Buehler Test
 Species: guinea pig
 Method: OECD Test Guideline 406
 Result: Did not cause sensitisation on laboratory animals.

142-82-5:

Test Type: Maximization test
 Species: guinea pig
 Method: OECD Test Guideline 406
 Result: Does not cause skin sensitisation.
 Remarks: Based on a similar product formulation.

Germ cell mutagenicity

Components:

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

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

	: Test Type: Ames test - Metabolic activation: with and without metabolic activation - Result: negative
Genotoxicity in vivo	: Test Type: Chromosome aberration assay in vivo - Test species: rat - Cell type: Bone marrow - Application Route: Intraperitoneal - Exposure time: 1 or 5 d - Dose: 0, 0.025, 0.082, 0.247 mL/kg - Result: negative - 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 effects.
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 : Test Type: Ames test - Metabolic activation: with and without metabolic activation - 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 activation - 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

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Germ cell mutagenicity-Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

64742-49-0:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

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

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: rat
Application Route: Inhalation
Dose: 0, 2000, 10000 and 20000 mg/m3
Result: negative
GLP: yes

Germ cell mutagenicity-Assessment : Animal testing did not show any mutagenic effects.

64742-89-8:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: positive
GLP: No data available

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: rat (male and female)
Application Route: Inhalation
Exposure time: 6 hours/day
Dose: 0, 2000, 10000, 20000 mg/m3
Result: positive
GLP: yes

Germ cell mutagenicity-Assessment : Positive result(s) from in vivo heritable germ cell mutagenicity tests in mammals

68410-97-9:

Germ cell mutagenicity-Assessment : Mutagenicity classification not possible from current data

67-63-0:

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Genotoxicity in vitro	: Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative
	: Test Type: Mammalian cell gene mutation assay Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Result: negative GLP: yes
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: mouse (male and female) Application Route: Intraperitoneal Exposure time: Single Dose: 0, 350, 1173, 2500, 3500 mg/kg Result: negative GLP: yes
Germ cell mutagenicity-Assessment	: Did not show mutagenic effects in animal experiments.
1330-20-7:	
Genotoxicity in vitro	: Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Method: Mutagenicity (in vitro mammalian cytogenetic test) Result: negative
	: Test Type: Sister chromatid exchange assay in mammalian cells Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo	: Test Type: Dominant lethal assay Test species: mouse Application Route: Subcutaneous Exposure time: 8 wk Dose: 1.0 mL/kg Method: OECD Test Guideline 478 Result: negative GLP: no
Germ cell mutagenicity-Assessment	: Animal testing did not show any mutagenic effects.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

100-41-4:

Genotoxicity in vitro

: Test Type: Chromosome aberration test in vitro
Test species: Chinese hamster ovary (CHO)
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: no

: 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
GLP: yes

Genotoxicity in vivo

: Test Type: In vivo micronucleus test
Test species: mouse (male)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Test Type: DNA damage and/or repair
Test species: mouse (male and female)
Application Route: Inhalation
Method: OECD Test Guideline 486
Result: negative
GLP: yes

Germ cell mutagenicity-
Assessment

: In vivo tests did not show mutagenic effects

78-93-3:

Genotoxicity in vitro

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

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

: Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

	Result: negative
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Test species: mouse (male and female) Dose: 1.96 mL/kg Method: OECD Test Guideline 474 Result: negative
Germ cell mutagenicity-Assessment	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
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
	: Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
Germ cell mutagenicity-Assessment	: Did not show mutagenic effects in animal experiments.

Carcinogenicity

Components:

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

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

67-64-1:

Species: mouse, (female)
Application Route: Dermal
Exposure time: 365 d (90%) or 424 d (100%)

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Dose: 0.1ml 90(71mg) or 100% (79mg)
Frequency of Treatment: 3 times per wk
NOAEL: 79

Result: did not display carcinogenic properties

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

64742-49-0:

Species: mouse, (male)
Application Route: Dermal
Exposure time: 102 wk
Dose: 0.05 ml neat
Frequency of Treatment: 3 times per wk
NOAEL: 0.05

Method: OECD Test Guideline 451
Result: did not display carcinogenic properties
GLP: No data available

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

64742-89-8:

Species: mouse, (male)
Application Route: Dermal
Exposure time: 102 wk
Dose: 0.05 ml neat
Method: OECD Test Guideline 453
Result: did not display carcinogenic properties
GLP: No data available
Remarks: Category 1B

Carcinogenicity - Assessment : Possible human carcinogen

68410-97-9:

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

67-63-0:

Species: rat, (male and female)
Application Route: inhalation (vapour)
Exposure time: 104 wks
Activity duration: 6 h
Dose: 0, 500, 2500, 5000 ppm
Frequency of Treatment: 5 days/week
NOAEL: 5,000 ppm

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Method: OECD Test Guideline 451
Result: did not display carcinogenic properties
GLP: yes

Species: mouse, (male and female)
Application Route: inhalation (vapour)
Exposure time: 78 wks
Activity duration: 6 h
Dose: 0, 500, 2500, 5000 ppm
Frequency of Treatment: 5 days/week
NOAEL: 5,000 ppm

Result: did not display carcinogenic properties
GLP: yes

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

1330-20-7:

Species: mouse, (male and female)
Application Route: Oral
Exposure time: 103 wk
Dose: 0, 500 or 1000 mg/kg
Frequency of Treatment: 5 days/week
Method: Directive 67/548/EEC, Annex V, B.32.
Result: did not display carcinogenic properties
GLP: No data available

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

100-41-4:

Species: mouse, (male and female)
Application Route: Inhalation
Exposure time: 103 wk
Activity duration: 6 h
Dose: 0, 75, 250, 750 ppm
Frequency of Treatment: 5 days/week
NOAEL: 250 ppm

Method: OECD Test Guideline 453
Result: evidence of carcinogenic activity
Symptoms: increased incidences of alveolar/bronchiolar neoplasms, increase incidence of hepatocellular carcinomas
GLP: yes

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

78-93-3:

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Remarks: This information is not available.

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

142-82-5:

Remarks: This information is not available.

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

Reproductive toxicity

Components:

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. Reduced 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 development : 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

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

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 development : 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-foetal toxicity.: NOAEC: 2,200 ppm
Method: OECD Test Guideline 414
Result: No teratogenic potential.
GLP: No data available

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.

64742-49-0:

Effects on fertility : Species: rat
Application Route: Inhalation
Dose: 0, 5000, 10000, 20000 mg/m3
Duration of Single Treatment: 6 h
Frequency of Treatment: 7 days/week
General Toxicity - Parent: NOAEC: > 20,000
General Toxicity F1: NOAEC: > 20,000
Method: OECD Test Guideline 416
GLP: yes

Effects on foetal development : Species: rat
Application Route: Inhalation
Dose: 2563, 7960, 23900 mg/m3
Duration of Single Treatment: 13 d
Frequency of Treatment: 7 days/week
General Toxicity Maternal: NOAEL: 23,900
Embryo-foetal toxicity.: NOAEL: 23,900
Method: OECD Test Guideline 414
Result: No teratogenic effects.
GLP: yes

Reproductive toxicity - : No toxicity to reproduction

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Assessment	No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.
64742-89-8: Reproductive toxicity - Assessment	: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
68410-97-9: Reproductive toxicity - Assessment	: Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.
67-63-0: Effects on fertility	: Test Type: Two-generation study Species: rat, male and female Dose: 0, 100, 500, 1000 mg/kg bw/d General Toxicity - Parent: NOAEL: 500 mg/kg body weight General Toxicity F1: NOAEL: 500 mg/kg body weight Fertility: NOAEL: 1,000 mg/kg body weight Symptoms: Maternal effects. Fetotoxicity. Reduced offspring weight gain. Method: OECD Test Guideline 416 Result: Animal testing did not show any effects on fertility. GLP: yes
Effects on foetal development	: Species: rabbit Application Route: Oral Dose: 0, 120, 240, 480 mg/kg bw/day Duration of Single Treatment: 13 d General Toxicity Maternal: NOAEL: 240 mg/kg body weight Developmental Toxicity: NOAEL: 480 mg/kg Symptoms: Maternal toxicity Result: No teratogenic effects. GLP: yes
Reproductive toxicity - Assessment	: Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
1330-20-7: Effects on fertility	: Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 25, 100 and 500 ppm Duration of Single Treatment: 6 h

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

	Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: > 500 ppm General Toxicity F1: NOAEC: > 500 ppm Early Embryonic Development: NOAEC: > 500 ppm Result: No reproductive effects.
Effects on foetal development	: Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000 or 2000 ppm Duration of Single Treatment: 14 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: > 2,000 Developmental Toxicity: NOAEC: 100 ppm Result: No teratogenic effects., Developmental toxicity occurred at maternal toxicity dose levels
Reproductive toxicity - Assessment	: Animal testing did not show any effects on fertility. Damage to fetus not classifiable
100-41-4: Effects on fertility	: Test Type: One generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500 and 1000 ppm Duration of Single Treatment: 6 h General Toxicity - Parent: NOAEC: 1,000 ppm General Toxicity F1: NOAEC: 100 ppm Symptoms: Reduced foetal weight. Reduced offspring weight gain. Method: OECD Test Guideline 415 Result: No reproductive effects. GLP: yes
Effects on foetal development	: Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000, 2000 ppm Duration of Single Treatment: 15 d General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: 2,000 ppm Developmental Toxicity: NOAEC: 500 ppm Symptoms: Reduced body weight Method: OECD Test Guideline 414 Result: Developmental toxicity occurred at maternal toxicity dose levels GLP: No data available
Reproductive toxicity - Assessment	: No toxicity to reproduction Did not show teratogenic effects in animal experiments.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

78-93-3:

Effects on foetal development

: Species: rat, female
Application Route: Inhalation
Dose: 400, 1000, 3000 ppm
Duration of Single Treatment: 18 d
Frequency of Treatment: 7 days/week
General Toxicity Maternal: NOAEC: 1,002 ppm
Teratogenicity: NOAEC: 1,002 ppm
Method: OECD Test Guideline 414
GLP: no

Reproductive toxicity - Assessment

: Fertility classification not possible from current data. Did not show teratogenic effects in animal experiments.

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 F1: 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 development

: Species: mouse
Application Route: inhalation (vapour)
Dose: 0, 900, 3000, 9000 ppm
Duration of Single Treatment: 10 d
Frequency of Treatment: 6 hr/day
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 - Assessment

: Animal testing did not show any effects on fertility. Embryotoxicity classification not possible from current data.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

STOT - single exposure

Product:

No data available

Components:

108-88-3:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

67-64-1:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

64742-49-0:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

64742-89-8:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

68410-97-9:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

67-63-0:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

1330-20-7:

Exposure routes: Inhalation

Target Organs: Respiratory system

Assessment: May cause respiratory irritation., The substance or mixture is classified

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Components:

No data available

78-93-3:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

142-82-5:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT - repeated exposure

Product:

No data available

Components:

108-88-3:

Exposure routes: Inhalation

Target Organs: Auditory system, Eyes

Assessment: May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Components:

No data available

Components:

No data available

Components:

No data available

Components:

No data available

Components:

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

No data available

1330-20-7:

Target Organs: Liver, Kidney, Central nervous system

Assessment: May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

100-41-4:

Target Organs: Auditory system

Assessment: May cause damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Components:

No data available

Components:

No data available

Repeated dose toxicity

Components:

108-88-3:

Species: mouse, male and female

NOAEL: 625 mg/kg

LOAEL: 1,250 mg/kg

Application Route: Oral

Exposure time: 13 wks

Number of exposures: 5 d/wk

Dose: 312, 625, 1250, 2500, 5000

Group: yes

GLP: yes

Symptoms: death, Increased liver weight, ataxia, hypoactivity, hypothermia

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

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

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

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 - : Causes mild skin irritation., Causes serious eye irrita-
Assessment tion.

64742-49-0:

Species: rat, male
NOAEL: < 500 mg/kg
Application Route: Oral
Exposure time: 4 wk
Number of exposures: 5 d/wk
Dose: 500 or 2000 mg/kg/day
Symptoms: nephropathy

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

67-63-0:

Species: rat, male and female
NOAEL: > 5000
Application Route: inhalation (vapour)
Exposure time: 13 wks
Number of exposures: 6 h/d, 5 d/wk
Dose: 0, 100, 500, 1500, 5000 ppm
Method: OECD Test Guideline 413
GLP: yes
Symptoms: Central nervous system depression

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Species: mouse, male and female
 NOAEL: > 5000
 Application Route: inhalation (vapour)
 Exposure time: 13 wks
 Number of exposures: 6 h/d, 5 d/wk
 Dose: 0, 100, 500, 1500, 5000 ppm
 Method: OECD Test Guideline 413
 GLP: yes
 Symptoms: Central nervous system depression

1330-20-7:

Species: rat, male and female
 NOAEL: 250 mg/kg
 Application Route: Oral
 Exposure time: 103 wk
 Number of exposures: 5 d/wk
 Dose: 0, 250 or 500 mg/kg
 Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

100-41-4:

Species: rat, male and female
 NOAEL: 75 mg/kg
 Application Route: Oral
 Exposure time: 28 d
 Dose: 75, 250 and 750 mg/kg bw/day
 Method: OECD Test Guideline 407
 GLP: yes
 Symptoms: Increased kidney and liver weights

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.
 Assessment

Aspiration toxicity

Components:

108-88-3:

Aspiration Toxicity - Category 1

64742-49-0:

May be fatal if swallowed and enters airways.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

64742-89-8:

Aspiration Toxicity - Category 1

68410-97-9:

May be fatal if swallowed and enters airways.

67-63-0:

May be harmful if swallowed and enters airways.

1330-20-7:

May be fatal if swallowed and enters airways.

100-41-4:

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

Components:

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 invertebrates : 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

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

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 invertebrates : 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 : LL50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l
Exposure time: 96 h
Analytical monitoring: yes
Method: Static
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 4.5 mg/l
Exposure time: 48 h
Analytical monitoring: yes
Method: Static
GLP: yes
Remarks: Toxic to aquatic organisms.

Toxicity to algae : EL50 (Selenastrum capricornutum (green algae)): 3.71 mg/l
Exposure time: 96 h
Analytical monitoring: yes
Method: Static
GLP: yes

Ecotoxicology Assessment
Acute aquatic toxicity : Toxic to aquatic life.

64742-89-8:

Toxicity to fish : LL50 (Fish): 8.2 mg/l
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: yes
GLP: yes

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

- Toxicity to daphnia and other aquatic invertebrates : EL50 (*Daphnia magna* (Water flea)): 4.5 mg/l
Exposure time: 48 h
Test Type: Immobilization
Analytical monitoring: yes
Test substance: Naphtha
GLP: yes
- Toxicity to algae : EL50 (*Pseudokirchneriella subcapitata* (green algae)): 3.7 mg/l
Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes
GLP: yes

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 : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Ecotoxicology Assessment

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

67-63-0:

Toxicity to fish : LC50 (*Pimephales promelas* (fathead minnow)): 9,640 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 100 mg/l
Exposure time: 24 h
Test Type: static test

Toxicity to algae : Remarks: No data available

Toxicity to bacteria : Toxicity threshold (*Pseudomonas putida*): 1,050 mg/l
Exposure time: 16 h

1330-20-7:

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 2.6 mg/l

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

	Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 1 mg/l Exposure time: 24 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata): 4.36 mg/l End point: Growth rate Exposure time: 73 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
Ecotoxicology Assessment Acute aquatic toxicity	: Toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.
100-41-4:	
Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 1.8 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata): 5.4 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: Static GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: (Daphnia): 3.6 mg/l
Toxicity to bacteria	: GLP: Remarks: No data available
Ecotoxicology Assessment Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.
78-93-3:	
Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): >

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

	100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: Immobilization
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 96 h

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 invertebrates	: 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 degradability

Components:

108-88-3:

Biodegradability	: Inoculum: Sewage Biodegradation: 100 % Remarks: Readily biodegradable
------------------	---

67-64-1:

Biodegradability	: Remarks: Readily biodegradable
------------------	----------------------------------

64742-49-0:

Biodegradability	: aerobic Inoculum: activated sludge Concentration: 20 mg/l Biodegradation: 74.30 % Exposure time: 56 d GLP: yes Remarks: Inherently biodegradable.
------------------	---

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

64742-89-8:

Biodegradability : Concentration: 49.2 mg/l
Result: Readily biodegradable.
Biodegradation: 77 %
Testing period: 2 d
Exposure time: 28 d
GLP: yes

67-63-0:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 95 %
Method: OECD Test Guideline 301E

Chemical Oxygen Demand (COD) : 0.00209 mg/g

Theoretical Oxygen Demand (ThOD) : 0.00240 mg/g

1330-20-7:

Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 72 %
Exposure time: 20 d

100-41-4:

Biodegradability : Inoculum: activated sludge
Concentration: 22 mg/l
Result: Readily biodegradable.
Biodegradation: 70 %
Exposure time: 28 d
GLP: yes

78-93-3:

Biodegradability : Concentration: 2 mg/l
Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 28 d
Test substance: Methylethyl Ketone
GLP: yes
Remarks: Readily biodegradable

142-82-5:

Biodegradability : Primary biodegradation
Inoculum: activated sludge
Concentration: 100 mg/l
Biodegradation: 100 %
Testing period: 2 d
Exposure time: 25 d

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Remarks: Readily biodegradable

Bioaccumulative potential

Components:

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:

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)

67-63-0:

Bioaccumulation : Bioconcentration factor (BCF): 3.16
Remarks: Does not significantly accumulate in organisms.

Partition coefficient: n-octanol/water : log Pow: 0.05 (25 °C)

1330-20-7:

Partition coefficient: n-octanol/water : log Pow: 2.77 - 3.15

100-41-4:

Partition coefficient: n-octanol/water : log Pow: 2.92

78-93-3:

Partition coefficient: n-octanol/water : log Pow: 2.49

Mobility in soil

Components:

67-63-0:

Stability in soil : Remarks: Adsorbs on soil.

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

Other adverse effects

Product:

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	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 information	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.
-----------------------------------	---

Components:

100-41-4:

Results of PBT and vPvB assessment	: This substance is not considered to be persistent, bio-accumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
------------------------------------	--

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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 reduction, 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, (TOLUENE, MIXED XYLENES), 3 , II

IMDG (International Maritime Dangerous Goods): UN1263, PAINT RELATED MATERIAL, (TOLUENE, MIXED XYLENES), 3, II, Flash Point:-16 °C(3 °F)

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

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

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid, Carcinogen, Harmful by skin absorption., Moderate skin irritant, Moderate eye irritant, Moderate respiratory irritant, Teratogen, Reproductive hazard, Mutagen

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Toluene	108-88-3	1000	1701

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
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):

108-88-3	Toluene	58.7931 %
100-41-4	Ethylbenzene	1.0228 %
71-43-2	Benzene	0.0726 %
110-54-3	Hexane	0.0026 %
67-56-1	Methanol	0.0008 %
98-82-8	Cumene	0.0002 %
91-20-3	Naphthalene	0.0002 %

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 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

108-88-3	Toluene	58.7931 %
67-64-1	Acetone	14.37 %
67-63-0	Isopropyl alcohol	9.55 %
1330-20-7	Mixed xylenes	3.187 %
100-41-4	Ethylbenzene	1.0228 %
78-93-3	Methyl ethyl ketone	0.98 %

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

110-82-7	Cyclohexane	0.3287 %
71-43-2	Benzene	0.0726 %
64-17-5	Ethanol	0.0095 %
71-23-8	n-Propanol	0.0014 %
67-56-1	Methanol	0.0008 %
98-82-8	Cumene	0.0002 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

108-88-3	Toluene	58.7931 %
1330-20-7	Mixed xylenes	3.187 %
100-41-4	Ethylbenzene	1.0228 %
110-82-7	Cyclohexane	0.3287 %
71-43-2	Benzene	0.0726 PPM
91-20-3	Naphthalene	0.0002 PPM

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

108-88-3	Toluene	58.7931 %
1330-20-7	Mixed xylenes	3.187 %
100-41-4	Ethylbenzene	1.0228 %
110-82-7	Cyclohexane	0.3287 %
71-43-2	Benzene	0.0726 PPM
91-20-3	Naphthalene	0.0002 PPM

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

108-88-3	Toluene	58.7931 %
100-41-4	Ethylbenzene	1.0228 %

US State Regulations

Massachusetts Right To Know

108-88-3	Toluene	50 - 70 %
67-64-1	Acetone	10 - 20 %
67-63-0	Isopropyl alcohol	5 - 10 %
1330-20-7	Mixed xylenes	1 - 5 %
100-41-4	Ethylbenzene	1 - 5 %
71-43-2	Benzene	0 - 0.1 %

Pennsylvania Right To Know

108-88-3	Toluene	50 - 70 %
67-64-1	Acetone	10 - 20 %
64742-49-0	Naphtha (petroleum), hydrotreated light	10 - 20 %
64742-89-8	Solvent naphtha (petroleum), light aliph.	10 - 20 %
68410-97-9	Distillates (petroleum), light distillate hydrotreating process, low-boiling	10 - 20 %
67-63-0	Isopropyl alcohol	5 - 10 %
1330-20-7	Mixed xylenes	1 - 5 %

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

100-41-4	Ethylbenzene	1 - 5 %
78-93-3	Methyl ethyl ketone	0.1 - 1 %
110-82-7	Cyclohexane	0.1 - 1 %
71-43-2	Benzene	0 - 0.1 %

New Jersey Right To Know

108-88-3	Toluene	50 - 70 %
67-64-1	Acetone	10 - 20 %
64742-49-0	Naphtha (petroleum), hydrotreated light	10 - 20 %
64742-89-8	Solvent naphtha (petroleum), light aliph.	10 - 20 %
68410-97-9	Distillates (petroleum), light distillate hydrotreating process, low-boiling	10 - 20 %
67-63-0	Isopropyl alcohol	5 - 10 %
1330-20-7	Mixed xylenes	1 - 5 %
100-41-4	Ethylbenzene	1 - 5 %

California 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	
91-20-3	Naphthalene	
	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:

1907/2006 (EU)	:	n (Negative listing) (Not in compliance with the inventory)
Switzerland. New notified substances and declared preparations	:	y (positive listing) (The formulation contains substances listed on the Swiss Inventory)
United States TSCA Inventory	:	y (positive listing) (On TSCA Inventory)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of)

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

		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 Substances Inventory	:	n (Negative listing) (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)

Safety Data Sheet

SW1 LACQUER THINNER

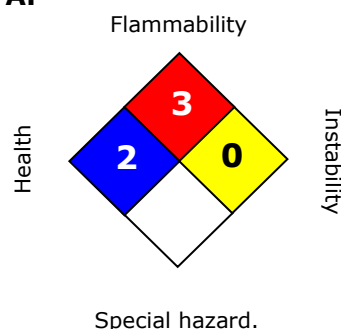
Version 1.0

Revision Date: 09/26/2014

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	3
PHYSICAL HAZARD	0

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

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 confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by NEXEO™ Solutions EHS Product Safety Department (1-855-429-2661) MSDS@nexeosolutions.com.

Material number:

16056645, 16061967, 16056647, 16056646, 16056648

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances 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	OSHA	Occupational Safety & Health Admin-

Safety Data Sheet

SW1 LACQUER THINNER

Version 1.0

Revision Date: 09/26/2014

	Scenario Tool		istration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration 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 Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50			Lethal Concentration 50%