SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name**: Lacquer Thinner

**Product Use Description**: 25WC : Thinner CSOLV

**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

Eye irritation : Category 2A

Reproductive toxicity : Category 2

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

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

**GHS Label element**

Hazard pictograms :

- Flammable
- Corrosive
- Warning

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

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:**
- 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.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

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

Potential Health Effects

Carcinogenicity:
IARC
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

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

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

<table>
<thead>
<tr>
<th>Appearance</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>clear, colourless</td>
</tr>
<tr>
<td>Hazard Summary</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Hazardous components

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical Name</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>90 - 100</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>1 - 5</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice: Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
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Do not leave the victim unattended.

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

SECTION 5. FIREFIGHTING MEASURES

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

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: Carbon oxides
Nitrogen oxides (NOx)

Specific extinguishing methods: Use a water spray to cool fully closed containers.

Further information: Collect contaminated fire extinguishing water 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.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting 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.
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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.

Conditions for safe storage:
No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed 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

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Components</th>
<th>Value type</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
</table>

MSDS Number: 100000016169

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**MSDS Number: 100000016169**

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>TWA 500 ppm ACGIH</td>
<td>TWA 250 ppm 590 mg/m³ NIOSH REL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 1,000 ppm 2,400 mg/m³ OSHA Z-1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 750 ppm 1,800 mg/m³ OSHA P0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEL 1,000 ppm 2,400 mg/m³ OSHA P0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene TWA 20 ppm ACGIH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 100 ppm 375 mg/m³ NIOSH REL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEL 150 ppm 560 mg/m³ NIOSH REL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 200 ppm OSHA Z-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEIL 300 ppm OSHA Z-2</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Peak 500 ppm OSHA Z-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 100 ppm 375 mg/m³ OSHA P0</td>
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<td></td>
</tr>
<tr>
<td>STEL 150 ppm 560 mg/m³ OSHA P0</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate TWA 150 ppm ACGIH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEL 200 ppm ACGIH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST 200 ppm 950 mg/m³ NIOSH REL</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 150 ppm 710 mg/m³ NIOSH REL</td>
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<td></td>
</tr>
<tr>
<td>TWA 150 ppm 710 mg/m³ OSHA Z-1</td>
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<tr>
<td>TWA 150 ppm 710 mg/m³ OSHA P0</td>
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<td></td>
</tr>
<tr>
<td>STEL 200 ppm 950 mg/m³ OSHA P0</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Biological occupational exposure limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Acetone</td>
<td>Urine</td>
<td>End of shift (As soon as possible after expo-</td>
<td>50 mg/l</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Toluene</th>
<th>108-88-3</th>
<th>Toluene</th>
<th>In blood</th>
<th>Prior to last shift of work-week</th>
<th>0.02 mg/l</th>
<th>ACGIH BEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td></td>
<td>Toluene</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>0.03 mg/l</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td>o-Cresol</td>
<td></td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>0.3 mg/g Creatinine</td>
<td>ACGIH BEI</td>
<td></td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>clear, colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point (Melting point/freezing point)</td>
<td>&lt; -70 °C (&lt; -94 °F)</td>
</tr>
<tr>
<td>Boiling Point (Boiling point/boiling range)</td>
<td>56 - 125 °C (133 - 257 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>-20 °C (-4 °F)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Burning rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>230.969 mmHg @ 25 °C (77 °F)</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.792 @ 20 °C (68 °F)</td>
</tr>
<tr>
<td>Density</td>
<td>0.793 g/cm3 @ 20 °C (68 °F)</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-</td>
<td>No data available</td>
</tr>
</tbody>
</table>
SECTION 10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No hazards to be specially mentioned.

Conditions to avoid: Keep away from heat, flame, sparks and other ignition sources.

Incompatible materials:
- Bases
- Oxidizing agents
- Reducing agents
- strong bases

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

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

**Components:**
67-64-1:
Acute oral toxicity: LD50 (rat): 5,800 mg/kg

Acute inhalation toxicity: LC50 (rat): 76.0 mg/l
Exposure time: 4 h

Acute dermal toxicity: LD50: > 7,426 mg/kg
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**108-88-3:**

- **Acute oral toxicity**: LD50 (rat, male): > 5,580 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
- **Acute dermal toxicity**: LD50 (rabbit): > 5,000 mg/kg

**123-86-4:**

- **Acute oral toxicity**: LD50 (rat): > 5,000 mg/kg  
  Method: OECD Test Guideline 423  
  GLP: no
- **Acute inhalation toxicity**: LC50 (rat, male and female): > 21 mg/l  
  Exposure time: 4 h  
  Test atmosphere: vapour  
  Method: OECD Test Guideline 403  
  GLP: yes
- **Acute dermal toxicity**: LD50 (rabbit, male and female): > 5,000 mg/kg  
  Method: OECD Test Guideline 402  
  GLP: yes

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**Skin corrosion/irritation**

**Product:**

Result: No skin irritation

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**Components:**

**67-64-1:**

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

**108-88-3:**

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

**123-86-4:**

- Species: rabbit  
- Method: OECD Test Guideline 404  
- Result: No skin irritation  
  GLP: no
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Product:
Result: Irritating to eyes.

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

108-88-3:
Species: rabbit
Result: Irritating to eyes.
Method: OECD Test Guideline 405

123-86-4:
Species: rabbit
Result: No eye irritation
GLP: yes

Respiratory or skin sensitisation

Components:
67-64-1:
Test Type: Maximization test
Species: guinea pig
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

123-86-4:
Species: guinea pig
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:
67-64-1:
Genotoxicity in vitro
Test Type: Mammalian cell gene mutation assay
Test species: Mouse lymphoma cells
Metabolic activation: Without metabolic activation
Method: OECD Test Guideline 476
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

Germ cell mutagenicity-Assessment

: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

108-88-3:
Genotoxicity in vitro

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

Genotoxicity in vivo

: Test Type: Dominant lethal assay
Test species: mouse (male)
Application Route: inhalation (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.

123-86-4:
Genotoxicity in vitro

: Test Type: Chromosome aberration test in vitro
Test species: Chinese hamster lung fibroblasts
Metabolic activation: Without metabolic activation
Method: OECD Test Guideline 473
Result: negative
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GLP: No data available

Genotoxicity in vivo
Test Type: In vivo micronucleus test
Test species: mouse (male and female)
Application Route: Oral
Dose: 500, 1000, 2000 mg/kg bw
Method: OECD Test Guideline 474
Result: negative
GLP: yes
Test substance: Information given is based on data obtained from similar substances.

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

Carcinogenicity

Components:

67-64-1:
Species: mouse, (female)
Application Route: Dermal
Exposure time: 365 d (90%) or 424 d (100%)
Dose: 0.1ml 90(71mg) or 100% (79mg)
Frequency of Treatment: 3 times per wk
NOAEL: 79
Result: did not display carcinogenic properties
Carcinogenicity - Assessment: Carcinogenicity classification not possible from current data.

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.

123-86-4:
Remarks: This information is not available.
Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Components:

67-64-1:
Effects on fertility: Species: rat, male
Application Route: oral
Dose: 0, 5000, 10000 mg/L
Frequency of Treatment: 7 days/week
General Toxicity - Parent: LOAEL: 10,000
Fertility: 10,000

Effects on 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.

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

Reproductive toxicity - Assessment:
- Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

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

Effects on foetal development:
- Species: rat, male and female
- Application Route: vapour
- Dose: 500, 1500, 3000 ppm
- Duration of Single Treatment: 6 h
- Frequency of Treatment: 5 days/week
- GLP: yes

Reproductive toxicity - Assessment:
- Fertility classification not possible from current data.
- Embryotoxicity classification not possible from current data.

STOT - single exposure
Product: No data available
Components:
- 67-64-1:
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<table>
<thead>
<tr>
<th>Exposure routes:</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure routes:</th>
<th>Target Organs:</th>
<th>Assessment:</th>
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</thead>
<tbody>
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<td>Central nervous system</td>
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</table>

<table>
<thead>
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<th>Assessment:</th>
<th>Remarks:</th>
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</thead>
<tbody>
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<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.</td>
<td></td>
</tr>
</tbody>
</table>

**STOT - repeated exposure**

**Product:** No data available

**Components:**

**67-64-1:** No data available

<table>
<thead>
<tr>
<th>Exposure routes:</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Auditory system,</td>
<td>May cause damage</td>
<td></td>
</tr>
</tbody>
</table>
Eyes

The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

123-86-4: No data available

Repeated dose toxicity

**Components:**

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

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

Repeated dose toxicity - Assessment: Causes mild skin irritation., Causes serious eye irritation.

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

Repeated dose toxicity - : Causes skin irritation.
Assessment

123-86-4:
Species: rat, male and female
NOAEL: 500
Application Route: inhalation (vapour)
Exposure time: 13 wk
Number of exposures: 6 h/d, 5d/wk
Dose: 500, 1500, 3000 ppm
GLP: yes
Symptoms: oral or nasal discharge

Aspiration toxicity

Product:
No aspiration toxicity classification

Components:
108-88-3:
Aspiration Toxicity - Category 1

Further information

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:
67-64-1:
Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 6,100 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 7,630 mg/l
Exposure time: 48 h
Test substance: Acetone

Toxicity to algae: Remarks: No data available

108-88-3:
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

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

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

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

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 44 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l
End point: Growth rate
Exposure time: 72 h

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

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

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

**Persistence and degradability**

**Components:**

**67-64-1:**
- Biodegradability: Remarks: Readily biodegradable

**108-88-3:**
- Biodegradability: Inoculum: Sewage
  - Biodegradation: 100%
  - Remarks: Readily biodegradable

**123-86-4:**
- Biodegradability: Biodegradation: 83%
  - Exposure time: 28 d
  - Method: OECD Test Guideline 301D

Chemical Oxygen Demand (COD): 0.00169 mg/g

BOD/COD: BOD/COD: 72%

Theoritical Oxygen Demand (ThOD): 0.0022 mg/g

**Bioaccumulative potential**

**Components:**

**67-64-1:**
- Partition coefficient: n-octanol/water: log Pow: -0.24

**108-88-3:**
- Partition coefficient: n-octanol/water: log Pow: 2.73

**123-86-4:**
- Bioaccumulation: Species: Fish
  - Bioconcentration factor (BCF): 15

Partition coefficient: n-octanol/water: log Pow: 1.82

**Mobility in soil**

No data available
Other adverse effects
No data available

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: No data available

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, 3, II, Flash Point:-20 °C(-4 °F)

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

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

SECTION 15. REGULATORY INFORMATION
Safety Data Sheet
Lacquer Thinner 25WC

Version 1.2
Revision Date: 05/26/2015

OSHA Hazards: Flammable liquid, Moderate eye irritant, Teratogen, Reproductive hazard, Specific target organ toxicity - single exposure, Specific target organ toxicity - repeated exposure

WHMIS Classification: B2: Flammable liquid
D2A: Very Toxic Material Causing Other Toxic Effects
D2B: Toxic Material Causing Other Toxic Effects

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

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>5000</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

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

SARA 302: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>108-88-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toluene</td>
<td>1.7338 %</td>
</tr>
</tbody>
</table>

Clean Air Act
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61): 108-88-3 Toluene 1.7338 %
100-41-4 Ethylbenzene 0.0346 %
71-43-2 Benzene 0.0065 %
67-56-1 Methanol 0.0059 %
98-82-8 Cumene 0.0866 PPM
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>96.9318 %</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>1.7338 %</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate</td>
<td>1.3344 %</td>
</tr>
</tbody>
</table>
Safety Data Sheet
Lacquer Thinner 25WC

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

Clean Water Act
The following Hazardous Substances are listed under the U.S. Clean Water Act, Section 311, Table 116.4A:
108-88-3 Toluene 1.7338 %
123-86-4 n-Butyl acetate 1.3344 %
100-41-4 Ethylbenzene 0.0346 %
71-43-2 Benzene 0.0065 %

The following Hazardous Chemicals are listed under the U.S. Clean Water Act, Section 311, Table 117.3:
108-88-3 Toluene 1.7338 %
123-86-4 n-Butyl acetate 1.3344 %
100-41-4 Ethylbenzene 0.0346 %
71-43-2 Benzene 0.0065 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307
108-88-3 Toluene 1.7338 %

US State Regulations
Massachusetts Right To Know
67-64-1 Acetone 90 - 100 %
108-88-3 Toluene 1 - 5 %
123-86-4 n-Butyl acetate 1 - 5 %
71-43-2 Benzene 0 - 0.1 %

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

New Jersey Right To Know
67-64-1 Acetone 90 - 100 %
108-88-3 Toluene 1 - 5 %
123-86-4 n-Butyl acetate 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
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
108-88-3 Toluene
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<table>
<thead>
<tr>
<th>Component</th>
<th>MSDS Number: 100000016169</th>
</tr>
</thead>
<tbody>
<tr>
<td>71-43-2</td>
<td>Benzene</td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Reporting Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States TSCA Inventory</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td></td>
<td>(On TSCA Inventory)</td>
</tr>
<tr>
<td>Canadian Domestic Substances List (DSL)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td></td>
<td>(All components of this product are on the Canadian DSL.)</td>
</tr>
<tr>
<td>Australia Inventory of Chemical Substances (AICS)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td></td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>New Zealand. Inventory of Chemical Substances</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td></td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>Japan. ENCS - Existing and New Chemical Substances Inventory</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td></td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>Korea. Korean Existing Chemicals Inventory (KECI)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td></td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td></td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>China. Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>y (positive listing)</td>
</tr>
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<td>(On the inventory, or in compliance with the inventory)</td>
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</tbody>
</table>
SECTION 16. OTHER INFORMATION
Further information

NFPA:

Health

Flammability

Instability

Special hazard.

HMIS III:

HEALTH

FLAMMABILITY

PHYSICAL HAZARD

2*

3

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.

Legacy MSDS: 000000174151

Material number:
736348, 735447, 735446, 735445, 735444, 735443

Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NDSL</td>
<td>Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
</tr>
<tr>
<td>EC50 50%</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>EGEST</td>
<td>EOSCA Generic Exposure Scenario Tool</td>
</tr>
<tr>
<td>EOSCA</td>
<td>European Oilfield Specialty Chemicals Association</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50%</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Agency</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>NZIoC</td>
<td>New Zealand Inventory of Chemicals</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No Observable Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No Observed Effect Concentration</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
</tbody>
</table>

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## Safety Data Sheet
### Lacquer Thinner 25WC

**Version 1.2**

<table>
<thead>
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<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>PICCS</td>
<td>Philippines Inventory of Commercial Chemical Substances</td>
</tr>
<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
</tr>
<tr>
<td>PRNT</td>
<td>Presumed Not Toxic</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation Recovery Act</td>
</tr>
<tr>
<td>&gt;=</td>
<td>Greater Than or Equal To</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term Exposure Limit</td>
</tr>
<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act.</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical Substances in China</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
</tr>
<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
</tr>
<tr>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
</tr>
</tbody>
</table>