INGERSOLL RAND encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Product name: Ingersoll Rand Techrol Gold TL

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Selection of the appropriate polyglycol product for a specific application requires knowledge of the fluid requirements of the application, awareness of the most important of these requirements, and a match-up with the properties of the various polyglycol materials. Polyglycol products can be formulated for use in numerous industry applications such as hydraulic fluids, quenchants, compressor and refrigeration lubricants, heat transfer fluids, machinery lubricants, solder assist fluids, metalworking lubricants, textile finishing, etc.

1.3 Details of the supplier of the safety data sheet
COMPANY IDENTIFICATION
INGERSOLL RAND
800D BEATY ST
DAVIDSON, NC 28036
UNITED STATES

Customer Information Number: +01 704-655-4000

1.4 EMERGENCY TELEPHONE NUMBER
U.S. 24-Hour Emergency #: 800-424-9300
Outside U.S. Emergency #: +01 703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.


Supplemental information
EUH210 Safety data sheet available on request.

2.3 Other hazards
This product contains no substances assessed to be PBT or vPvB at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures
This product is a mixture.

<table>
<thead>
<tr>
<th>CASRN / EC-No. / Index-No.</th>
<th>REACH Registration Number</th>
<th>Concentration</th>
<th>Component</th>
<th>Classification: REGULATION (EC) No 1272/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASRN Confidential EC-No. Confidential Index-No. -</td>
<td>-</td>
<td>&gt;= 50,0 - &lt;= 60,0 %</td>
<td>Alcohol alkoxylate</td>
<td>Not classified</td>
</tr>
<tr>
<td>CASRN Confidential EC-No. Confidential Index-No. -</td>
<td>-</td>
<td>&gt;= 30,0 - &lt;= 40,0 %</td>
<td>Polyalkylene glycol</td>
<td>Not classified</td>
</tr>
<tr>
<td>CASRN Confidential EC-No. Confidential Index-No. -</td>
<td>-</td>
<td>&gt;= 5,0 - &lt;= 15,0 %</td>
<td>Pentaerythritol ester</td>
<td>Not classified</td>
</tr>
<tr>
<td>CASRN 68411-46-1 EC-No. 270-128-1 Index-No. -</td>
<td>-</td>
<td>&gt;= 1,0 - &lt;= 5,0 %</td>
<td>4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline</td>
<td>Aquatic Chronic - 3 - H412</td>
</tr>
</tbody>
</table>

If present in this product, any not classified components disclosed above for which no country specific OEL value(s) is(are) indicated under Section 8, are being disclosed as voluntarily disclosed components.

For the full text of the H-Statements mentioned in this Section, see Section 16.
SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures
General advice:
If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin contact: Wash off with plenty of water. Suitable emergency safety shower facility should be available in work area.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed:
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

4.3 Indication of any immediate medical attention and special treatment needed
Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water fog or fine spray.. Dry chemical fire extinguishers.. Carbon dioxide fire extinguishers.. Foam.. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective..

Unsuitable extinguishing media: Do not use direct water stream.. May spread fire..

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.. Combustion products may include and are not limited to:. Carbon monoxide.. Carbon dioxide..

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation.. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids..
5.3 Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry.
Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

---

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 **Personal precautions, protective equipment and emergency procedures:** Isolate area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to section 7, Handling, for additional precautionary measures. Keep upwind of spill. Keep unnecessary and unprotected personnel from entering the area.

6.2 **Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

6.3 **Methods and materials for containment and cleaning up:** Contain spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

6.4 **Reference to other sections:** References to other sections, if applicable, have been provided in the previous sub-sections.

---

**SECTION 7: HANDLING AND STORAGE**

7.1 **Precautions for safe handling:** Avoid contact with eyes. Do not swallow. Wash thoroughly after handling. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

7.2 **Conditions for safe storage, including any incompatibilities:** Store in the following material(s):
316 stainless steel. Carbon steel. Glass-lined container. Polypropylene. Polyethylene-lined container. Stainless steel. Teflon. This material may soften and lift certain paint and surface coatings. Use product promptly after opening. Store in original unopened container. Unopened containers of material stored beyond the recommended shelf life should be retested against the sales specifications before use. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.

7.3 **Specific end use(s):** See the technical data sheet on this product for further information.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Derived No Effect Level
4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline

Workers

<table>
<thead>
<tr>
<th></th>
<th>Acute systemic effects</th>
<th>Acute local effects</th>
<th>Long-term systemic effects</th>
<th>Long-term local effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dermal</td>
<td>Inhalation</td>
<td>Dermal</td>
<td>Inhalation</td>
</tr>
<tr>
<td></td>
<td>n.a.</td>
<td>n.a.</td>
<td>25 mg/kg bw/day</td>
<td>44 mg/m³</td>
</tr>
</tbody>
</table>

Consumers

<table>
<thead>
<tr>
<th></th>
<th>Acute systemic effects</th>
<th>Acute local effects</th>
<th>Long-term systemic effects</th>
<th>Long-term local effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dermal</td>
<td>Inhalation</td>
<td>Oral</td>
<td>Dermal</td>
</tr>
<tr>
<td></td>
<td>n.a.</td>
<td>n.a.</td>
<td>25 mg/kg bw/day</td>
<td>21 mg/m³</td>
</tr>
</tbody>
</table>

Predicted No Effect Concentration
4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline

<table>
<thead>
<tr>
<th>Compartment</th>
<th>PNEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh water</td>
<td>0,051 mg/l</td>
</tr>
<tr>
<td>Marine water</td>
<td>0,0051 mg/l</td>
</tr>
<tr>
<td>Intermittent use/release</td>
<td>0,51 mg/l</td>
</tr>
<tr>
<td>Sewage treatment plant</td>
<td>10 mg/l</td>
</tr>
<tr>
<td>Fresh water sediment</td>
<td>0,446 mg/kg</td>
</tr>
<tr>
<td>Marine sediment</td>
<td>0,045 mg/kg</td>
</tr>
<tr>
<td>Soil</td>
<td>1,76 mg/kg</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

Skin protection

Hand protection: Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is
recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2 (meeting standard EN 14387).

**Environmental exposure controls**
See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>mild</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No test data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>5.0 - 8.0 DOWM 101495</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No test data available</td>
</tr>
<tr>
<td>Boiling point (760 mmHg)</td>
<td>decomposes prior to boiling</td>
</tr>
<tr>
<td>Flash point</td>
<td>257 °C Cleveland Open Cup ASTM D92</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>No test data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable to liquids</td>
</tr>
<tr>
<td>Flammability (liquids)</td>
<td>Not expected to be a static-accumulating flammable liquid.</td>
</tr>
</tbody>
</table>
### Lower explosion limit
No test data available

### Upper explosion limit
No test data available

### Vapor Pressure
negligible

### Relative Vapor Density (air = 1)
No test data available

### Relative Density (water = 1)
0.9353 at 25 °C Measured

### Water solubility
insoluble

### Partition coefficient: n-octanol/water
No data available

### Auto-ignition temperature
No test data available

### Decomposition temperature
No test data available

### Kinematic Viscosity
35.9 - 38.7 cSt at 40 °C ASTM D7042

### Explosive properties
No test data available

### Oxidizing properties
No test data available

### Molecular weight
No data available

**NOTE:** The physical data presented above are typical values and should not be construed as a specification.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity
No data available

#### 10.2 Chemical stability
Thermally stable at typical use temperatures.

#### 10.3 Possibility of hazardous reactions
Polymerization will not occur.

#### 10.4 Conditions to avoid
Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

#### 10.5 Incompatible materials
Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

#### 10.6 Hazardous decomposition products
Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aldehydes. Alcohols. Ethers. Hydrocarbons. Ketones. Organic acids. Polymer fragments.

### SECTION 11: TOXICOLOGICAL INFORMATION

*Toxicological information appears in this section when such data is available.*

#### 11.1 Information on toxicological effects

**Information on likely routes of exposure**
Ingestion, Inhalation, Skin contact, Eye contact.

**Acute toxicity** (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)
Acute oral toxicity
Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):
LD50, Rat, > 2 000 mg/kg Estimated.

Information for components:

**Alcohol alkoxylate**
LD50, Rat, > 2 000 mg/kg No deaths occurred at this concentration.

**Polyalkylene glycol**
LD50, Rat, > 2 000 mg/kg No deaths occurred at this concentration.

**Pentaerythritol ester**
For similar material(s): LD50, Rat, > 5 000 mg/kg

Acute dermal toxicity
Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s):
LD50, Rat, > 2 000 mg/kg Estimated.

Information for components:

**Alcohol alkoxylate**
LD50, Rat, > 2 000 mg/kg No deaths occurred at this concentration.

**Polyalkylene glycol**
The dermal LD50 has not been determined.

Based on information for a similar material: LD50, Rat, > 2 000 mg/kg Estimated. No deaths occurred at this concentration.

**Pentaerythritol ester**
Based on information for a similar material: LD50, Rat, male and female, > 2 000 mg/kg No deaths occurred at this concentration.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
LD50, Rat, male and female, > 2 000 mg/kg No deaths occurred at this concentration.

Acute inhalation toxicity
At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous. Vapor from heated material or mist may cause respiratory irritation.

As product: The LC50 has not been determined.
Information for components:

**Alcohol alkoxylate**
As product: The LC50 has not been determined.

**Polyalkylene glycol**
As product: The LC50 has not been determined.

**Pentaerythritol ester**
The LC50 has not been determined.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
The LC50 has not been determined.

**Skin corrosion/irritation**
Brief contact may cause slight skin irritation with local redness.

Information for components:

**Alcohol alkoxylate**
Brief contact may cause slight skin irritation with local redness.

**Polyalkylene glycol**
Brief contact may cause slight skin irritation with local redness.

**Pentaerythritol ester**
Brief contact is essentially nonirritating to skin.
Prolonged contact may cause slight skin irritation with local redness.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
Brief contact may cause slight skin irritation with local redness.

**Serious eye damage/eye irritation**
May cause slight temporary eye irritation.
May cause slight temporary corneal injury.

Information for components:

**Alcohol alkoxylate**
May cause slight temporary eye irritation.
Corneal injury is unlikely.

**Polyalkylene glycol**
May cause slight eye irritation.
May cause slight temporary corneal injury.

**Pentaerythritol ester**
May cause slight eye irritation.
Corneal injury is unlikely.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
Essentially nonirritating to eyes.
Sensitization
Contains component(s) which did not cause allergic skin sensitization in guinea pigs.

For respiratory sensitization:
No specific, relevant data available for assessment.

Information for components:

**Alcohol alkoxylate**
For skin sensitization:
No relevant data found.

For respiratory sensitization:
No relevant data found.

**Polyalkylene glycol**
For skin sensitization:
No relevant data found.

For respiratory sensitization:
No relevant data found.

**Pentaerythritol ester**
For skin sensitization:
No relevant data found.

For respiratory sensitization:
No relevant data found.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Information for components:

**Alcohol alkoxylate**
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Polyalkylene glycol**
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Pentaerythritol ester**
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
Available data are inadequate to determine single exposure specific target organ toxicity.

Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.
Information for components:

Alcohol alkoxylate
Based on physical properties, not likely to be an aspiration hazard.

Polyalkylene glycol
Based on physical properties, not likely to be an aspiration hazard.

Pentaerythritol ester
Based on physical properties, not likely to be an aspiration hazard.

4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline
Based on physical properties, not likely to be an aspiration hazard.

Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

Specific Target Organ Systemic Toxicity (Repeated Exposure)
No specific, relevant data available for assessment.

Information for components:

Alcohol alkoxylate
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Polyalkylene glycol
No relevant data found.

Pentaerythritol ester
No relevant data found.

4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity
No specific, relevant data available for assessment.

Information for components:

Alcohol alkoxylate
No relevant data found.

Polyalkylene glycol
No relevant data found.

Pentaerythritol ester
No relevant data found.

4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline
No relevant data found.
Teratogenicity
Contains component(s) which did not cause birth defects or any other fetal effects in lab animals.

Information for components:

**Alcohol alkoxylate**
No relevant data found.

**Polyalkylene glycol**
No relevant data found.

**Pentaerythritol ester**
No relevant data found.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive toxicity
Contains component(s) which did not interfere with fertility in animal studies.

Information for components:

**Alcohol alkoxylate**
No relevant data found.

**Polyalkylene glycol**
No relevant data found.

**Pentaerythritol ester**
No relevant data found.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
In animal studies, did not interfere with fertility.

Mutagenicity
In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity studies in animals were negative for component(s) tested.

Information for components:

**Alcohol alkoxylate**
In vitro genetic toxicity studies were negative.

**Polyalkylene glycol**
No relevant data found.

**Pentaerythritol ester**
No relevant data found.

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**
For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.
SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

12.1 Toxicity

**Alcohol alkoxylate**

**Acute toxicity to fish**
Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).
LC50, Oncorhynchus mykiss (rainbow trout), Static, 96 Hour, > 105 mg/l

**Acute toxicity to aquatic invertebrates**
EL50, Daphnia magna (Water flea), static test, 48 Hour, > 1 000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
ErC50, Pseudokirchneriella subcapitata (green algae), Static, 72 Hour, Growth rate inhibition, > 100 mg/l

**Polyalkylene glycol**

**Acute toxicity to fish**
Based on information for a similar material:
Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

**Acute toxicity to aquatic invertebrates**
Based on information for a similar material:
EL50, Daphnia magna, Static, 48 Hour, > 100 mg/l

**Acute toxicity to algae/aquatic plants**
Based on information for a similar material:
EL50, Scenedesmus capricornutum (fresh water algae), Static, 72 Hour, Growth rate inhibition, > 1 000 mg/l, OECD Test Guideline 201

**4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline**

**Acute toxicity to fish**
Material is harmful to aquatic organisms (LC50/EC50/IC50 between 10 and 100 mg/L in the most sensitive species).
LC50, Danio rerio (zebra fish), static test, 96 Hour, > 71 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
EC50, Daphnia magna (Water flea), 48 Hour, > 51 mg/l, OECD Test Guideline 202 or Equivalent
Acute toxicity to algae/aquatic plants
ErC50, Desmodesmus subspicatus (green algae), Static, 72 Hour, Growth rate, > 100 mg/l, OECD Test Guideline 201
NOEC, Desmodesmus subspicatus (green algae), Static, 72 Hour, Growth rate, > 10 mg/l, OECD Test Guideline 201

Toxicity to bacteria
IC50, activated sludge, Static, 3 Hour, Respiration rates., > 100 mg/l, OECD Test Guideline 209

12.2 Persistence and degradability
Biodegradability: Material is expected to be readily biodegradable.
10-day Window: Not applicable
Biodegradation: 71.5 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

Alcohol alkoxylate
Bioaccumulation: No relevant data found.

Polyalkylene glycol
Bioaccumulation: No data available for this product. No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

Pentaerythritol ester
Bioaccumulation: No relevant data found.

4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline
Bioaccumulation: Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).
Partition coefficient: n-octanol/water(log Pow): > 7 Estimated.

12.4 Mobility in soil

Alcohol alkoxylate
No relevant data found.

Polyalkylene glycol
No data available.

Pentaerythritol ester
No relevant data found.

4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline
No data available.

12.5 Results of PBT and vPvB assessment

Alcohol alkoxylate
This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).
Polyalkylene glycol
This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Pentaerythritol ester
This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline
This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Alcohol alkoxylate
This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Polyalkylene glycol
This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Pentaerythritol ester
This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

4-(2,2,3-trimethylbut-3-enyl)-N-[4-(2,2,3-trimethylbut-3-enyl)phenyl]aniline
This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

SECTION 14: TRANSPORT INFORMATION

Classification for ROAD and Rail transport (ADR/RID):

14.1 UN number Not applicable
14.2 UN proper shipping name Not regulated for transport
14.3 Transport hazard class(es) Not applicable
14.4 Packing group Not applicable
14.5 Environmental hazards Not considered environmentally hazardous based on available data.
14.6 Special precautions for user No data available.
Classification for SEA transport (IMO-IMDG):
14.1 UN number Not applicable
14.2 UN proper shipping name Not regulated for transport
14.3 Transport hazard class(es) Not applicable
14.4 Packing group Not applicable
14.5 Environmental hazards Not considered as marine pollutant based on available data.
14.6 Special precautions for user No data available.
14.7 Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):
14.1 UN number Not applicable
14.2 UN proper shipping name Not regulated for transport
14.3 Transport hazard class(es) Not applicable
14.4 Packing group Not applicable
14.5 Environmental hazards Not applicable
14.6 Special precautions for user No data available.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH Regulation (EC) No 1907/2006
This product contains only components that have been either registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH). Polymers are exempted from registration under REACH. All relevant starting materials and additives have been either registered, or are exempt from registration according to Regulation (EC) No. 1907/2006 (REACH). The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer’s/user’s responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

Listed in Regulation: Not applicable
15.2 Chemical safety assessment
No Chemical Safety Assessment has been carried out for this substance/mixture.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.
H412 Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008
This product is not classified as dangerous according to EC criteria.

Revision
Identification Number: / A001 / Issue Date: 14.11.2019 / Version: 2.0
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend
| Aquatic Chronic | Long-term (chronic) aquatic hazard |

Full text of other abbreviations
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECS - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative
Information Source and References
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

INGERSOLL RAND urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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