

TERT BUTYL ACETATE

SDS Number:

Revision Date: 8/26/2016

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1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

NIC Industries, Inc
7050 6th Street
White City, OR 97503

Phone: 541.826.1922
Fax: 541.830.6522
Email: johnw@nicindustries.com
Web: www.nicindustries.com

Product Name: TERT BUTYL ACETATE
Revision Date: 8/26/2016
Version: 1.0
Common Name: Tertiary butyl Acetate
CAS Number: 540-88-5

EMERGENCY CONTACT: CALL PERS: 1-800-633-8253 (USA & Canada) or 001-1-801-629-0667 (International).

The information contained in this Safety Data Sheet (SDS) is, to the best of our knowledge, true and accurate and presented in good faith. NIC Industries, Inc. makes no warranties, expressed or implied, as to the accuracy and adequacy of this information. Because many factors may affect processing or application/use of this product, this data is offered solely for the user's consideration, investigation and verification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or process. Regulatory requirements are subject to change and may differ from one location to another. It is the responsibility of the buyer/user to ensure its activities comply with all local, state and federal regulations.

2 HAZARDS IDENTIFICATION

Route of Entry: Eyes, Ingestion, Inhalation, Skin

Target Organs: Central Nervous System, Kidneys, Liver.

Inhalation: Not expected to be a relevant route of exposure, however under conditions where exposure to vapors or mists is possible, could cause respiratory tract infection.

Skin Contact: May be mildly irritating to the skin. May cause skin sensitization, rashes, exzema, and redness. Prolonged or repeated exposure may aggravate existing conditions.

Eye Contact: May be irritating to the eyes.

Ingestion: Not likely to be a relevant route of exposure, however, ingestion may cause damage to the lining of the gastrointestinal tract.

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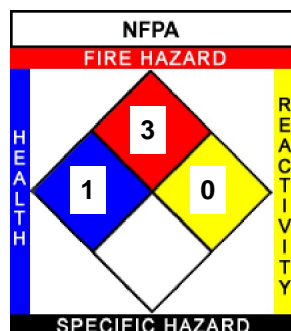
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NFPA:
HMIS III:

Health = 1, Fire = 3, Reactivity = 0
H*1/F3/PH0



HMIS III	
HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARDS	0
PERSONAL PROTECTION B Safety Glasses, Gloves	

GHS Signal Word:
DANGER

GHS Hazard Pictograms:



GHS Classifications:
Physical, Flammable Liquids, 2
Health, Acute toxicity, 5 Inhalation

GHS Phrases:
H225 - Highly flammable liquid and vapour
H333 - May be harmful if inhaled

GHS Precautionary Statements:
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
P243 - Take precautionary measures against static discharge.
P262 - Do not get in eyes, on skin, or on clothing.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+350 - IF ON SKIN: Gently wash with soap and water.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P403+233 - Store in a well ventilated place. Keep container tightly closed.
P103 - Read label before use.

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3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	Percentage	Chemical Name
540-88-5	99.5000%	tert-Butyl acetate
75-65-0	0.4999%	tert-Butyl alcohol

Composition Comments:

The components are not hazardous or are below required disclosure limits. There are no ingredients or additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as significantly hazardous to health or the environment and hence require reporting in this section.

4 FIRST AID MEASURES

- Inhalation:** Remove to fresh air. If breathing is difficult, have trained person administer oxygen. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. Immediately call an ambulance.
- Skin Contact:** Flush thoroughly with water for at least 15 minutes while removing contaminated clothing and shoes. Wash all clothing before re-use. If irritation persists, seek medical attention.
- Eye Contact:** If in eyes, hold eyes open and immediately flush with water for at least 15 minutes. If irritation persists seek medical attention.
- Ingestion:** Do not induce vomiting. Seek medical attention immediately. Never give liquid to an unconscious person.

5 FIRE FIGHTING MEASURES

- Flammability:** Not Applicable
- Flash Point:** 39-degrees F (4-degrees C) at 1013 hPa (759.8 mm Hg)
- Autoignition Temp:** 1092-degrees F (589-degrees C) at 1,013 hPa (760 mm Hg)
- LEL:** ~1.26 vol%.
- UEL:** ~6.88 vol%

Suitable extinguishing media: Use alcohol-resistant foam. Carbon dioxide or dry powder. Water spray.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Ensure adequate ventilation.

Environmental precautions: Prevent product from entering drains.

Methods and material for containment and clean-up: All equipment used when handling the product must be grounded. Eliminate sources of ignition. Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

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7 HANDLING AND STORAGE

Handling Precautions: Flammable/combustible - Keep away from oxidizers, heat and flames. Avoid contact with skin and eyes. Avoid breathing mists or vapour. Use only with adequate ventilation.

Storage Requirements: No data available.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures.

Personal Protective Equip: Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hand protection: Wear chemical resistant gloves such as: Butyl rubber.
Eye and face protection: Use splash goggles when eye contact due to splashing or spraying liquid is possible.
Skin and body protection: Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn.
Hygiene measures: Selection of appropriate personal protective equipment (PPE) should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of the potential exposure.
Use good personal hygiene practices.
Wash hands before eating, drinking, smoking, or using toilet facilities.

CONTROL PARAMETERS:

Occupational Exposure Limits:

Chemical Identity:

Tert-Butyl-acetate: 540-88-5 TWA 200 ppm (ELV); US (ACGIH) 2012 (BRD)

Tert-Butyl-acetate: 540-88-5 IDLH 1,500 ppm (ELV); (NIOSH) 9/2007 (BRD)

Remarks: 10% LEL (Lower Exposure Level)

Tert-Butyl-acetate: 540-88-5 TWA 200 ppm - 950 mg/m³ (ELV); US (OSHA) June 23, 2006

Tert-Butyl-alcohol: 75-65-0 TWA 100 ppm (ELV); US (ACGIH) 2012

Tert-Butyl-alcohol: 75-65-0 IDLH 1,600 ppm (ELV); (NIOSH) September 2007

Tert-Butyl-alcohol: 75-65-0 TWA 100 ppm - 300 mg/m³ (ELV) US (OSHA) June 23, 2006

ELV = Exposure Limit Values

BRD = Basis Revision Date

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9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless	Odor:	Camphor-like
Physical State:	Liquid	Solubility:	7,820 mg/l
Odor Threshold:	71 ppb	Freezing/Melting Pt.:	-72.67-degrees F (-58.15-degrees C) at hPa
Spec Grav./Density:	Varies with color: 0.9-1.5	Flash Point:	39-degrees F (4-degrees C) at 1013.0 hPa
Viscosity:	kinematic: <1 mm ² /s; dynamic: <1 mPa.s	VOC:	Exempt
Boiling Point:	208.0-degrees F (97.8-degrees C) at 1,013	Auto-ignition Temp:	1092-degrees F (589-degrees C) at 1,013 h
Flammability:	Not Applicable		
Vapor Pressure:	55.995 hPa (42.000 mm Hg) at 68-degrees		
pH:	6 - 7		
Evap. Rate:	2.8 (butyl acetate = 1)		
Molecular weight:	116.16 g/mol		

Explosive Properties: Not explosive

Oxidizing Properties: Not considered an oxidizing agent.

Decomposition Temperature: Not determined

10 STABILITY AND REACTIVITY

Stability:	Chemical Stability: Stable under recommended storage conditions. Reactivity: Will not occur.
Conditions to Avoid:	Heat, sparks, open flame, other ignition sources, and oxidizing conditions.
Materials to Avoid:	Some plastics Acids Alkalies Nitrates Strong oxidizing agents.
Hazardous Decomposition:	Under hot, acidic conditions, the decomposition products are isobutylene and acetic acid.
Hazardous Polymerization:	Not expected to occur.

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TOXICOLOGICAL INFORMATION

Symptoms related to the physical, chemical and toxicological characteristics:

Ingestion: No data available

Inhalation: No data available

Skin Contact: No data available

Eye Contact: No data available

Information on toxicological effects:

Acute toxicity (All possible routes of exposure.):

Oral product: ATEmix (): 4,120.603015 mg/kg

Dermal product: ATEmix () 2,010.05021 mg/kg

Inhalation Product: No data available.

Specified Substance(s): tert-Butyl acetate LC 50 (Rat): >2.23 mg/l (Yes) 2 (reliable with restrictions)

Repeated dose toxicity Product: No data available.

Carcinogenicity: Product: No data available.

-IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified.

-US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified.

-US> OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified.

Germ cell mutagenicity

-In vitro: Product: No data available.

-In vivo: Product: No data available.

Reproductive toxicity: Product: No data available.

Specific target organ toxicity - single exposure: Product: No data available.

Specific target organ toxicity - repeated exposure: Product: No data available.

Aspiration hazard: Product: No data available.

Other effects: No data available.

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ECOLOGICAL INFORMATION

Ecotoxicity: Acute hazards to the aquatic environment: Fish
-No data available.

Aquatic invertebrates: Product: No data available.

Chronic hazards to the aquatic environment:

-Fish: No data available.

-Aquatic invertebrates: No data available.

-Toxicity to Aquatic Plants: No data available.

Persistence and degradability:

-Biodegradability: 50% Inherently biodegradable.

Bioaccumulative potential:

-Bioconcentration factor (BCF): No data available.

-Partition coefficient n-octanol / water (log Kow) No data available.

-Specified substance(s): tert-Butyl acetate Log Kow: 1.76.

-T-Butyl Alcohol Log Kow: 0.35

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments:

-tert-Butyl acetate: No data available.

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DISPOSAL CONSIDERATIONS

Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Comply with applicable federal, state, and local regulations.

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TRANSPORT INFORMATION

DOT Class: Flammable Liquid (3) #3
UN #: 1123

DOT:

UN number: UN 1123

UN proper shipping name: BUTYL ACETATES

Transport hazard class(es):

-- Class: 3

-- Label(s): 3

Packing Group: II

Marine Pollutant: Not regulated.

IMDG:

UN number: UN 1123

UN proper shipping name: BUTYL ACETATES

Transport hazard class(es):

-- Class: 3

-- Label(s): 3

EmS No.: F-E, S-D

Packing group: II

Marine Pollutant: Not regulated.

IATA:

UN number: UN 1123

Proper shipping name: BUTYL ACETATES

Transport hazard class(es):

-- Class: 3

-- Label(s): 3

Packing group: II

Environmental hazards: Not regulated.



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REGULATORY INFORMATION

Tertiary butyl acetate was excluded from the Federal definition of a VOC (40 C.F.R. 51.100(s)(5)) by the U.S. Environmental Protection Agency on November 29, 2004 (69 FR 69304). State and local definitions may vary. If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

US Federal regulations. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

-tert-Butyl acetate: Reportable quantity: 5000 lbs.

-T-Butyl Alcohol: Reportable quantity: 100 lbs.

-2,4,4-Trmethyl-1-pentene: Reportable quantity: 100 lbs.

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Superfund Amendments and Reauthorization Act of 1986 (SARA)

-Hazard Categories: Not listed.

-SARA 302 Extremely Hazardous Substance: None present or none present in regulated quantities.

-SARA 304 Emergency Release Notification:

Chemical Identity:

-- tert-Butyl acetate 5000 lbs.

-- T-Butyl Alcohol 100 lbs.

-- 2,4,4-Trmethyl-1-pentene 100 lbs.

-SARA 311/312 Hazardous Chemical--Threshold Planning Quantity:

Chemical Identity:

-- tert-Butyl-acetate 500 lbs.

-- T-Butyl- Alcohol 500 lbs.

-SARA 313 (TRI Reporting): None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):

tert-Butyl-acetate Reportable quantity: 5000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None present or none present in regulated quantities.

US. State Regulations:

US. California Proposition 65: No ingredients regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act: tert-Butyl acetate Listed.

US. Massachusetts RTK - Substance List: tert-Butyl-acetate Listed.

US. Pennsylvania RTK - Hazardous Substances: tert-Butyl-acetate Listed.

US. Rhode Island RTK tert-Butyl-acetate Listed.

Other International Regulations: Global Inventory Status:

Australia; AICS Compliant.

Canada: DSL Compliant

China: IECSC Compliant.

Europe: REACH See REACH Compliance Statement.

Japan: ENCS Compliant.

Korea KECI Compliant

New Zealand NZLoC Compliant

Phillippines: PICCS Compliant

United States of America: TSCA Compliant.

NIC Industries, Inc. coatings meet all air quality and regulatory requirements with respect to manufacturing and application. Specifically the hardened finished product does not release any "volatile organic compounds" (VOC) under any ambient conditions.

REGULATORY KEY DESCRIPTIONS

TSCA = Toxic Substances Control Act

CERCLA = Superfund clean up substance

CSWHS = Clean water Act Hazardous substances

MASS = MA Massachusetts Hazardous Substances List

OSHA = OSHA workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

TXAIR = TX Air Contaminants with Health Effects Screening Level

NJHS = NJ Right-to-Know Hazardous Substances

SARA313 = SARA 313 Title III Toxic Chemicals

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U.S. TOXIC SUBSTANCES CONTROL ACT: All components of this product are on the TSCA Inventory or are exempt from the TSCA Inventory requirements uinder 40 CFR 720.30.

*REACH: Under REACH, registration of substances which are used in manufacturing of articles do not apply to NIC Industries, Inc. operations. NIC Industries, Inc. products are "articles" as defined in REACH Article 3(3) and do not release substances under their normal use. Suppliers of articles must provide recipients with informtion on Substances of Very High Concern (SVHC) if those are p[resent above a concentration limit of 0.1% on an article level. NIC Industries, Inc. products do not contain any of the currently listed SVHC's. NIC Industries, Inc. will continue ot work wit our suppliers to ensure that all SVHC's are notified to the European Chemicals Agency, if necessary, to comply with the REACH requirement. NIC Industries, Inc. assures its customers that our products are in fully compliance with the EU REACH requirement.

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OTHER INFORMATION

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.,

U.S. Federal Regulations:

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Material Safety Data Sheet available to all your employees.

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