1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TLR44 PLUS AEROSOL
Recommended use: Lubricant/Single Grade Hydraulic/Compressor Oil with ISO 68 Viscosity

Information on Manufacturer
MANTEK, DIVISION OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code: 5496
Chemical nature: Resins in solution

Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color: White
Physical State: Liquid
Odor: Rubbing alcohol

GHS Classification
Physical Hazards
Flammable aerosols: Category 1***
Gases under pressure: Compressed Gas***

Health Hazard
Acute Inhalation Toxicity - Gas: Category 4
Acute Inhalation Toxicity - Dusts and Mists: Category 3
Serious Eye Damage/Eye Irritation: Category 2
Specific target organ systemic toxicity (single exposure): Category 3
Specific target organ systemic toxicity (repeated exposure): Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H222 - Extremely flammable aerosol
H331 - Toxic if inhaled
H336 - May cause drowsiness or dizziness
H319 - Causes serious eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure
H280 - Contains gas under pressure; may explode if heated

Precautionary Statements
P210 - Keep away from heat, sparks, open flames or hot surfaces.
P211 - Do not spray on an open flame or other ignition source
P251 - Pressurized container: Do not pierce or burn, even after use
P280 - Wear protective gloves, protective clothing and eye protection.
P270 - Do not eat, drink or smoke when using this product
P260 - Do not breathe vapor, mist or gas
P271 - Use in a well-ventilated area.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a physician if unwell.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists, get medical attention.
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P501 - Dispose of contents and container in accordance with applicable local regulations.***

2 % of the mixture consists of ingredient(s) of unknown toxicity
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>40-70</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>15-40</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>7-13</td>
</tr>
<tr>
<td>Polytetrafluoroethylene</td>
<td>9002-84-0</td>
<td>1-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**General advice**
Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist, or gas.

**Eye Contact**
Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

**Skin Contact**
Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.

**Inhalation**
If inhaled, remove to fresh air. Get medical attention if symptoms occur.

**Ingestion**
Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person.

**Notes to physician**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Flash Point**
***54 °F*** / ***12°C***

**Suitable Extinguishing Media**
Foam. Alcohol-resistant foam. Dry chemical. Water spray. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Incompatible Materials**
None known.

**Specific hazards arising from the chemical**
Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Flame extension: 30 inches / 75 cm and Burnback: 0 inch / 0 cm.

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**
Use personal protective equipment. Ensure adequate ventilation. Take precautionary measures against static discharges. Remove all sources of ignition. Material can create slippery conditions.

**Environmental Precautions**
Do not flush into surface water or sanitary sewer system.

**Methods for Containment**
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**Methods for Cleaning Up**
Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.

**Neutralizing Agent**
Not applicable.

7. HANDLING AND STORAGE

**Handling**
Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist or gas.

**Storage**
Keep away from heat and sources of ignition.

**Storage Temperature**
Minimum ***36 °F*** / ***2°C***
Maximum ***120 °F*** / ***49°C***

**Storage Conditions**
Indoor X Outdoor Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>TWA: 200 ppm</td>
<td>TWA: 400 ppm</td>
<td>2000 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL: 400 ppm***</td>
<td>TWA: 980 mg/m³***</td>
<td>STEL 500 ppm</td>
</tr>
</tbody>
</table>

Issuing Date 06/19/2015
Butane

<table>
<thead>
<tr>
<th>STEL</th>
<th>TWA: 400 ppm</th>
<th>TWA: 1900 mg/m³***</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 ppm***</td>
<td>800 ppm</td>
<td>1900 mg/m³***</td>
</tr>
</tbody>
</table>

Propane

<table>
<thead>
<tr>
<th>TWA: 1000 ppm***</th>
<th>TWA: 1000 ppm</th>
<th>TWA: 1800 mg/m³***</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800 mg/m³***</td>
<td>2100 ppm</td>
<td>1800 mg/m³***</td>
</tr>
</tbody>
</table>

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

**Personal Protective Equipment**

**Eye/Face Protection**
Safety glasses with side-shields.

**Skin Protection**
For prolonged or repeated contact, use protective gloves with appropriate chemical resistance.

**Respiratory Protection**
In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**General Hygiene Considerations**
Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>51.6 (BuAc = 1)</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>99.0</td>
</tr>
<tr>
<td>VOC Content (g/L)</td>
<td>0</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>1.9 (air = 1)</td>
</tr>
<tr>
<td>Octanol/Water Partition</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>*** 54 °F *** / *** 12°C ***</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flammability Limits in Air %: Propellant</td>
<td>Upper 12.7 Lower 1.8</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Chemical Stability**
Stable. Hazardous polymerization does not occur.

**Conditions to Avoid**
Keep away from open flames, hot surfaces, and sources of ignition.

**Incompatible Products**
Strong oxidizing agents, Strong acids, Aluminium.

**Decomposition Temperature**
No data available

**Hazardous Decomposition Products**
Carbon oxides, Hydrogen fluoride, Fluorinated hydrocarbons.

**Possibility of Hazardous Reactions**
None under normal processing.

### 11. TOXICOLOGICAL INFORMATION

**Product Information**
No information available.

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

**Oral LD50**
No information available

**Dermal LD50**
No information available

**Inhalation LC50**

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>No information available</td>
</tr>
<tr>
<td>Mist</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Principle Route of Exposure**
Inhalation, Skin contact, Eye contact.

**Primary Routes of Entry**
Inhalation

**Acute Effects**

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Skin</td>
<td>May cause skin irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. May be fatal if inhaled in large quantities.</td>
</tr>
</tbody>
</table>

**Ingestion**
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Chronic Toxicity**
May cause polymer fume fever, a temporary flu-like illness accompanied by chills, fever, and a cough. This can last up to 24 hours in duration. Prolonged or repeated exposure increases the risk.
Liver and kidney injuries may occur.

**Target Organ Effects**
- Eyes, Skin, Respiratory system, Central nervous system, Liver, Kidney.

**Aggravated Medical Conditions**
- Skin disorders, Respiratory disorders, Neurological disorders, Liver disorders, Kidney disorders.

### Component Information

#### Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
<th>Draize Test</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>≥ 1870 mg/kg ( Rat )***</td>
<td>≥ 4059 mg/kg ( Rabbit )***</td>
<td>= 72600 mg/m³ ( Rat ) 4 h***</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Butane</td>
<td></td>
<td></td>
<td>= 658 g/m³ ( Rat ) 4 h***</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Propane</td>
<td></td>
<td></td>
<td>= 658 mg/L ( Rat ) 4 h</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Mutagenicity</th>
<th>Sensitization</th>
<th>Developmental Toxicity</th>
<th>Reproductive Toxicity</th>
<th>Target Organ Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>eyes, respiratory system, skin, liver, kidney, CNS</td>
<td></td>
</tr>
<tr>
<td>Butane</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>CNS, heart</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>CNS, heart</td>
<td></td>
</tr>
</tbody>
</table>

#### Carcinogenicity

There are no known carcinogenic chemicals in this product.

### 12. ECOLOGICAL INFORMATION

#### Product Information

No information available.

#### Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>EC50 &gt; 1000 mg/L Desmodesmus subspicatus 72 h</td>
<td>LC50 = 11130 mg/L Pimephales promelas 96 h</td>
<td>EC50 = 35390 mg/L 5 min</td>
<td>13299: 48 h Daphnia magna mg/L EC50 ***</td>
<td>0.05***</td>
</tr>
<tr>
<td>Butane</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>2.89***</td>
</tr>
<tr>
<td>Propane</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
<td>2.3***</td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

#### Product Disposal

Dispose of in accordance with local regulations.

#### Container Disposal

Contents under pressure. Do not puncture. Empty containers should be taken for local recycling, recovery, or waste disposal. Empty remaining contents.

### 14. TRANSPORT INFORMATION

#### DOT

- **Proper Shipping Name**: Consumer commodity
- **Hazard Class**: ORM-D
- **Description**: Consumer commodity, ORM-D,

#### TDG

- **Proper shipping name**: Aerosols
- **Hazard Class**: 2.1
- **UN-No**: UN1950
- **Description**: AEROSOLS,2.1,UN1950 LTD. QTY.

#### ICAO

- **UN-No**: UN1950
- **Proper Shipping Name**: Aerosols
- **Hazard Class**: 2.1
Shipping Description: Aerosols, UN1950 LTD. QTY.

IATA
UN-No: UN1950
Proper Shipping Name: Aerosols, flammable
Hazard Class: 2.1
ERG Code: 10L
Shipping Description: UN1950, Aerosols, flammable, 2.1 LTD. QTY.

IMDG/IMO
Proper Shipping Name: Aerosols
Hazard Class: 2.1
UN-No: UN1950
EmS No.: F-D, S-U
Shipping Description: UN1950, Aerosols, 2.1 LIMITED QUANTITIES

15. REGULATORY INFORMATION

Inventories
TSCA: Complies
DSL: Complies

U.S. Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>40-70</td>
<td>1.0***</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Categorization

<table>
<thead>
<tr>
<th>Acute Health Hazard</th>
<th>Chronic Health Hazard</th>
<th>Fire Hazard</th>
<th>Sudden Release of Pressure Hazard</th>
<th>Reactive Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA

16. OTHER INFORMATION

Prepared By: Rachael Mohochi
Supercedes Date: 04/01/2011
Issuing Date: 06/19/2015
Reason for Revision: No information available.
Glossary: No information available.
List of References: No information available.

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