

Safety Data Sheet

Section 1: Identification

Product Name: Tert-Butyl Acetate
Synonyms: Tertiary butyl acetate; Acetic Acid, tert-butyl ester
CAS #: 540-88-5
Chemical Formula: C₆H₁₂O₂

Company: AllChem Industries ICG, Inc. **Emergency Number:** CHEMTREC 800-424-9300
 6010 NW First Place
 Gainesville, FL 32607
 Phone: 352-378-9696

Recommended use: Solvent.
Restrictions on use: Automotive (motor vehicle) fuels.

Section 2: Hazard(s) Identification

GHS classification:	Category
Flammable liquid	2
Acute toxicity, Inhalation	4
Acute toxicity, Oral	5
Aquatic toxicity – Acute	3
STOT – Single exposure	3

GHS Label elements:
Pictograms:



Signal Word: Danger

Hazard statements:

Code	Description
H225	Highly flammable liquid and vapor.
H303	May be harmful if swallowed
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H402	Harmful to aquatic life.

Precautionary statements:

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Code	Description
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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.
P271	Use only outdoors or in well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/clothing, eye/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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P370, P378	In case of fire: Use dry sand, dry chemical or alcohol resistant foam for extinction.
P403, P235	Store in well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container in accordance with local/regional regulations.

Other classifications:

NFPA Rating:	
Health:	1
Fire:	3
Reactivity:	0

HMIS Rating:	
Health:	2
Flammability:	3
Physical:	0

Section 3: Composition/ Information on Ingredients

Chemical Name:	CAS Number	Concentration	EC Number
Tert-Butyl Acetate	540-88-5	99.5 – 100 %	208-760-7

Section 4: First Aid Measures

- Inhalation:** Remove to fresh air.
If not breathing, apply artificial respiration.
If breathing is difficult, give oxygen provided a qualified individual is present.
Get medical attention.
- Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel.
If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
If victim is conscious and alert, give lukewarm water.
Never give anything by mouth to an unconscious person.
Get medical attention.
- Skin Contact:** Flush skin with plenty of soap and lukewarm water for at least 15 minutes while removing contaminated clothing and shoes.
If sticky, use waterless cleaner first.
Wash clothing before reuse or discard if they cannot be thoroughly cleaned.
Get medical assistance if irritation persists.
- Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present.
Get medical assistance if irritation persists.
- Note to Physician:** Treat symptomatically and supportively.
High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure).
The onset of respiratory symptoms may be delayed for several hours after exposure.
In case of ingestion, the stomach should be emptied by gastric lavage under qualified medical supervision.

Section 5: Fire Fighting Measures

- Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol resistant foam.
Do NOT use solid water stream as it may spread fire.
Use water to cool exposed containers.
Containers may explode in the heat of a fire.
- Special Protective Equipment:** Wear a self-contained breathing apparatus MSHA/NIOSH (approved or equivalent), and full protective gear.
- Specific Hazards:** Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.
Vapors may form explosive mixture with air.
Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
Collect contaminated fire extinguishing water separately, and dispose of in accordance with local regulations.

Section 6: Accidental Release Measures

Emergency Procedures:	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove all sources of ignition. Wear personal protection equipment. All equipment used when handling must be grounded. A vapor suppressing foam may be used to reduce vapors. Use non-sparking tools.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains, waterways, sewers or confined areas. Discharge into the environment must be avoided.
Methods of containment/cleanup:	Absorb with inert materials and place into appropriate containers for disposal.

Section 7: Handling and Storage

Handling:	Wear personal protection equipment. Avoid ingestion and inhalation. Ground and bond containers when transferring material to avoid static discharges. Use spark-proof tools and explosion-proof equipment. Empty containers retain product residue (liquid and/or vapor), and can be dangerous. Carefully vent any internal pressure before removing closure. Take precautionary measures against static discharge.
Storage:	Keep away from heat, sparks, flame and other sources of ignition, including static discharge. Store tightly closed container in a cool, dry, well-ventilated area. Store drums with bung in up position. Suitable packaging material: Steel drums. Non-suitable packaging material: May attack some forms of plastics, rubbers, and coatings.

Section 8: Exposure Controls/ Personal Protection

Exposure Limits:

<u>Regulator:</u>	<u>Test:</u>	<u>Allowance:</u>
ACGIH	TWA	200 ppm
NIOSH	IDLH	1,500 ppm
OSHA	TWA	200 ppm / 950 mg/m ³

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.
An emergency eye wash/shower must be readily accessible to the work area.

Personal Protective Equipment:

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- Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134. In confined areas, use a self-contained breathing apparatus.
- Skin Protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.
Recommended glove material: Butyl or nitrile rubber.
- Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Section 9: Physical and Chemical Properties

Appearance:	Clear, colorless liquid
Odor:	Camphor-like odor.
Odor Threshold:	71 ppb
pH:	6 - 7
Melting/Freezing Point:	-58.15 °C at 1,013 hPa
Boiling Point:	97.8 °C at 1,013 hPa
Decomposition Temperature:	No data available
Flash Point:	4 °C at 1,013 hPa
Auto-ignition Temperature:	589 °C at 1,013 hPa
Flammability/Explosive Limits:	1.26 - 6.88 % (V)
Vapor Pressure:	55.995 hPa at 20 °C
Vapor Density (air=1):	No data available
Relative Density (water=1):	0.86 g/cm ³ at 25 °C
Solubility (in water):	7,820 mg/l at 23 °C
Partition coefficient: n-Octanol/water:	Log Pow: 1.64 at 21.7 °C
Evaporation Rate (Butyl Acetate=1):	2.8
Molecular Weight:	116.16 g/mol

Section 10: Stability and Reactivity

- Stability:** Stable at room temperature and under normal conditions.
- Hazardous Reactions:** Not expected to occur.
- Conditions to Avoid:** Avoid heat, sparks, open flames other sources of ignition, and oxidizing conditions.

Incompatible Materials: Some plastics, acids, alkalis, nitrates, strong oxidizing agents.

Hazardous Decomposition Products: Under hot, acidic conditions, the decomposition products are isobutylene and acetic acid.

Thermal decomposition yields, carbon oxides, and water.

Section 11: Toxicological Information

Potential Health Effects:

Inhalation: Harmful if inhaled.
High vapor concentrations may cause CNS stimulation (increased activity, shaking, tremors) and/or depression (fatigue, dizziness, and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure).

Skin Contact: May cause slight transient skin irritation.
Repeated exposure may cause skin dryness or cracking.

Eye Contact: May cause moderate eye irritation.

Ingestion: May be harmful if swallowed.
High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure).

Symptoms of Exposure: Symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and/or fever.

Numerical Measures of Acute Toxicity:

<u>Route:</u>	<u>Test:</u>	<u>Subject:</u>	<u>Value:</u>	<u>Time:</u>
Dermal	LD 50	Rabbit	> 2,000 mg/kg	
Inhalation	LC 50		12.52 mg/l	4 hours
Oral	LD 50	Rat	4,500 mg/kg	

Additional Information:

RTEC #: AF7400000

Aspiration toxicity: Can cause pulmonary edema if aspirated into lungs.

Carcinogenicity: This product is not classified as a carcinogen by IARC or U.S. ACGIH, NTP or OSHA.

Germ cell mutagenicity: Not classified based on available information.

Reproductive toxicity: Not classified based on available information.

Sensitization: Not classified based on available information.

Serious eye damage/irritation: Moderate eye irritation.

Skin corrosion/irritation: May cause slight transient skin irritation.
Repeated exposure may cause skin dryness or cracking.

STOT- Repeated Exposure: Not classified based on available information.

STOT-Single Exposure: May cause respiratory irritation.
May cause drowsiness or dizziness.

Section 12: Ecological Information

Ecotoxicity:	Harmful to aquatic life.			
<u>Group:</u>	<u>Test:</u>	<u>Subject:</u>	<u>Value:</u>	<u>Time:</u>
Fish:	LC 50	Oncorhynchus mykiss	240 mg/l	96 hours
Aquatic invertebrates:	EC 50	Daphnia magna	350 mg/l	48 hours
Aquatic plants:	EC 50	Pseudokirchneriella subcapitata	16 mg/l	72 hours

Persistence and Degradability: Readily Biodegradable.

Bioaccumulative Potential: Low potential for bioaccumulation.

Mobility in Soil: Low absorption to soil particulates predicted

Section 13: Disposal Considerations:

Packaging: Empty containers may retain product residue, follow label warnings even after container is emptied.

Disposal: Dispose of according to Federal, State, and Local Regulations

Section 14: Transportation Information

The information in this section is for reference only and should not take the place of a bill of lading specific to an order.

UN #:	UN 1123
Proper shipping Name:	Butyl Acetates
Transport Hazard Class:	3
Packing Group:	II
Marine Pollutant:	No
Labels & Placards:	FLAMMABLE
Reportable quantity:	5,000 lbs.
EMS #:	F-E, S-D

Section 15: Regulatory Information

US Federal - TSCA: This product is listed on the TSCA inventory.

California – Prop 65: This product is not subject to the State of California’s Proposition 65 regulations.

Section 16: Other Information

Revision Date: August 30, 2018

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall AllChem be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if AllChem has been advised of the possibility of such damages.