Section 1. Product and Company Identification

**Product Name**  
Tertiary Butyl Alcohol  

**CAS Number**  
75-65-0  

Parchem - fine & specialty chemicals  
415 Huguenot Street  
New Rochelle, NY 10801  
(914) 654-6800  (914) 654-6899  
parchem.com  info@parchem.com  

**EMERGENCY RESPONSE NUMBER**  
CHEMTEL  
Toll Free US & Canada: (800) 255-3924  
All other Origins: (813) 248-0585  
Collect Calls Accepted  

Section 2. Hazards Identification

**Classification of the substance or mixture**  
**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**  
Flammable liquids (Category 2), H225  
Eye irritation (Category 2A), H319  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335  

**GHS Label Elements**  

**Pictograms:**  

**Signal word:** DANGER  

**Hazard and precautionary statements**  
**Hazard statement(s)**  
H225 Highly flammable liquid and vapor.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  

**Precautionary statement(s)**  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Tertiary Butyl Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym(s)</td>
<td>tert-Butanol; 2-Methyl-2-propanol; Trimethyl carbinol; tert-Butyl alcohol</td>
</tr>
<tr>
<td>Formula</td>
<td>C₄H₁₀O</td>
</tr>
<tr>
<td>CAS Number</td>
<td>75-65-0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary Butyl Alcohol</td>
<td>75-65-0</td>
<td>≤ 100%</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

**Description of first aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

*Move out of dangerous area.*

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

**In case of skin contact:** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling and/or in section 11

**Indication of any immediate medical attention and special treatment needed:** No data available
Section 5. Firefighting Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections: For disposal see section 13.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections: For disposal see section 13.

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition. No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Section 8. Exposure Controls / Personal Protection

Control parameters
Components with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>tert-Butyl alcohol</td>
<td>75-65-0</td>
<td>TWA</td>
<td>100.000000 ppm</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Remarks</td>
<td>Central Nervous System impairment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not classifiable as a human carcinogen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>100.000000 ppm 300.000000 mg/m³</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST</td>
<td>150.000000 ppm 450.000000 mg/m³</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>100.000000 ppm 300.000000 mg/m³</td>
<td>USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The value in mg/m³ is approximate.</td>
</tr>
</tbody>
</table>

Exposure controls

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: impervious clothing, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form: Liquid
Color: Colorless
Melting point/freezing point: Melting point/range: 23 - 26°C (73 - 79°F)
Initial boiling point and boiling range: 83°C (181°F)
Flash point: 11°C (52°F) - closed cup
Upper explosion limit: 8% (V)
Lower explosion limit: 2.4% (V)
Vapor pressure: 41 hPa (31 mmHg) at 20°C (68°F)
59 hPa (44 mmHg) at 26°C (79°F)
Vapor density: 2.56 · (Air = 1.0)
Relative density: 0.775 g/mL at 25°C (77°F)
Water solubility: Completely miscible

Other safety information
Relative vapor density: 2.56 · (Air = 1.0)

Section 10. Stability and Reactivity

Reactivity: No data available
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: Vapors may form explosive mixture with air.
Conditions to avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials: Strong oxidizing agents, Copper, Alkali metals, Aluminum
Hazardous decomposition products: In the event of fire: see section 5

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - 2,743 mg/kg
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation. Respiratory disorder
Gastrointestinal: Other changes.

LD50 Dermal - Rabbit - > 2,000 mg/kg
Remarks: Prolonged skin contact may cause skin irritation and/or dermatitis.

Skin corrosion/irritation
Skin - Rabbit
Result: Mild skin irritation - 24 h
**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Irritating to eyes. - 24 h

**Respiratory or skin sensitization:** No data available
**Germ cell mutagenicity:** No data available

**Carcinogenicity:** This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.
- **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available
**Specific target organ toxicity - single exposure:** Inhalation - May cause respiratory irritation.
**Specific target organ toxicity - repeated exposure:** No data available
**Aspiration hazard:** No data available

**Additional Information:**
RTECS: EO1925000
drying, cracking of the skin, Skin irritation
Liver - Irregularities - Based on Human Evidence

**12. ECOTEST:**
**Toxicity**
- **Toxicity to fish:** LC50 - Pimephales promelas (fathead minnow) - 6,140 mg/l - 96 h
- **Toxicity to daphnia and other aquatic invertebrates:** EC50 - Daphnia magna (Water flea) - 933 mg/l - 48 h

**Persistence and degradability**
**Biodegradability** Zahn-Wellens Test - Exposure time 19 d
Result: > 99.9 % - Readily biodegradable

**Bioaccumulative potential:** Does not bioaccumulate.
**Mobility in soil:** No data available
**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
**Other adverse effects:** No data available
Section 12. Ecological Information

Toxicity
Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 6,140 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 933 mg/l - 48 h

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Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Other adverse effects: No data available

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT (US)
UN number: UN1120
Class: 3
Packing group: II
Proper shipping name: Butanols
Reportable Quantity (RQ): Poison Inhalation Hazard: No

IMDG
UN number: UN1120
Class: 3
Packing group: II
EMS-No: F-E, S-D
Proper shipping name: BUTANOLS

IATA
UN number: UN1120
Class: 3
Packing group: II
Proper shipping name: Butanols
Section 15. Regulatory Information

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** The following components are subject to reporting levels established by SARA Title III, Section 313:

<table>
<thead>
<tr>
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**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

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**Pennsylvania Right To Know Components**

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**New Jersey Right To Know Components**

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**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

REVISION DATE: 7/22/2015