1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
- Trade name: Rislone® Ethanol Fuel Treatment

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier:
  Rislone
  P.O. Box 187
  Holly, MI 48442 USA
  Phone: (810) 603-1321

1.4 Emergency telephone number:
- ChemTel Inc.
  (800)255-3924, +1 (813)248-0585

2 Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

  ! GHS02 flame
  Flam. LIq. 3   H226 Flammable liquid and vapour.

  ! GHS08 health hazard
  Asp. Tox. 1   H304 May be fatal if swallowed and enters airways.

  ! GHS05 corrosion
  Skin Corr. 1B  H314 Causes severe skin burns and eye damage.
  Aquatic Chronic 3  H412 Harmful to aquatic life with long lasting effects.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

  ! C; Corrosive
  R34: Causes burns.

  ! Xn; Harmful
  R65: Harmful: may cause lung damage if swallowed.

  ! Xi; Irritant

(Contd. on page 2)
Trade name: Rislone® Ethanol Fuel Treatment

(Contd. of page 1)

R37: Irritating to respiratory system.
R10-52/53: Flammable. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
· Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

· 2.2 Label elements
· Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
· Hazard pictograms

GHS02 GHS05 GHS08

· Signal word Danger
· Hazard-determining components of labelling:
  Polyetheramine
  Stoddard solvent
  Distillates (petroleum), hydrotreated light
· Hazard statements
  H226 Flammable liquid and vapour.
  H314 Causes severe skin burns and eye damage.
  H304 May be fatal if swallowed and enters airways.
  H412 Harmful to aquatic life with long lasting effects.
· Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  P280 Wear protective gloves and eye protection.
  P233 Keep container tightly closed.
  P260 Do not breathe mist/vapours/spray.
  P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P403+P235 Store in a well-ventilated place. Keep cool.

(Contd. on page 3)
Trade name: Rislone® Ethanol Fuel Treatment

- Hazard description:
- WHMIS-symbols:
  - B3 - Combustible liquid
  - D2B - Toxic material causing other toxic effects
  - E - Corrosive material

- NFPA ratings (scale 0 - 4)
  - Health = 2
  - Fire = 2
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - Health = 2
  - Fire = 2
  - Reactivity = 0

* - Indicates a long term health hazard from repeated or prolonged exposures.

- HMIS Long Term Health Hazard Substances
  - None of the ingredients is listed.

2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

3.2 Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 8052-41-3</td>
</tr>
<tr>
<td>EINECS: 232-489-3</td>
</tr>
<tr>
<td>Index number: 649-345-00-4</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Trade name: Rislone® Ethanol Fuel Treatment

<table>
<thead>
<tr>
<th>CAS: 64742-47-8</th>
<th>Distillates (petroleum), hydrotreated light</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 265-149-8</td>
<td>Xn R65</td>
</tr>
<tr>
<td>Index number: 649-422-00-2</td>
<td>Flam. Liqu. 3, H226</td>
</tr>
<tr>
<td></td>
<td>Asp. Tox. 1, H304</td>
</tr>
<tr>
<td>CAS: 9046-10-0</td>
<td>Polyetheramine</td>
</tr>
<tr>
<td></td>
<td>C R34; Xn R21/22</td>
</tr>
<tr>
<td></td>
<td>R52/53</td>
</tr>
<tr>
<td></td>
<td>Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H302; Acute Tox. 4, H312</td>
</tr>
<tr>
<td></td>
<td>Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>CAS: 122-39-4</td>
<td>diphenylamine</td>
</tr>
<tr>
<td>EINECS: 204-539-4</td>
<td>T R23/24/25; N R50/53</td>
</tr>
<tr>
<td>Index number: 612-026-00-5</td>
<td>Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331</td>
</tr>
<tr>
<td></td>
<td>STOT RE 2, H373</td>
</tr>
<tr>
<td></td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

- **4.1 Description of first aid measures**
  
  **General information:**
  
  Immediately remove any clothing soiled by the product.
  
  In case of irregular breathing or respiratory arrest provide artificial respiration.
  
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  
  **After inhalation:**
  
  Supply fresh air.
  
  Seek immediate medical advice.
  
  In case of unconsciousness place patient stably in side position for transportation.
  
  **After skin contact:**
  
  Immediately wash with water and soap and rinse thoroughly.
  
  If skin irritation continues, consult a doctor.
  
  **After eye contact:**
  
  Protect unharmed eye.
  
  Rinse opened eye for several minutes under running water.
  
  Remove contact lenses if worn, if possible.
  
  Rinse opened eye for several minutes under running water. Then consult a doctor.
  
  **After swallowing:**
  
  Rinse out mouth and then drink plenty of water.
  
  Do not induce vomiting; call for medical help immediately.
  
  A person vomiting while laying on their back should be turned onto their side.

- **4.2 Most important symptoms and effects, both acute and delayed**
  
  Coughing
  
  Dizziness
  
  Breathing difficulty
  
  Headache
Trade name: Rislone® Ethanol Fuel Treatment

- Gastric or intestinal disorders
  - **Hazards**
    - Danger of pulmonary oedema.
    - Danger of impaired breathing.
    - Danger of gastric perforation.
    - Condition may deteriorate with alcohol consumption.
  - **4.3 Indication of any immediate medical attention and special treatment needed**
    - If swallowed or in case of vomiting, danger of entering the lungs.
    - Medical supervision for at least 48 hours.
    - If necessary oxygen respiration treatment.
    - Later observation for pneumonia and pulmonary oedema.
    - Treat skin and mucous membrane with antihistamine and corticoid preparations.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
  - Alcohol resistant foam
  - Fire-extinguishing powder
  - Carbon dioxide
  - Gaseous extinguishing agents
  - Water haze or fog
- **For safety reasons unsuitable extinguishing agents:**
  - Water spray
  - Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
  - In case of fire, the following can be released:
  - Carbon monoxide (CO)
  - Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
  - **Protective equipment:**
    - Wear self-contained respiratory protective device.
    - Wear fully protective suit.
  - **Additional information** Cool endangered receptacles with water fog or haze.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - Use respiratory protective device against the effects of fumes/dust/aerosol.
  - Wear protective equipment. Keep unprotected persons away.
  - Ensure adequate ventilation
  - Keep away from ignition sources.
  - Protect from heat.
  - Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:**
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewers/surface or ground water.

(Contd. of page 4)
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Printing date 12/19/2012 Revision: 12/17/2012

Trade name: Rislone® Ethanol Fuel Treatment

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling
Open and handle receptacle with care.
Prevent formation of aerosols.
Keep away from heat and direct sunlight.
Avoid splashes or spray in enclosed areas.
Use only in well ventilated areas.

Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Provide ventilation for receptacles.
Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:
Store away from foodstuffs.
Store away from oxidizing agents.
Do not store together with acids.

Further information about storage conditions:
Store in cool, dry conditions in well sealed receptacles.
Keep container tightly sealed.

7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

8052-41-3 Stoddard solvent

| PEL (USA) | 2900 mg/m³, 500 ppm |
| REL (USA) | Short-term value: C 1800* mg/m³  |
| Long-term value: 350 mg/m³  |
| *15-min |

(Contd. on page 7)
Safety Data Sheet  
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 12/19/2012  
Revision: 12/17/2012

Trade name: Rislone® Ethanol Fuel Treatment

<table>
<thead>
<tr>
<th>TLV (USA)</th>
<th>525 mg/m³, 100 ppm</th>
</tr>
</thead>
</table>
| EL (Canada) | Short-term value: 580 mg/m³  
| Long-term value: 290 mg/m³  |
| EV (Canada) | 525 mg/m³  |

64742-47-8 Distillates (petroleum), hydrotreated light

| EL (Canada) | 200 mg/m³ |
| Skin |

122-39-4 diphenylamine

| REL (USA) | 10 mg/m³ |
| TLV (USA) | 10 mg/m³ |
| EL (Canada) | 10 mg/m³ |
| EV (Canada) | 10 mg/m³ |

- DNELs No further relevant information available.
- PNECs No further relevant information available.
- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:
- General protective and hygienic measures:
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing.
  Wash hands before breaks and at the end of work.
  Store protective clothing separately.
  Do not inhale gases / fumes / aerosols.
  Avoid contact with the eyes and skin.

Respiratory protection:
  Use suitable respiratory protective device in case of insufficient ventilation.
  Use suitable respiratory protective device when aerosol or mist is formed.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 8)
### 9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

**General Information**
- **Appearance:**
  - Form: Liquid
  - Colour: Amber coloured
- **Odour:** Petroleum-like
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.
- **Flash point:** 110 °F / 43 °C
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 410 °F / 210 °C
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**
  - Lower: 0.5 Vol %
  - Upper: 6.5 Vol %
- **Vapour pressure:** Not determined.
- **Density at 20 °C:** 0.8 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not determined.

(Contd. on page 9)
Trade name: Rislone® Ethanol Fuel Treatment

- Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Solvent content:
  - Organic solvents: Not determined.
- Solids content: Not determined.
- 9.2 Other information: No further relevant information available.

10 Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.
- 10.3 Possibility of hazardous reactions
  Flammable.
  Develops readily flammable gases/fumes.
  Reacts with strong acids.
  Used empty containers may contain product gases which form explosive mixtures with air.
  Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.
  Reacts with peroxides and other radical forming substances.
  Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
- 10.4 Conditions to avoid
  Keep ignition sources away - Do not smoke.
  Store away from oxidizing agents.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:
  Hydrocarbons
  Carbon monoxide and carbon dioxide
  Nitrogen oxides

11 Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values relevant for classification:
    122-39-4 diphenylamine
    Oral LD50 1120 mg/kg (rat)
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Trade name: Rislone® Ethanol Fuel Treatment

- **Primary irritant effect:**
  - **on the skin:** Caustic effect on skin and mucous membranes.
  - **on the eye:** Strong irritant with the danger of severe eye injury.
  - **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**
  Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.
- **Additional toxicological information:**
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  - Corrosive
  - Irritant
  - Vapours have narcotic effect.
- **Acute effects (acute toxicity, irritation and corrosivity)**
  Vapours have narcotic effect.
  Danger through skin adsorption.

### 12 Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity:** The product contains materials that are harmful to the environment.
- **12.2 Persistence and degradability** The product is partly biodegradable. Significant residuals remain.
- **12.3 Bioaccumulative potential** May be accumulated in organism
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxic effects:**
  - **Remark:** Due to mechanical actions of the product (e.g. agglutinations) damages may occur.
- **Additional ecological information:**
  - **General notes:**
    This statement was deduced from the properties of the single components.
    Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
    Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**
    Contact waste processors for recycling information. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

(Contd. on page 11)
## 14 Transport information

### 14.1 UN-Number

<table>
<thead>
<tr>
<th>DOT</th>
<th>N/A</th>
</tr>
</thead>
</table>

Reclassified as combustible under US DOT regulation 49CFR173.150(f) For shipments by ground only. No labeling required for single packages under 119 US gal / 450 L. Shipments by air or vessel use IATA or IMDG classifications as required.

### ADR, IMDG, IATA

<table>
<thead>
<tr>
<th>ADR</th>
<th>UN1993</th>
</tr>
</thead>
</table>

### 14.2 UN proper shipping name

<table>
<thead>
<tr>
<th>DOT</th>
<th>Reclassified as combustible under US DOT regulation 49CFR173.150(f) For shipments by ground only. No labeling required for single packages under 119 US gal / 450 L. Shipments by air or vessel use IATA or IMDG classifications as required.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>1993 FLAMMABLE LIQUID, N.O.S. (PETROLEUM DISTILLATES)</td>
</tr>
<tr>
<td>IMDG, IATA</td>
<td>FLAMMABLE LIQUID, N.O.S. (PETROLEUM DISTILLATES)</td>
</tr>
</tbody>
</table>

### 14.3 Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
<th>N/A</th>
</tr>
</thead>
</table>

### ADR

- **Class**: 3 (F1) Flammable liquids.  
  - **Label**: 3

### IMDG, IATA

- **Class**: 3 Flammable liquids.  
  - **Label**: 3

### 14.4 Packing group

<table>
<thead>
<tr>
<th>DOT</th>
<th>N/A</th>
</tr>
</thead>
</table>

(Contd. on page 12)
## 15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - United States (USA)
  - SARA

  - **Section 355 (extremely hazardous substances):**
    None of the ingredients is listed.

  - **Section 313 (Specific toxic chemical listings):**
    | Code    | Chemical          |
    |---------|-------------------|
    | 122-39-4| diphenylamine     |
    | 100-41-4| ethylbenzene      |

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

- **Proposition 65 (California):**
  - **Chemicals known to cause cancer:**
    Contains trace quantities of substances known to the State of California to cause cancer.
    | Code    | Chemical          |
    |---------|-------------------|
    | 100-41-4| ethylbenzene      |

- **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  None of the ingredients is listed.
### 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.

**Relevant phrases**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed.</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways.</td>
</tr>
<tr>
<td>H311</td>
<td>Toxic in contact with skin.</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin.</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>R21/22</td>
<td>Harmful in contact with skin and if swallowed.</td>
</tr>
<tr>
<td>R23/24/25</td>
<td>Toxic by inhalation, in contact with skin and if swallowed.</td>
</tr>
<tr>
<td>R33</td>
<td>Danger of cumulative effects.</td>
</tr>
<tr>
<td>R34</td>
<td>Causes burns.</td>
</tr>
</tbody>
</table>
Trade name: Rislone® Ethanol Fuel Treatment

(Contd. of page 13)

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.

- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - WHMIS: Workplace Hazardous Materials Information System (Canada)
  - DNEL: Derived No-Effect Level (REACH)
  - PNEC: Predicted No-Effect Concentration (REACH)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent

- **Sources**
  - SDS Prepared by:
    - ChemTel Inc.
    - 1305 North Florida Avenue
    - Tampa, Florida USA 33602-2902
    - Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
    - Website: www.chemtelinc.com