Material Safety Data Sheet

(Standard and Renew)

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

1.1 Product identifier

Trade name: **Tenite™**

Chemical name: Plasticized cellulose acetate

1.2 Details of the supplier of the safety data sheet

Eastman Mazzucchelli Plastics (Shenzhen) Co., Ltd
Floor 1-2, Building No.3,
Long Quan Industrial Park, Tongsheng Community, Da Lang Shenzhen (PRC)
Tel. +86 0755-61132777

SECTION 2: Composition / information on ingredients

2.1 Chemical nature

Plasticized cellulose acetate

2.2 Main components

Chemical Name	Content	CAS No.	EC No.
Polymer of cellulose acetate	>57%	9004-35-7	618-380-7
Diethyl phthalate	<38%	84-66-2	201-550-6
Additive(s)/colorant(s)	<5%	proprietary	

*All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 3: Risk identification

3.1 GHS classification in accordance with 29 CFR 1910.1200

Not Classified

3.2 Harmful effects on the health

There are no particular risks if the normal standards of industrial hygiene are adhered to. Very rare cases of intolerance to prolonged contact have been noted.

3.3 Physical or chemical risks

Molten material will produce thermal burns.

In certain conditions the powdered product may form explosive mixtures with the air.

3.4 Other hazards

None known

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	The dust may cause irritation of the respiratory tracts. Should this occur, move to fresh air. Consult a doctor if necessary. In the event of inhaling fumes caused by the combustion of the product, move to fresh air and consult a doctor.
Eye contact:	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Consult a doctor if necessary. If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes. Consult a doctor.
Skin contact:	Wash with soap and water. Consult a doctor if this 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. Consult a doctor.
Swallowing:	In the event of accidental swallowing, consult a doctor. Administer nothing by mouth if the victim is unconscious. Do not induce vomiting.

4.2	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.

4.3 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

5.1	General fire hazards:	Material can accumulate static charges which may cause an eletrical spark (ignition source). Use proper bonding and/or grounding procedures.
5.2	Suitable extinguishing media:	Water spray. Foam. Dry chemical. Carbon Dioxide. In the event of fire, removed the stored materials from the area at risk, if it's possible to do safely.

5.3	Risks due to the development of dangerous substances:	The gases produced by the combustion process may contain dangerous substances, such as CO, CO_2, CH_3COOH.
5.4	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

6.1	Personal precautions, protective equipment and emergency procedures:	Wear appropriate personal protective equipment.
6.2	Environmental precautions:	Not regarded as dangerous for the environment.
6.3	Methods and material for containment and cleaning up:	Sweep up and place in a clearly labeled container for chemical waste.
6.4	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:

7.1	Handling	The area which the product is to be used should be well-aired. Avoid contact with oxidising substances. Avoid heating to temperatures greater than 300℃.
7.2	Conditions for safe storage, including any incompatibilities:	Keep container closed. Store in a cool, dry place.
7.3	Specific end use:	Plastics.

SECTION 8: Exposure controls/personal protection

8.1 Exposure limit values of the main components

-Cellulose acetate	TWA:	10mg/m^3
	STEL:	20mg/m^3
- Diethyl phthalate	TWA:	5mg/m^3

8.2 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:	It is a good industrial hygiene practice to minimize skin contact. When material is heated, wear gloves to protect against thermal burns.
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

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	solid
Form:	granules
Color:	varies with formulation
Odor:	slight
Specific Gravity:	1.26-1.31 g/cm^3
Solubility in water:	insoluble
Melting temperature:	160-190℃
Self-ignition temperature:	>330℃

SECTION 10: Stability and reactivity

10.1	Stability:	The material is stable in the recommended handling and storage conditions. If subjected to high temperatures, this may give rise to dangerous decomposition products, such as carbon monoxide and dioxide, acetic acid and methane.
10.2	Conditions to avoid:	None at ambient temperatures. Avoid excessive heat to temperature of 300℃.
10.3	Incompatible materials:	Oxidising substances.

10.4 Hazardous decomposition products: Carbon monoxide (CO). Carbon dioxide (CO_2). Acetic acid (CH_3COOH).

SECTION 11: Toxicological information

There are no particular toxicological risks in the raw material state and during normal use, when the elementary standards of industrial hygiene are adhered to.
Very rare cases of intolerance to prolonged contact have been noted.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	Oral LD-50(Rat): 9000 mg/kg
	Oral LD-50(Rabbit): 1000 mg/kg
additive(s)/colorant(s)	No data available.

Dermal

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	Dermal LD-50(Guinea Pig): >20 ml/kg(highest dose tested)
additive(s)/colorant(s)	No data available.

Inhalation

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	LD-50(Rat, 6h): > 511 ppm (highest concentration tested)
additive(s)/colorant(s)	No data available.

Skin corrosion/irritation

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	(Guinea Pig, 24h): slight
additive(s)/colorant(s)	No data available.

Serious eye damage/eye irritation

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	(Rabbit, 24h): slight

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

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	LC-50(Rainbow Trout, 96h): 12 mg/l
	LC-50(Bluegill Sunfish, 96h): 22 mg/l
	LC-50(Fathead Minnow, 96h): 17 mg/l
additive(s)/colorant(s)	No data available.

Aquatic invertebrates

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	EC-50(daphnid, 48h): 90 mg/l
additive(s)/colorant(s)	No data available.

Toxicity to aquatic plants

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	EC-50(Selenastrum capricomutum, 192h): 30.3 mg/l
additive(s)/colorant(s)	No data available.

12.2 Persistence and degradability

Biological Oxygen demand

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	BOD-5: 2000 mg/g
additive(s)/colorant(s)	No data available.

Chemical Oxygen demand

Product:	No data available.
Specified substance(s):	
cellulose acetate	No data available.
diethyl phthalate	1660 - 2100 mg/g
additive(s)/colorant(s)	No data available.

SECTION 13: Disposal considerations

Disposal methods:	The remains of the product should not be abandoned in the environment. 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.

International Regulations

IATA-DGR	Not regulated as a dangerous good
IMDG-Code	Not regulated as a dangerous good
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable for product as supplied.
Domestic regulation 49 CFR	Not regulated as a dangerous good

SECTION 15: Regulatory information

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

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

SECTION 16: Other information

Revision information:	Version upgrade
Issue date:	03/20/2025
Disclaimer:	The information contained in the schedule is based on the knowledge available to us on the date of compilation. The product characteristics are set out here to describe the safety precautions and emergency measures, and should not be taken as a guarantee of specific properties. This information should be used to make an independent determination of the methods to safeguard workers and the environment.