1 Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product Trade Name</th>
<th>QUINSYN-GL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Number</td>
<td>Not applicable for mixtures.</td>
</tr>
<tr>
<td>Synonyms</td>
<td>None.</td>
</tr>
<tr>
<td>Generic Chemical Name</td>
<td>Mixture.</td>
</tr>
<tr>
<td>Product Type</td>
<td>Multipurpose.</td>
</tr>
<tr>
<td>Preparation/Revision Date</td>
<td>18 November 2013</td>
</tr>
<tr>
<td>Transportation Emergency Phone No.</td>
<td>FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)</td>
</tr>
<tr>
<td>MSDS No.</td>
<td>73882977-2411911-5179311-102103</td>
</tr>
</tbody>
</table>

2 Hazards Identification

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Red liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Principal Hazards</td>
<td>This material has no known health hazards.</td>
</tr>
</tbody>
</table>

See Section 11 for complete health hazard information.

3 Composition/Information on Ingredients

| Hazardous Ingredients | This material has no known hazards under applicable laws. |

4 First Aid Measures

<table>
<thead>
<tr>
<th>Eyes</th>
<th>Flush with water at least 30 minutes. Get medical attention if eye irritation develops or persists.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Remove exposed person to fresh air if adverse effects are observed.</td>
</tr>
<tr>
<td>Oral</td>
<td>DO NOT INDUCE VOMITING. Get immediate medical attention.</td>
</tr>
<tr>
<td>Additional Information</td>
<td>Note to physician: Treat symptomatically.</td>
</tr>
</tbody>
</table>

5 Fire Fighting Measures

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>226 °C, 440.1 °F COC (Typical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinguishing Media</td>
<td>CO2, dry chemical, or foam. Water can be used to cool and protect exposed material.</td>
</tr>
<tr>
<td>Firefighting Procedures</td>
<td>Recommend wearing self-contained breathing apparatus.</td>
</tr>
<tr>
<td>Unusual Fire &amp; Explosion Hazards</td>
<td>See section 10 for additional information.</td>
</tr>
</tbody>
</table>

6 Accidental Release Measures
Spill Procedures
Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

7 Handling and Storage

Pumping Temperature
Not determined.

Maximum Handling Temperature
Not determined.

Handling Procedures
Keep containers closed when not in use. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

Maximum Storage Temperature
Not determined.

Storage Procedures
See section 10 for incompatible materials.

Maximum Loading Temperature
Not determined.

8 Exposure Controls/Personal Protection

Exposure Limits
None established.

Other Exposure Limits
Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH TWA of 5 mg per cubic meter.

Engineering Controls
Use with adequate ventilation.

Gloves Procedures
Nitrile.

Eye Protection
Safety Glasses.

Respiratory Protection
Use NIOSH/MSHA approved respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Clothing Recommendation
Long sleeve shirt is recommended. Launder contaminated clothing before reuse.

9 Physical and Chemical Properties

Flash Point
226 °C, 440.1 °F COC (Typical)

Upper Flammable Limit
Not determined.

Lower Flammable Limit
Not determined.

Autoignition Point
Not determined.

Explosion Data
Material does not have explosive properties.

Vapor Pressure
Not determined.

pH
Not determined.

Specific Gravity
0.87 (15.6 °C)

Bulk Density
Not determined.

Water Solubility
Insoluble.

Percent Solid
Not determined.

Percent Volatile
Not determined.

Volatile Organic Compound
Not determined.

Vapor Density
Not determined.

Evaporation Rate
Not determined.

Odor
Mild

Appearance
Red liquid.

Viscosity
48.8 Centistokes (40 °C)

Odor Threshold
Not determined.

Boiling Point
Not determined.

Pour Point Temperature
Not determined.

Melting / Freezing Point
Not determined.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

10 Stability and Reactivity

Stability
Material is normally stable at moderately elevated temperatures and pressures.

Decomposition Temperature
Not determined.

Incompatibility
Strong acids. Oxidizing agents.

Polymerization
Will not occur.
Thermal Decomposition
Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

Conditions to Avoid
Not determined.

### 11 Toxicological Information

#### -- ACUTE EXPOSURE --

**Eye Irritation**
Not expected to cause eye irritation. Based on data from components or similar materials.

**Skin Irritation**
Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

**Respiratory Irritation**
If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.

**Dermal Toxicity**
The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.

**Inhalation Toxicity**
No data available to indicate product or components may be a toxic inhalation hazard.

**Oral Toxicity**
The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials.

**Dermal Sensitization**
Not expected to cause skin sensitization. Based on data from components or similar materials.

**Inhalation Sensitization**
No data available to indicate product or components may be respiratory sensitizers.

#### -- CHRONIC EXPOSURE --

**Chronic Toxicity**
No data available to indicate product or components present at greater than 1% are chronic health hazards.

**Carcinogenicity**
This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.

**Mutagenicity**
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Reproductive Toxicity**
No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

**Teratogenicity**
No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

#### -- ADDITIONAL INFORMATION --

**Other**
No other health hazards known.

### 12 Ecological Information

#### -- ENVIRONMENTAL TOXICITY --

**Freshwater Fish Toxicity**
The acute LC50 is 100 - 1000 mg/L based on component data.

**Freshwater Invertebrates Toxicity**
The acute EC50 is 100 - 1000 mg/L based on component data.

**Algal Inhibition**
The acute EC50 is 100 - 1000 mg/L based on component data.

**Saltwater Fish Toxicity**
Not determined.

**Saltwater Invertebrates Toxicity**
Not determined.

**Bacteria Toxicity**
The acute EC50 is 100 - 1000 ppm based on component data.

**Miscellaneous Toxicity**
Not determined.

#### -- ENVIRONMENTAL FATE --

**Biodegradation**
At least 25% of the components in this product show moderate biodegradation based on OECD 301-type test data. At least 25% of the components in this product show moderate biodegradation based on OECD 302-type test data.

**Bioaccumulation**
Less than 1.0% of the components potentially bioconcentrate, based on octanol/water coefficients.

**Soil Mobility**
Not determined.

### 13 Disposal Considerations

**Waste Disposal**
This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

### 14 Transport Information

**ICAO/IATA I**
Not regulated.

**ICAO/IATA II**
Not regulated.

**IMDG**
Not regulated.

**IMDG EMS Fire**
Not applicable.

**IMDG EMS Spill**
Not applicable.

**IMDG MFAG**
Not applicable.
MARPOL Annex II  Not determined.
USCG Compatibility Not determined.
U.S. DOT Bulk Not regulated.
DOT NAERG Not applicable.
U.S. DOT Intermediate NAERG Not applicable.
U.S. DOT Non-Bulk Not regulated.
U.S. DOT Non-Bulk NAERG Not applicable.
Canada Not regulated.
Mexico Not regulated.
Bulk Quantity 85000 KG, 187391 lbs.
Intermediate Quantity 11000 KG, 24251 lbs.
Non-Bulk Quantity 400 KG, 882 lbs.

Review classification requirements before shipping materials at elevated temperatures.

15 Regulatory Information

-- Global Chemical Inventories --

USA All components of this material are on the US TSCA Inventory or are exempt.

Other TSCA Reg. None known.
EU To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH, or e-mail us at REACH_MSDS_INQUIRIES@Lubrizol.com
Japan All components are in compliance with the Chemical Substances Control Law of Japan.
Australia All components are in compliance with chemical notification requirements in Australia.
New Zealand All components are in compliance with chemical notification requirements in New Zealand.
Canada All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
Korea All components are in compliance in Korea.
Philippines All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
China All components of this product are listed on the Inventory of Existing Chemical Substances in China.
Taiwan All components of this product are listed on the Taiwan inventory.

-- Other U.S. Federal Regulations --

SARA Ext. Haz. Subst. This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.
SARA Section 313 This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.
SARA 311 Classifications

<table>
<thead>
<tr>
<th>Classification</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactivity Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA Hazardous Substances None known.

-- State Regulations --

Cal. Prop. 65 This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: 8 ppm Ethyl acrylate, CAS no. 140-88-5

-- Product Registrations --

U.S. Fuel Registration Not applicable.
Finnish Registration Number Not Registered
Swedish Registration Number Not Registered
Norwegian Registration Number Not Registered
Danish Registration Number Not Registered
Swiss Registration Number Not Registered
Italian Registration Number Not Registered

-- Other / International --
Miscellaneous Regulatory Information
Not determined.

16 Other Information

US NFPA Codes

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>N/E</td>
</tr>
</tbody>
</table>

(N/E) - None established

HMIS Codes

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Precautionary Labels

- This material has no known health hazards.

Revision Indicators

This MSDS has no revisions since 18 November 2013

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