

Eastman(TM) Cellulose Acetate (CA-398-3)

| | | | |
|---------|----------------|-------------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: - |
| 2.1 | 06/14/2018 | 150000001217 | Date of first issue: 09/06/2016 |
| PRD | | SDSUS / Z8 / 0001 | |

SECTION 1. IDENTIFICATION

Product name : Eastman(TM) Cellulose Acetate (CA-398-3)

Product code : 01847-00, P0184701, P0184707, E0184701, E0184702, P0184732, P0184734, N0184701, P0184727, P01847A3, P0184700

Manufacturer or supplier's details

Company name of supplier : Eastman Chemical Company

Address : 200 South Wilcox Drive
Kingsport TN 37660-5280

Telephone : (423) 229-2000

Emergency telephone : CHEMTREC: +1-800-424-9300, +1-703-527-3887 CCN7321

Recommended use of the chemical and restrictions on use

Recommended use : Polymer

Restrictions on use : None known.

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200**

Combustible dust

GHS label elements

Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.

Precautionary Statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces.
No smoking.
P243 Take action to prevent static discharges.

Disposal:
P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance / Mixture : Substance
CAS-No. : 9004-35-7

Ingredients

| Chemical name | CAS-No. | Concentration (% w/w) |
|-------------------|-----------|-----------------------|
| cellulose acetate | 9004-35-7 | 100 |

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.
 : Treat symptomatically.
 : If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water.
 : If symptoms persist, call a physician.
 : Cool skin rapidly with cold water after contact with molten
 : material.
 : Do not peel solidified product off the skin.
 : Burns must be treated by a physician.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty
 : of water and seek medical advice.
 : Remove contact lenses, if present and easy to do. Continue
 : rinsing.

If swallowed : Seek medical advice.

Most important symptoms : The molten product can cause serious burns.
and effects, both acute and
delayed

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray
 : Dry chemical
 : Carbon dioxide (CO₂)

Unsuitable extinguishing : Do not use a solid water stream as it may scatter and spread
media : fire.

Specific hazards during fire : Avoid generating dust; fine dust dispersed in air in sufficient
fighting : concentrations, and in the presence of an ignition source is a
 : potential dust explosion hazard.

Further information : Minimize dust generation and accumulation.

Special protective equipment : Wear an approved positive pressure self-contained breathing
for fire-fighters : apparatus in addition to standard fire fighting gear.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Wear appropriate personal protective equipment. Local authorities should be advised if significant spillages cannot be contained.
- Environmental precautions : Avoid release to the environment.
- Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.
-

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Minimize dust generation and accumulation.
- Advice on safe handling : Mixing cellulose esters in a nonpolar hydrocarbon, such as toluene or xylene, may result in the buildup of static electricity, which can cause a flash fire or an explosion. When adding cellulose ester to any flammable liquid, an inert gas atmosphere should be maintained within the vessel.
- Conditions for safe storage : Keep container tightly closed.
-

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

- Engineering measures** : 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.

Personal protective equipment

- 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.

Hand protection

- Remarks : Wear suitable gloves. When handling hot material, use heat resistant gloves.
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| | | |
|--------------------------|---|---|
| Eye protection | : | Safety glasses Wear a face shield when working with molten material. |
| Skin and body protection | : | Wear suitable protective clothing. |
| Protective measures | : | Ensure that eye flushing systems and safety showers are located close to the working place. |
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|--|---|-----------------------------------|
| Appearance | : | powder |
| Color | : | white |
| Odor | : | odorless |
| Odor Threshold | : | not determined |
| pH | : | not determined |
| Melting point/range | : | not determined |
| Boiling point/boiling range | : | not determined |
| Flash point | : | not applicable, combustible solid |
| Evaporation rate | : | not determined |
| Upper explosion limit / Upper flammability limit | : | not determined |
| Lower explosion limit / Lower flammability limit | : | not determined |
| Vapor pressure | : | not determined |
| Relative vapor density | : | not determined |
| Relative density | : | 1.31 - 1.32 |
| Solubility(ies) Water solubility | : | negligible |
| Partition coefficient: n-octanol/water | : | No data available |
| Autoignition temperature | : | not determined |
| Decomposition temperature | : | 579 °F / 304 °C |

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Decomposition energy (mass): 123 J/g
Method: DSC

Viscosity
Viscosity, dynamic : not determined
Viscosity, kinematic : not determined
Explosive properties : No data available
Oxidizing properties : No data available
Dust explosion class : St 2 - strong explosion

SECTION 10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.
Chemical stability : Stable under normal conditions.
Conditions to avoid : Minimize dust generation and accumulation.
Incompatible materials : Strong oxidizing agents
Hazardous decomposition products : Carbon monoxide
Carbon dioxide (CO₂)

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Product:

Acute oral toxicity : Remarks: No data available
Acute inhalation toxicity : Remarks: No data available
Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : No data available

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks : No data available

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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

EPCRA - Emergency Planning and Community Right-to-Know

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

| Ingredients | CAS-No. | Component TPQ (lbs) |
|-------------|---------|---------------------|
|-------------|---------|---------------------|

SARA 311/312 Hazards : Fire Hazard

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

| | | |
|-------------------|-----------|------------------|
| cellulose acetate | 9004-35-7 | >= 90 - <= 100 % |
|-------------------|-----------|------------------|

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

| | |
|-------------------|-----------|
| cellulose acetate | 9004-35-7 |
|-------------------|-----------|

New Jersey Right To Know

| | |
|-------------------|-----------|
| cellulose acetate | 9004-35-7 |
|-------------------|-----------|

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

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- CH INV : On the inventory, or in compliance with the inventory
- DSL : On the inventory, or in compliance with the inventory
- AICS : On the inventory, or in compliance with the inventory
- NZIoC : On the inventory, or in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- ISHL : On the inventory, or in compliance with the inventory
- KECI : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory
- TCSI : Not listed
- TSCA : On the inventory, or in compliance with the inventory

TSCA list

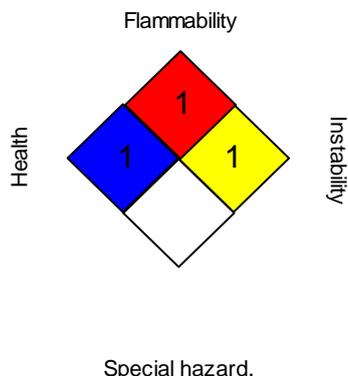
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

| | | |
|------------------------|---|---|
| HEALTH | / | 1 |
| FLAMMABILITY | 1 | |
| PHYSICAL HAZARD | 0 | |

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

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AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 06/14/2018

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8