

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: Tenite(TM) Butyrate 285E2R30012 Natural Trsp

Product No.: EAN 090590. 000000000050041494

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Plastics

Uses advised against: None known.

Details of the supplier of the safety data sheet**Manufacturer / Supplier**

Eastman Chemical Company
200 South Wilcox Drive
Kingsport, TN 37660-5280 US
+14232292000

Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

SECTION 2: Hazards identification

Hazard classification:**OSHA Specified Hazards:**

Combustible dust

If converted to small particles during further processing, handling or by other means may form combustible dust concentrations in air.

Warning label items including precautionary statement:

Signal words: WARNING!

Hazard Statement(s): If converted to small particles during further processing, handling or by other means may form combustible dust concentrations in air.

Precautionary statement:

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None known.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification	Notes
cellulose acetate butyrate	>70%	CAS-No.: 9004-36-8	
bis(2-ethylhexyl) adipate	<15%	CAS-No.: 103-23-1	
additive(s)/colorant(s)	<15%	CAS-No.: proprietary	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
This substance has workplace exposure limit(s).

SECTION 4: First aid measures

Description of first aid measures

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist. If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact: Wash with soap and water. Get medical attention if symptoms occur. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn. Get medical attention.

Ingestion: Seek medical advice.

Most important symptoms and effects, both acute and delayed: Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.

Indication of any immediate medical attention and special treatment needed

Hazards: Contact with molten substance/product may cause severe burns to skin and eyes.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards: Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures.

Extinguishing media

Suitable extinguishing media: Water spray. Dry chemical. Carbon Dioxide.

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture: Powdered material may form explosive dust-air mixtures.

Advice for firefighters

Special fire fighting procedures: Minimize dust generation and accumulation.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment.

Environmental precautions: Avoid release to the environment.

Methods and material for containment and cleaning up: Sweep up and place in a clearly labeled container for chemical waste.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

Precautions for safe handling: Avoid contact with molten material. Minimize dust generation and accumulation.

Conditions for safe storage, including any incompatibilities: Keep container closed.

Specific end use(s): Plastics.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Country specific exposure limits have not been established or are not applicable unless listed below.

Exposure controls

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information:	Eye bath. Washing facilities.
Eye/face protection:	It is a good industrial hygiene practice to minimize eye contact. Wear a face shield when working with molten material.
Skin protection	
Hand protection:	It is a good industrial hygiene practice to minimize skin contact. When material is heated, wear gloves to protect against thermal burns.
Other:	No data available.
Respiratory Protection:	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.
Hygiene measures:	Observe good industrial hygiene practices.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

Physical State:	Solid
Form:	Pellet
Color:	varies with formulation
Odor:	Slight
Odor Threshold:	Not determined.
pH:	No data available.
Softening Point:	varies with formulation
Boiling Point:	No data available.
Flash Point:	not applicable, combustible solid
Evaporation Rate:	Not determined.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)-:	No data available.
Flammability Limit - Lower (%)-:	No data available.
Vapor pressure:	Not determined.
Vapor density (air=1):	No data available.
Specific Gravity:	> 1 (estimated)
Solubility(ies)	
Solubility in Water:	Negligible
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	Thermal stability not tested. Low stability hazard expected at normal operating temperatures.
Dynamic Viscosity:	No data available.
Kinematic viscosity:	Not determined.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

SECTION 10: Stability and reactivity

Reactivity:	None known.
Chemical stability:	Stable
Possibility of hazardous reactions:	None known.
Conditions to avoid:	None at ambient temperatures.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon Monoxide. Carbon Dioxide.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	None known.
Ingestion:	None known.
Skin contact:	Molten material will produce thermal burns.
Eye contact:	Molten material will produce thermal burns.

Information on toxicological effects

Acute Toxicity

Oral

Product:	No data available.
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Specified substance(s)

cellulose acetate butyrate	Oral LD-50: (Rat): > 3,200 mg/kg (highest dose tested)
bis(2-ethylhexyl) adipate	Oral LD-50: (Rat, Male.): 45,000 mg/kg Oral LD-50: (Rat, Female.): 24,600 mg/kg
additive(s)/colorant(s)	No data available.

Dermal

Product:	No data available.
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Specified substance(s)

cellulose acetate butyrate	Dermal LD-50: (Guinea Pig): > 1,000 mg/kg (highest dose tested)
bis(2-ethylhexyl) adipate	Dermal LD-50: (Rat): > 2,000 mg/kg

additive(s)/colorant(s) No data available.

Inhalation

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate LC50 (Rat, 4 h): > 5.7 mg/l (highest concentration tested)
additive(s)/colorant(s) No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate NOAEL (Rat, Oral Study): 200 mg/kg
additive(s)/colorant(s) No data available.

Skin corrosion/irritation:

Product: No data available.

Specified substance(s)

cellulose acetate butyrate (Guinea Pig, 24 h): slight
bis(2-ethylhexyl) adipate (Rabbit, 24 h): none
additive(s)/colorant(s) No data available.

Serious eye damage/eye irritation:

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate (Rabbit, 24 h): none
additive(s)/colorant(s) No data available.

Respiratory or skin sensitization:

Product: No data available.

Specified substance(s)

cellulose acetate butyrate Skin Sensitization: , - non-sensitizing
bis(2-ethylhexyl) adipate Skin Sensitization: , (Guinea Pig) - Not a skin sensitizer.
additive(s)/colorant(s) No data available.

Mutagenicity

In vitro

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate Salmonella typhimurium assay (Ames test), Bacterial Reverse Mutation Assay :
negative +/- activation
additive(s)/colorant(s) No data available.

In vivo

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate Chromosomal aberration (Mouse): negative
additive(s)/colorant(s) No data available.

Carcinogenicity

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Specific target organ toxicity - single exposure

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Specific target organ toxicity - repeated exposure

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Aspiration hazard

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Other adverse effects: No data available.

SECTION 12: Ecological information

Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate NOEC: (golden orfe, 48 h): > 10,000 mg/l
additive(s)/colorant(s) No data available.

Aquatic invertebrates

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate EC-50 (Water Flea, 48 h): > 500 mg/l
additive(s)/colorant(s) No data available.

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Aquatic invertebrates

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate NOEC (Water Flea, 21 d): > 0.77 mg/l
additive(s)/colorant(s) No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate EC-50 (Scenedesmus subspicatus, 72 h): > 500 mg/l
additive(s)/colorant(s) No data available.

Persistence and degradability

Biodegradation

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate 90 - 100 % (28 d, Ready Biodegradability: Manometric Respirometry Test) Readily biodegradable
additive(s)/colorant(s) No data available.

Biological Oxygen Demand:

Product No data available.

Specified substance(s)

cellulose acetate butyrate No data available.

bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Chemical Oxygen Demand:

Product No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

BOD/COD ratio

Product No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Bioaccumulative potential

Product: No data available.

Specified substance(s)

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Results of PBT and vPvB assessment:

No data available.

cellulose acetate butyrate No data available.
bis(2-ethylhexyl) adipate No data available.
additive(s)/colorant(s) No data available.

Other adverse effects:

No data available.

SECTION 13: Disposal considerations

Waste treatment methods

General information: No data available.

Disposal methods: Dispose of waste and residues in accordance with local authority requirements. Incinerate.

SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Class not regulated

IMDG - International Maritime Dangerous Goods Code

Class not regulated

IATA

Class not regulated

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: noncontrolled

SARA 311-312 Hazard Classification(s):

fire hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List

NONE

OSHA: hazardous

TSCA (US Toxic Substances Control Act): All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 1, Flammability - 1, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Training information: No data available.

Issue date: 11/04/2014

SDS No.:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.