MATERIAL SAFETY DATA SHEET

Product Name: PAINT THINNER

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION
Product Type: Thinners/Solvent
Product Name: Paint Thinner
Part Number(s): 10-6702

Emergency Contact: Chemtrec
Phone: (800) 424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

Hazard Classification

- GHS02 Flame
  Flam. Liq. 2 H225 Highly flammable liquid and vapor.

- GHS07
  Skin Irrit. 2 H315 Causes skin irritation.
  STOT SE 3 H336 May cause drowsiness or dizziness.

Hazard statements

- GHS08 Health hazard
  Muta. 1A H340 May cause genetic defects.
  Carc. 1A H350 May cause cancer.
  Repr. 1A H360 May damage fertility or the unborn child.
  STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
  Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Label Elements

- GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).

- Pictogram(s)
  GHS02 GHS07 GHS08

Signal Word

- Danger

Hazard-determining Component(s)

- Toluene
- Naphtha (petroleum), hydrotreated heavy
- Benzene

Hazard statements

- Highly flammable liquid and vapor.
- Causes skin irritation.
- May cause genetic defects.
- May cause cancer.

Part Number(s): 10-6702
Product Name: PAINT THINNER

SECTION 2: HAZARD(S) IDENTIFICATION (CONTINUED)

May damage fertility or the unborn child.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wear protective gloves / eye protection / face protection.
Wear protective gloves.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
If swallowed: Immediately call a poison center/doctor.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard Rating System
- NFPA System
  - NFPA Ratings (scale 0 - 4)
    
    | Health | Fire | Reactivity |
    |--------|------|------------|
    | 2      | 3    | 0          |

NFPA special hazards (water reactivity and oxidizing property): None

HMIS System
- HMIS Ratings (scale 0 - 4)
  
  Health = *2
  Fire = 3
  Reactivity = 0

Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
MATERIAL SAFETY DATA SHEET

Product Name: PAINT THINNER

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

· Chemical Characterization: Mixtures

| CAS: 64742-48-9 Naphtha (petroleum), hydrocracked heavy | 40-50% |
| EINECS: 265-150-3 Index Number: 649-327-00-8 |  |
| Flam. Liq. 4, H227 Asp. Tox. 1, H304 |  |

| CAS: 108-88-3 Toluene | 40-50% |
| EINECS: 203-625-9 Index Number: 601-021-00-3 |  |
| Flam. Liq. 2, H225 Asp. Tox. 1, H304 Muta. 1A, H340; Carc. 1A, H341; Repro. 1A, H360; STOT RE 2, H373; Asp. Tox. 1, H304 |  |
| Skin Irrit. 2, H315; STOT SE 3, H336 |  |

· Classification System:
The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.

SECTION 4: FIRST-AID MEASURES

· Description of First Aid Measures

· General Information
Symptoms may be delayed several hours after exposure; victims should be medically observed for at least 48 hours after exposure. Ensure medical personnel are aware of exposure and take precautions for their personal protection; see Section 8 for the information of personal protection.

· After Inhalation
Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing. In case of unconsciousness place patient stably in side position for transportation. Use a respiration bag or breathing device. Give artificial respiration if not breathing. If breathing is difficult, administer oxygen. Seek immediate medical advice.

· After Skin Contact
Remove all contaminated clothing and wash before reuse. Wash contaminated skin with water and soap and rinse thoroughly. Seek immediate medical advice.

· After Eye Contact
Rinse opened eyes under running water for at least 15 minutes. Remove contact lenses if present and easy to do so; continue rinsing. Seek immediate medical advice.

· After Swallowing
If victim is unconscious; never give anything by mouth. If victim is conscious, rinse out mouth with water. Do NOT induce vomiting. If vomiting occurs spontaneously, keep victim's head below hips to prevent aspiration of liquid into lungs. Seek immediate medical advice even there are no symptoms.

· After Exposure Get medical advice/attention at once.
SECTION 4: FIRST-AID MEASURES (CONTINUED)

· Information for Doctor Have chemical containers, labels and/or (M)SDS ready when calling or visiting a medical center.
  · Indication of any Immediate Medical Attention and Special Treatment Needed
    After frequent or high intense exposure, the following medical tests are recommended:
    skin tests
    nervous system function tests
    kidney tests
    liver tests
    Reproductive system function tests
    respiratory system tests
    Check section 11 Toxicological Information for further relevant information.

· Additional Information
  For additional information, please consult the corresponding first aid measures in the most current version of Emergency Response Guidebook which is produced by the US Department of Transportation.

SECTION 5: FIRE-FIGHTING MEASURES

· Extinguishing Media
  · Suitable Extinguishing Agent(s)
    Use fire fighting measures and extinguishing agents that suit the environment.
    In case of fire, suitable extinguishing agents are:
    Alcohol resistant foam.
    Dry chemical or fire-extinguishing powder.
    Carbon dioxide (CO₂).
    Water spray or water fog.
  · Unsuitable Extinguishing Agent(s) No relevant information.

· Firefighting Procedures
  · Isolate fire and deny unnecessary entry.
  · Eliminate all ignition sources if safe to do so.
  · Do not extinguish fire unless flow can be stopped.
  · Fight fire remotely due to the risk of explosion.
  · Burning liquids may be moved by flushing with water; protect personnel and minimize property damage.
  · Fight fire from protected location or safe distance.
  · Contain fire water runoff if possible to prevent environmental pollution.

· Special Hazards Arising in Fire
  · Caution! Highly flammable liquid or vapor.
    In case of fire, following can be released:
    Carbon dioxide (CO₂) and Carbon monoxide (CO)

· Advice for Firefighters
  · If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).
  · As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

· Additional Information Ensure adequate and functional fire fighting facilities equipped in working area at all times.
MATERIAL SAFETY DATA SHEET

Product Name: PAINT THINNER

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **Personal Precautions**
  Caution! Highly flammable liquid or vapor; wear fire resistant or retardant clothing during clean up.
  Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use.
  Ensure personnel take precautions for their personal protection during clean up; see Section 8 for the specific requirements.

- **Environmental Precautions** Keep away from sewage system or other water courses; do not penetrate ground/soil.

- **Cleaning Up Methods**
  Eliminate heat, sparks, open flame and other ignition sources before clean up.
  A vapor suppressing foam should be used to reduce vapors at first.
  All equipment used for clean up must be grounded.
  Don’t touch or walk through spilled chemicals unless trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).
  Ensure adequate ventilation.
  Keep unauthorized personnel away.
  For large spills:
  Shut off source of leak if safe to do so.
  Dike and contain.
  Remove with vacuum trucks or pump to storage/salvage vessels.
  Absorb residues with liquid-binding materials.
  For small spills:
  Ventilate and wash area after clean-up is complete.
  Collect spills in suitable and properly labeled containers.
  Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.
  Dispose contaminated chemicals as waste according to Section 13.

- **Additional Information** No further relevant information.

SECTION 7: HANDLING AND STORAGE

- **Handling**

  - **Precautions for Safe Handling**
    Caution! Highly flammable liquid or vapor.
    Obtain special instruction before use; do not handle until all safety precautions have been read and understood.
    Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.
    Keep away from heat, sparks, open flame and other ignition sources during handling.
    Ensure good ventilation and/or exhaustation at workplace.
    Keep away from incompatible material(s).
    Avoid any release into the environment.
    Keep container tightly closed when not in use if product is volatile so as to generate hazardous atmosphere.
    Observe all the personal protection requirements in Section 8.

  - **Information about Protection Against Explosions and Fires**
    Keep away from heat, sparks, open flame and other ignition sources.
    Protect against electrostatic charges during handling.
    Metal containers involved must be grounded and bonded.
    Use only non-sparking tools and equipment, especially when opening or closing containers of combustible contents.
    Have approved respirators prepared.
MATERIAL SAFETY DATA SHEET

Product Name: PAINT THINNER

SECTION 7: HANDLING AND STORAGE (CONTINUED)

· Storage
  · Requirements to be Met by Storerooms and Receptacles
    Caution! Highly flammable liquid or vapor; keep away from heat, sparks, open flame and other ignition sources during storage.
    Store in tightly closed containers in a cool, and well-ventilated area.
    Keep stored in accordance with local, regional, national, and international regulations.
  · Information about Storage in One Common Storage Facility
    Store away from incompatible material(s).
    Store away from foodstuffs.
    Avoid release to the environment.
  · Additional Information
    No further relevant information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

· Engineering Measures or Controls
  · Exposure Limit Values that Require Monitoring at the Workplace
    | Substance                          | OSHA Short-term value | REL Long-term value | TLV Long-term value |
    |-----------------------------------|-----------------------|--------------------|--------------------|
    | 64742-48-3 Naphtha (petroleum), hydrotreated heavy | | | |
    | 108-88-3 Toluene                   | 400 mg/m³             | 87 mg/m³, 20 ppm   | BEI                |
    | PEL Long-term value: 200 ppm       | Ceiling limit value: 300, 500 ppm |
    | REL Short-term value: 560 mg/m³, 150 ppm |
    | Long-term value: 375 mg/m³, 100 ppm |
    | TLV Long-term value: 75 mg/m³, 20 ppm |
    | 100-41-4 Ethylbenzene              | 435 mg/m³, 100 ppm    | 375 mg/m³, 100 ppm |
    | PEL Long-term value: 435 mg/m³, 100 ppm |
    | REL Short-term value: 545 mg/m³, 125 ppm |
    | Long-term value: 435 mg/m³, 100 ppm |
    | TLV Long-term value: 87 mg/m³, 20 ppm |
    | 71-43-2 benzene                    | 8 mg/m³, 2.5 ppm      | 1.6 mg/m³, 0.5 ppm |
    | PEL Short-term value: 15* mg/m³, 5* ppm |
    | Long-term value: 3* mg/m³, 1* ppm |
    | REL Short-term value: 1 ppm        |
    | Long-term value: 0.1 ppm           |
    | See Pocket Guide App. A            |
    | TLV Short-term value: 8 mg/m³, 2.5 ppm |
    | Long-term value: 1.6 mg/m³, 0.5 ppm |
    | Skin; BEI                         |

*table Z-2 for exclusions in 29CFR1910.1028(d)

In case of intensive or longer exposure, use a positive-pressure respiratory protective device that is independent of circulating air.

Obtain special instruction before use; do not handle until all safety precautions have been read and understood.

Caution! Highly flammable liquid or vapor; keep away from heat, sparks, open flame and other ignition sources during handling.

Avoid any skin contact.

Contaminated work clothing is not allowed out of workplace.

Avoid any release to the environment.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

Collect spills in suitable and properly labeled containers.

Ensure good ventilation and/or exhaustion at workplace.

Keep away from heat, sparks, open flame and other ignition sources during handling.

Clean hands and exposed skin thoroughly after work and before breaks.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.

Have approved respirators prepared.

Store in tightly closed containers in a cool, and well-ventilated area.

Keep stored in accordance with local, regional, national, and international regulations.

Avoid any skin contact.

Contaminated work clothing is not allowed out of workplace.

Avoid any release to the environment.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.

Collect spills in suitable and properly labeled containers.

Ensure good ventilation and/or exhaustion at workplace.

Keep away from heat, sparks, open flame and other ignition sources during handling.

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Avoid any skin contact.

Contaminated work clothing is not allowed out of workplace.

Avoid any release to the environment.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.

Collect spills in suitable and properly labeled containers.

Ensure good ventilation and/or exhaustion at workplace.

Keep away from heat, sparks, open flame and other ignition sources during handling.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

Clean hands and exposed skin thoroughly after work and before breaks.

Avoid any skin contact.

Contaminated work clothing is not allowed out of workplace.

Avoid any release to the environment.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.

Collect spills in suitable and properly labeled containers.

Ensure good ventilation and/or exhaustion at workplace.

Keep away from heat, sparks, open flame and other ignition sources during handling.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

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Keep away from heat, sparks, open flame and other ignition sources during handling.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

Clean hands and exposed skin thoroughly after work and before breaks.

Avoid any skin contact.

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Avoid any release to the environment.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.

Collect spills in suitable and properly labeled containers.

Ensure good ventilation and/or exhaustion at workplace.

Keep away from heat, sparks, open flame and other ignition sources during handling.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

Clean hands and exposed skin thoroughly after work and before breaks.

Avoid any skin contact.

Contaminated work clothing is not allowed out of workplace.

Avoid any release to the environment.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.

Collect spills in suitable and properly labeled containers.

Ensure good ventilation and/or exhaustion at workplace.

Keep away from heat, sparks, open flame and other ignition sources during handling.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

Clean hands and exposed skin thoroughly after work and before breaks.

Avoid any skin contact.

Contaminated work clothing is not allowed out of workplace.

Avoid any release to the environment.

Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

- Additional Information for the Limit Values
  As a CLASSIFIED CARCINOGEN, there may be NO safe level of exposure; reduce all contact to the lowest possible level.
  As a classified TERATOGEN to humans, there may be NO safe level of exposure; reduce all contact to the lowest possible level.

- Other Engineering Measures or Controls
  Ventilation rates should be matched to conditions.
  If applicable, use process enclosure(s), local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

- Personal Protective
  - General Protective and Hygienic Measures
    Avoid any skin contact.
    Do not eat, drink or smoke during work.
    Keep food, drink or feed away from working area.
    Contaminated work clothing is not allowed out of workplace.
    Avoid any skin contact.
    Clean hands and exposed skin thoroughly after work and before breaks.

  - Personal Protective Equipment (PPE)
    - Breathing Equipment
      Caution! Improper use of respirators is dangerous.
      In case of brief exposure or low pollution, use a respiratory filter device.
      In case of intensive or longer exposure, use a positive-pressure respiratory protective device that is independent of circulating air.

    - Hand Protection
      Protective gloves
      Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.
      Suggested glove type(s):
      Nitrile Gloves
      Butyl Rubber Gloves

    - Eye Protection
      Safety Glasses

- Body Protection
  No relevant information.

- Additional Information
  All protective clothing (suits, gloves, footwear, headgear) should be clean, available every day, and put on before work.
  The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- Information on Basic Physical and Chemical Properties
  - Appearance: Liquid
  - Form: Liquid
  - Color: Clear
  - Odor: Characteristic
  - Odor Threshold: Not determined.
  - PH-Value: Not determined.
  - Change in Condition:
    - Melting Point: Not determined.
    - Boiling Point: 108 °C (226 °F)
    - Flash Point: 4 °C (39 °F)
  - Decomposition Temperature: Not determined.
  - Flammability: Not determined.
  - Explosion: Not determined.
  - Explosion Limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapor Pressure: Not determined.
  - Density at 20 °C (68 °F): 0.81 g/cm³ (6.759 lbs/gal)
  - Solubility in or Miscibility with
    - Water: Not miscible or difficult to mix.
    - Viscosity:
      - Dynamic: Not determined.
      - Kinematic: Not determined.
  - Additional Information: No further relevant information.

SECTION 10: STABILITY AND REACTIVITY

- Physical Hazard(s) Highly flammable liquid or vapor.
- Hazardous Reactivity and Chemical Stability May form explosive vapor-air mixtures when heated above the flash point.
- Thermal Decomposition and Conditions to be Avoided
  Highly flammable liquid or vapor; keep away from direct sunlight, heat, sparks, open flame and other ignition sources at all times.
- Possibility of Other Hazardous Reaction(s) No further relevant information available.
- Incompatible Material(s)
  - Oxidizing agents
  - Bases (Alkalis)
  - Halogens
  - Strong acids
MATERIAL SAFETY DATA SHEET

Product Name: PAINT THINNER

SECTION 10: STABILITY AND REACTIVITY (CONTINUED)

- **Hazardous Decomposition Product(s)**
  Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.

- **Hazardous Polymerization Product(s)** No relevant information.

- **Additional Information** No further relevant information.

SECTION 11: TOXICOLOGICAL INFORMATION

**Acute Toxicity**

- **Oral**
  
<table>
<thead>
<tr>
<th>Substance</th>
<th>LD₅₀</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>&gt;5000 mg/kg (rat)</td>
<td>Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 403 Reference: ExxonMobil SDS</td>
</tr>
<tr>
<td>Toluene</td>
<td>5580 mg/kg (rat)</td>
<td>Reference: Sigma Aldrich SDS 2015</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>4700 mg/kg (rat)</td>
<td>Reference: ECHA (2011).</td>
</tr>
<tr>
<td>Benzene</td>
<td>4844 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

- **Potential Health Effect(s):**
  - abnormal pain
  - diarrhea
  - vomiting
  See acute inhalative effect(s) for further information

- **Dermal**
  
<table>
<thead>
<tr>
<th>Substance</th>
<th>LD₅₀</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>&gt;5000 mg/kg (rab)</td>
<td>Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 402 Reference: ExxonMobil SDS</td>
</tr>
<tr>
<td>Toluene</td>
<td>12267 mg/kg (rabbit) (males; occlusive; neat substance)</td>
<td>Reference: ECHA (2011).</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>15433 mg/kg (rabbit) (male; occlusive; neat substance; 24hr-exposure)</td>
<td>Calculated from LD₅₀ of 17.8 mL/kg bw and the specific gravity of 0.867 g/ml. Reference: ECHA (2011).</td>
</tr>
<tr>
<td>Benzene</td>
<td>48 mg/kg (mouse)</td>
<td></td>
</tr>
</tbody>
</table>
# SECTI0N 11: TOXICOLOGICAL INFORMATION (CONTINUED)

## Potential Health Effect(s):

<table>
<thead>
<tr>
<th>Inhalative</th>
<th>108-88-3 Toluene</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50/4 h</td>
<td>18 mg/l (rat) (Calculated from LC50 of 12.5, 28.1, 28.8, &amp; 333 mg/L)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inhalative</th>
<th>100-41-4 Ethylbenzene</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50/4 h</td>
<td>17.2 mg/l (rat) (Inhalation: vapor)</td>
</tr>
</tbody>
</table>

## Potential Health Effect(s):

<table>
<thead>
<tr>
<th>Inhalative</th>
<th>71-43-2 benzene</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50/4 h</td>
<td>9980 mg/l (mouse)</td>
</tr>
</tbody>
</table>

## Skin Corrosion or Irritation

<table>
<thead>
<tr>
<th>Corrosion/Irritation</th>
<th>64742-48-9 Naphtha (petroleum), hydrotreated heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>mild irritation (Test species: n/a)</td>
<td>Mildly irritating to skin with prolonged exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 404</td>
</tr>
<tr>
<td>Reference: ExxonMobil SDS</td>
<td></td>
</tr>
</tbody>
</table>

## Corrosion or Irritation

<table>
<thead>
<tr>
<th>Corrosion/Irritation</th>
<th>108-88-3 Toluene</th>
</tr>
</thead>
<tbody>
<tr>
<td>irritating (rabbit) (EU Method B4; 0.5ml neat substance; 4hr-contact)</td>
<td>Erythema: 3.3 (Max. score: 4; mean score of all treated animals; Time point: 24+48+72 hrs); not fully reversible within 7 days. Edema: 1.1 (Max. score: 4; mean score of all treated animals; Time point: 24+48+72 hrs); not fully reversible within 7 days. The substance was therefore considered as a moderate dermal irritant (Category 2). Reference: ECHA (2011).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corrosion/Irritation</th>
<th>100-41-4 Ethylbenzene</th>
</tr>
</thead>
<tbody>
<tr>
<td>moderately irr. (rabbit) (shaved skin; occlusive; neat substance)</td>
<td>The substance was moderately irritating to skin and caused moderate necrosis after 10-20 time daily application with undiluted substance to ear and shaved abdomen (occluded) of the treated rabbits. Reference: ECHA (2011).</td>
</tr>
</tbody>
</table>

## Potential Health Effect(s):

- Causes skin irritation. In contact with skin, may cause: redness and pain.
SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

Potential Health Effect(s):
No further relevant information; classification is not possible.

Eye Serious Damage or Irritation

<table>
<thead>
<tr>
<th>Substance</th>
<th>Damage/Irritation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9 Naphtha (petroleum), hydrotreated heavy</td>
<td>mild irritation (Test species: n/a)</td>
<td>May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405. Reference: ExxonMobil SDS</td>
</tr>
<tr>
<td>108-88-3 Toluene</td>
<td>slightly (rabbit) (OECD TG 405; 0.1 ml neat substance)</td>
<td>Cornea: 0/4 (Max. score: 4; Time point: 24h+48h+72h; mean score of all treated animals) Iris: 0/2 (Max. score: 2; Time point: 24h+48h+72h; mean score of all treated animals) Conjunctivae: 1.4/3 (Max. score: 3; Time point: 24h+48h+72h; mean score of all treated animals) The substance was therefore considered as slightly irritating (Category 2B) to rabbit eyes. Reference: ECHA (2011).</td>
</tr>
</tbody>
</table>

Potential Health Effect(s):
No further relevant information; classification is not possible.

Respiratory or Skin Sensitization

<table>
<thead>
<tr>
<th>Substance</th>
<th>Sensitization</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9 Naphtha (petroleum), hydrotreated heavy</td>
<td>Skin: negative (Test species: n/a)</td>
<td>Not expected to be a skin sensitizer. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 406. Reference: ExxonMobil SDS</td>
</tr>
<tr>
<td>108-88-3 Toluene</td>
<td>Skin: not sensitizing (guinea pig) (intradermal and epicutaneous; EU Method B6)</td>
<td>Only one treated pig showed a grade 1 reaction (discrete or patchy erythema) in response to a 50% solution. No other skin reactions were observed. The substance was therefore not classified as a skin sensitizer in this study. Reference: ECHA (2011).</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>Skin: not sensitizing (Human) (maximization test)</td>
<td>A maximization test was carried out on 25 volunteers with a 10% concentration of the substance, and it produced no sensitization reactions. Reference: ECHA (2011).</td>
</tr>
</tbody>
</table>

Potential Health Effect(s):
No relevant information for respiratory sensitization; classification is not possible.

Respiratory (No data available)

Potential Health Effect(s):
No relevant information for respiratory sensitization; classification is not possible.
SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

OSHA-Ca (Occupational Safety & Health Administration)

71-43-2 Benzene

Germ Cell Mutagenicity

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Mutagenicity: Not expected (Test species: n/a)
Not expected to be a germ cell mutagen. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471 473 474 476 479
Reference: ExxonMobil SDS

108-88-3 Toluene

Mutagenicity: Negative (salmonella typhimurium) (In Vitro (Mammalian cell gene mutation assay))
In Vitro (Mammalian cell gene mutation assay; OECD TG 476; L5178Y mouse lymphoma cells) - negative with and without metabolic activation.
In Vitro (Bacterial reverse mutation assay; EU Method B13/14; S. typhimurium TA 1535, TA 1537, TA 98 and TA 100) - negative with and without metabolic activation.
In Vivo (Chromosome aberration; Rat; Intraperitoneal with up to 0.25 ml/kg) - negative; there was no evidence of genotoxicity observed.

100-41-4 Ethylbenzene

Mutagenicity: Negative (Human)
In Vitro (mammalian cell gene mutation assay; OECD TG 476; mouse lymphoma L5178Y cells) - negative with and without metabolic activation.
In Vitro (mammalian chromosome aberration test; OECD TG 473; Chinese hamster Ovary (CHO)) - negative with and without metabolic activation.
In Vivo (unscheduled DNA synthesis; OECD TG 486; mouse; inhalation with 1000ppm of the substance) - negative; the substance did not induce DNA repair (as measured by unscheduled DNA synthesis) in the mouse liver.
In Vivo (micronucleus assay; OECD TG 474; mouse; up to 750 mg/kg/day) - negative; the substance did not increase the rate of development of micronuclei in polychromatic erythrocytes.

Potential Health Effect(s): May cause genetic defects.

Carcinogenicity

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Carcinogenicity: Not expected (Test species: n/a)
Not expected to cause cancer. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 451 453
Reference: ExxonMobil SDS

108-88-3 Toluene

Carcinogenicity: Negative (rat) (OECD TG 453; Inhalation: vapor)
NOAEC (Inhalation with up to 4.52 mg/l) = 4.52 mg/l; no increases in any tumor type observed.
IARC: Group 3 Not classifiable as to it's carcinogenicity to humans.

100-41-4 Ethylbenzene

Carcinogenicity: Positive (Test species: n/a)
Classified as Group 3B by IARC and Category A3 by ACGIH; the substance was therefore classified as a suspected human carcinogen (Category 2) by GHS-J.
### SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

#### Potential Health Effect(s):
- **May cause cancer.**
- **Not a known Carcinogen.**
- **May cause respiratory irritation.**
- **May cause damage to the unborn child.**
- **May cause respiratory irritation.**

#### Reproductive Toxicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Repr. Tox.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9 Naphtha (petroleum), hydrotreated heavy</td>
<td>not expected (Test species: n/a)</td>
<td>Not expected to be a reproductive toxicant. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 414 421 422. Reference: ExxonMobil SDS</td>
</tr>
<tr>
<td>108-88-3 Toluene</td>
<td>positive (Test species: n/a)</td>
<td>There were reproductive and/or developmental effects including increased incidence of natural abortion, abnormal development, and malformation of newborns observed after chronic exposure to the substance in humans. Meanwhile, there was evidence that it caused effects including increased incidences of foetal death, higher delayed ossification rate, a decrease and unossification of sternae, a shift in rib profile, excess ribs, retarded skeletal development, delayed reflex response, learning disability, early vaginal opening, and early testes descent at dosing levels not toxic to dams from rat and mouse teratogenicity tests. Meanwhile, it was listed as a teratogen by California 65. The substance was therefore classified as a suspected teratogen. Reference: GHS-J (2006), California Proposition 65 (2009), and ECHA (2012).</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>N/a (rat)</td>
<td>14% increase in incidence in pups with supernumerary ribs was observed at 1000 ppm dose level. Maternal effects in dams at this dose consisted of increases in liver (approximately 22%), kidney (approximately 10%), and spleen (approximately 10%) weights in the absence of histopathology changes. However, ECHA determined it was conclusive but not sufficient to make a conclusion. Reference: ECHA (2012).</td>
</tr>
</tbody>
</table>

#### Specific Target Organ Toxicity - Single Exposure

<table>
<thead>
<tr>
<th>Substance</th>
<th>STOT SINGLE</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9 Naphtha (petroleum), hydrotreated heavy</td>
<td>negative (Test species: n/a)</td>
<td>Not expected to cause organ damage from a single exposure. Reference: ExxonMobil SDS</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>(No data available)</td>
<td></td>
</tr>
</tbody>
</table>

#### Specific Target Organ Toxicity - Repeated Exposure

<table>
<thead>
<tr>
<th>Substance</th>
<th>STOT REPEATED</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9 Naphtha (petroleum), hydrotreated heavy</td>
<td>negative (Test species: n/a)</td>
<td>Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 408 413 422. Reference: ExxonMobil SDS</td>
</tr>
</tbody>
</table>

---

**Potential Health Effect(s):**
- May cause cancer.
- Not a known Carcinogen.
- May cause respiratory irritation.
- May cause damage to the unborn child.
SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

**108-88-3 Toluene**

<table>
<thead>
<tr>
<th>STOT-Repeated</th>
<th>(Human) (Nervous system, kidney, and liver via inhalation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOAEL (mouse; OECD TG 453; Inhalation: vapors; up to 750 ppm (3.25 mg/l) for 104 weeks) = 75 ppm: effects in liver, lung, thyroid and pituitary pathology were observed in mice that inhaled ≥ 250 ppm (1.08 mg/L) of the substance for 2 years. NOAEL (rat; OECD TG 407; oral with up to 750 mg/kg/day for 28 days) = 75 mg/kg bw/day; increased liver weight and hepatocellular hypertrophy at higher dose levels.</td>
<td></td>
</tr>
</tbody>
</table>

**100-41-4 Ethylbenzene**

<table>
<thead>
<tr>
<th>STOT-Repeated</th>
<th>(Rats and Mice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target: Liver, Lung, and Systemic effects (Category 2).</td>
<td></td>
</tr>
<tr>
<td>NOAEL (rat; OECD TG 407; oral with up to 750 mg/kg/day for 28 days) = 75 mg/kg bw/day; increased liver weight and hepatocellular hypertrophy at higher dose levels.</td>
<td></td>
</tr>
</tbody>
</table>

**Potential Health Effect(s):** May cause damage to organs through prolonged or repeated exposure.

**Aspiration Hazard**

**64742-48-9 Naphtha (petroleum), hydrotreated heavy**

Aspiration Hazard (Test species: n/a) May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material. 
Reference: ExxonMobil SDS

**108-88-3 Toluene**

Aspiration Hazard positive (Test species: n/a) (As a hydrocarbon with viscosity of 0.65 mm²/s) 
As a hydrocarbon with dynamic viscosity of 0.65 mm²/s (25 °C), the substance was classified as a Category 1 aspiration hazard. 

**100-41-4 Ethylbenzene**

Aspiration Hazard (Test species: n/a) The substance may cause chemical pneumonia due to mis-swallowing based on NIOSH ICSC. Meanwhile, the substance was a hydrocarbon with the kinematic viscosity of 0.74mm²/s at 25 °C. Thus, the substance was classified as a Category 1 aspiration hazard based on the criteria. 

**Potential Health Effect(s):** May be fatal if swallowed and enters airways.
If aspirated, causes coughing, gagging, distress, and rapidly developing pulmonary edema.

**Additional Information** No further relevant information.
### SECTION 12: ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th><strong>Aquatic Environmental Toxicity</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>64742-48-9 Naphtha (petroleum), hydrotreated heavy</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Crustacean Toxicity</strong></td>
<td>1000 mg/l (Daphnia magna (water flea))</td>
</tr>
<tr>
<td><strong>100-88-3 Toluene</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Algae Toxicity</strong></td>
<td>0.207 mg/l (Chlorella vulgaris) (EC50 (3 hrs))</td>
</tr>
<tr>
<td></td>
<td>1.34 mg/l (Chlamydomonas angulosa) (EC50 (3 hrs))</td>
</tr>
<tr>
<td><strong>Crustacean Toxicity</strong></td>
<td>3.78 mg/l (Ceriodaphnia dubia) (LC50 (48 hrs); US EPA 600/4-91-003)</td>
</tr>
<tr>
<td></td>
<td>NOEC (7 days) = 0.74 mg/l</td>
</tr>
<tr>
<td></td>
<td>Based on the rapid degradability, the substance is not classified as a chronic hazard. Based on the acute LC50 &lt;10 mg/l, the substance is classified as an Acute-2 environmental hazard.</td>
</tr>
<tr>
<td><strong>Fish Toxicity</strong></td>
<td>5.5 mg/l (Oncorhynchus mykiss (Rainbow trout)) (LC50 (96 hrs))</td>
</tr>
<tr>
<td></td>
<td>1.39 mg/l (Oncorhynchus kisutch) (NOEC (40 days); growth rate)</td>
</tr>
</tbody>
</table>

| **100-41-4 Ethylbenzene** |  |
| **Algae Toxicity** | 3.6 mg/l (Selenastrum capricornum) (LC50 (96 hrs); growth rate, TSCA 797.1050) |
| | 7.7 mg/l (Skeletonema costatum) (LC50 (96 hrs); growth rate, TSCA 797.1050) |
| **Crustacean Toxicity** | 1.81 - 2.38 mg/l (Daphnia magna (water flea)) (EC50 (48 hrs); static) |
| | 3.2 mg/l (Ceriodaphnia dubia) LC50(48 hrs; static; EPA Whole Effluent Testing Program method) |
| **Fish Toxicity** | 4.2 mg/l (Oncorhynchus mykiss (Rainbow trout)) (LC50 (96 hrs); OECD TG 203) |
| | 5.1 mg/l (Menidia menidia) (LC50 (96 hrs); flow-through, TSCA 797.1440) |
| | 12.1 mg/l (Pimephales promelas) (LC50 (96 hrs); flow-through) |
| | Based on the acute LC50 < 10 mg/l and the non-rapid degradability, the substance was classified as a chronic-2 environmental hazard. |

### Degradability and Stability

| **108-88-3 Toluene** |  |
| **Biodegradation** | readily biodegradable (Test species: n/a) (Biodegradation (OECD TG 301C) = 100%) |
| | Biodegradation (Direct analysis from GC; Chemical conc. 100 ppm; 2 weeks) = 100% |
| | The substance is readily biodegradable. |
| **Persistence** | (Test species: n/a) (The substance is not persistent) |
| | Although it was concluded to be persistent by Canada DSL, the substance was approved to be readily biodegradable and fast photodegradable based on ECHA; assessment is not possible without further information. |
| **Photodegradation** | 6.19E-12 cm²/molecule-sec (OH radical) |
| | Half-life (5E5 OH/cm³) = 2.59 days |
SECTION 12: ECOLOGICAL INFORMATION (CONTINUED)

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>Biodegradation: non-biodegrad. (Test species: n/a) (OECD TG 301C; Chemical conc. 100ppm; 4 weeks) Biodegradation (Direct analysis from HPLC) = 0% Biodegradation (Indirect analysis from BOD) = 0% The substance is non-biodegradable. Reference: CHIRI (2011).</td>
</tr>
<tr>
<td>100-88-3 Toluene</td>
<td>BCF: 90 (Leuciscus idus (ide or Orfe)) (The substance is not or low bioaccumulative) Koc: (No data available) LogPow: 2.73 (Test species: n/a) (pH=7, at 20 °C) Reference: Canada DSL (2007) and ECHA (2011).</td>
</tr>
</tbody>
</table>

Bioaccumulation and Distribution

- **Additional Information**: No further relevant information.

Degradability and Bioaccumulation Assessment: Non-rapidly degradable, and low bioaccumulative.

SECTION 13: DISPOSAL CONSIDERATIONS

- **Hazardous Waste List**
  - **Description**: The product has not been evaluated for its hazards when disposed as a waste by RCRA. However, it is necessary to contain and dispose of the product as a hazardous waste based on the Hazard Identification in Section 2.

- **RCRA Waste**:
  - 108-88-3 Toluene U220 40-50%
  - 100-41-4 Ethylbenzene D001 0.1-<1%
SECTION 13: DISPOSAL CONSIDERATIONS (CONTINUED)

- **Waste Treatment Recommendation:**
  Generation of waste should be avoided or minimized wherever possible.
  Chemical waste, even small quantities, is neither allowed to be poured down drains, sewage system or waterways; nor disposed with household garbage.
  Dispose of contents/containers in accordance with local, regional, national, and international regulations.

- **Unused and Uncontaminated Packagings**
  - **Recommendation** Dispose of according to your local waste regulations.

SECTION 14: TRANSPORT INFORMATION

- **UN-Number**
  - **DOT, ADR, IMDG, IATA** UN1993

- **UN Proper Shipping Name**
  - **DOT, ADR, IMDG, IATA** Flammable liquids, n.o.s. (Toluene, Naphtha)

- **Transport hazard class(es)**
  - **DOT**
  - Class 3 Flammable liquids
  - Label 3

  - **ADR**
  - Class 3 (F1) Flammable liquids
  - Label 3

  - **IMDG, IATA**
  - Class 3 Flammable liquids
  - Label 3
MATERIAL SAFETY DATA SHEET

Product Name: PAINT THINNER

SECTION 14: TRANSPORT INFORMATION (CONTINUED)

- **Packing group**
  - DOT, ADR, IMDG, IATA
  - II

- **Environmental Hazards:**
  - Not applicable.

- **Special Precautions:**
  - Warning: Flammable liquids
  - Danger Code (Kemler):
    - 33
  - EMS Number:
    - F-E,S-E

- **Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code:**
  - Not applicable.

- **Transport/Additional Information:**
  - **DOT**
    - Quantity limitations:
      - On passenger aircraft/rail: 5 L
      - On cargo aircraft only: 60 L
  - **ADR**
    - Excepted quantities (EQ)
      - Code: E2
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml
  - **IMDG**
    - Limited quantities (LQ)
      - 1L
    - Excepted quantities (EQ)
      - Code: E2
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml

- **UN "Model Regulation":**
  - UN1993, Flammable liquids, n.o.s. (Toluene, Naphtha)
  - II

SECTION 15: REGULATORY INFORMATION

- **USA Regulation Lists**
  - SARA (Superfund Amendments and Reauthorization Act of 1986)
    - Section 302 (Extremely Hazardous Substances)
      - None of the ingredients is listed.
    - Section 313 (Toxics Release Inventory (TRI) reporting)
  - Section 311/312 (Hazardous Chemical Inventory Reporting)
    - 108-88-3 Toluene
      - 40-50%
    - 100-41-4 Ethylbenzene
      - 0.1-<1%
    - 71-43-2 Benzene
      - 0.1-<1%
    - 108-88-3 Toluene
      - A, C, F
      - 40-50%

MSDS Number: 226
Revision Date: 04/14/2015
Supersedes Date: 04/12/2012
SECTION 15: REGULATORY INFORMATION (CONTINUED)

- **Hazard Abbreviations for SARA 311/312**
  - A - Acute Health Hazard
  - C - Chronic Health Hazard
  - F - Fire Hazard
  - R - Reactive Hazard
  - S - Sudden Release of Pressure Hazard

- **TSCA (Toxic Substances Control Act)**
  All ingredients are listed.

- **Proposition 65**
  - **Chemicals Known to Cause Cancer**
    - 100-41-4 Ethylbenzene
    - 71-43-2 benzene
  - **Chemicals Known to Cause Reproductive Toxicity for Females**
    - 108-88-3 Toluene
  - **Chemicals Known to Cause Reproductive Toxicity for Males**
    - 71-43-2 benzene
  - **Chemicals Known to Cause Developmental Toxicity**
    - 108-88-3 Toluene
    - 71-43-2 benzene

- **Carcinogenic Categories**
  - **EPA (Environmental Protection Agency)**
    - 108-88-3 Toluene D
    - 100-41-4 Ethylbenzene D
    - 71-43-2 benzene A, K/L
  - **IARC (International Agency for Research on Cancer)**
    - 108-88-3 Toluene 3
    - 100-41-4 Ethylbenzene 2B
    - 71-43-2 benzene 1
  - **NTP (National Toxicology Program)**
    - 71-43-2 benzene K
  - **TLV (Threshold Limit Value Established by ACGIH)**
    - 108-88-3 Toluene A4
    - 100-41-4 Ethylbenzene A3
    - 71-43-2 benzene A1
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    - 71-43-2 benzene
SECTION 15: REGULATORY INFORMATION (CONTINUED)

- **International Regulation Lists**
  - **Canadian Domestic Substance Listings:**
    - All ingredients are listed.
  - **Canadian Ingredient Disclosure list (limit 0.1%)**
    - 100-41-4 Ethylbenzene
    - 71-43-2 benzene
  - **Canadian Ingredient Disclosure list (limit 1%)**
    - 108-88-3 Toluene
  - **Chinese Chemical Inventory of Existing Chemical Substances:**
    - All ingredients are listed.
  - **Japanese Existing and New Chemical Substance List:**
    - 108-88-3 Toluene
    - 100-41-4 Ethylbenzene
    - 71-43-2 benzene
  - **Korean Existing Chemical Inventory:**
    - All ingredients are listed.
  - **European Pre-registered substances:**
    - All ingredients are listed.
  - **REACH - Substances of Very High Concern (SVHC) List:**
    - None of the ingredients is listed.
  - **Restriction of Hazardous Substances Directive (RoHS) list:**
    - None of the ingredients is listed.

SECTION 16- OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department Issuing (M)SDS:** Product Safety Department
  - **Abbreviations and acronyms:**
    - ACGIH: American Conference of Governmental Industrial Hygienists
    - ACToR: US EPA Aggregated Computational Toxicology Resource
    - ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
    - BCF: Bioconcentration Factor
    - CAS: Chemical Abstracts Service (division of the American Chemical Society)
    - CCRIS: US NLM TOXNET Chemical Carcinogenesis Research Information System
    - CHIRP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform
    - DOT: US Department of Transportation
    - DSL: Canada Domestic Substance List
    - ESIS: European Chemical Substances Information System

Part Number(s): 10-6702
SECTION 16- OTHER INFORMATION (CONTINUED)

HSDB: US NLM TOXNET Hazardous Substances Database
HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database
IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)
IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA)
ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)
ICSC: International Chemical Safety Cards
Koc: Partition coefficient, soil Organic Carbon to water
LC50/LD50: Lethal Concentration/Dose, 50 percent
N/a: Not available or Not applicable
NFPA: US National Fire Protection Association
NIOSH: US National Institute of Occupational Safety and Health
NITE: National Institute of Technology and Evaluation, Japan
OECD: Organisation for Economic Co-operation and Development
OSHA: US Occupational Safety and Health Administration
P: Marine Pollutant
RCRA: Resource Conservation and Recovery Act (USA)
REACH: EU Registry, Evaluation and Authorisation of Chemicals
RID: the Regulations Concerning the International Carriage of Dangerous Goods by Rail; published by the Central Office for International Carriage by Rail (OTIF)
RTDG: the Recommendations on the Transport of Dangerous Goods by United Nations (UN)
RTECS: US Registry of Toxic Effects of Chemical Substances
SARA: US Superfund Amendments and Reauthorization Act
SIDS: OECD existing chemicals Screening Information Data Sets
SVHC: EU ECHA Substance of Very High Concern
TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)
TOXLINE: US NLM bibliographic database search system
TSCA: US Toxic Substance Control Act

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