

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

SECTION 1. IDENTIFICATION

Product name : X-100 Application Solution

Product code : 000000000050149352

Manufacturer or supplier's details

Company name of supplier : Eastman Performance Films, LLC

Address : 575 Maryville Centre Drive
St. Louis MO 63141-5813

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

Recommended use of the chemical and restrictions on use

Recommended use : Cleaning agent

Restrictions on use : None known.

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

Eye irritation : Category 2A

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.

Precautionary Statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.
Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Other hazards

None known.

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Water	7732-18-5	90 - 98
Poly(oxy-1,2-ethanediyl), alpha-[(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-	9036-19-5	1 - 2

SECTION 4. FIRST AID MEASURES

If inhaled : Remove to fresh air.
Treat symptomatically.
Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and water.
Get medical attention if symptoms occur.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water
for at least 15 minutes.
Get medical advice/ attention.

If swallowed : Seek medical advice.

Most important symptoms and effects, both acute and delayed : Causes serious eye irritation.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use water spray to extinguish.
Foam
Dry chemical
Carbon dioxide (CO2)

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

Specific hazards during fire fighting : None known.

Hazardous combustion products : No hazardous combustion products are known

Further information : None known.

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

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

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 : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : None known.
- Advice on safe handling : Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling.
- 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 : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

- Remarks : Wear suitable gloves.

- Eye protection : Wear safety glasses with side shields (or goggles).

- Protective measures : Ensure that eye flushing systems and safety showers are located close to the working place.

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colorless
Odor	: odorless
Odor Threshold	: not determined
pH	: 2.1 - 3.1 (212 °F / 100 °C)
Melting point/range	: not determined
Boiling point/boiling range	: not determined
Flash point	: does not flash
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	: 1.002
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: not determined
Decomposition temperature	: Thermal stability not tested. Low stability hazard expected at normal operating temperatures.
Viscosity	
Viscosity, dynamic	: not determined
Viscosity, kinematic	: not determined
Explosive properties	: No data available

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Stable

Conditions to avoid : None known.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : Carbon dioxide (CO₂)
Carbon monoxide

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

Ingredients:**Poly(oxy-1,2-ethanediyl), alpha-[(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-:**

Acute oral toxicity : LD50 Oral (Rat): > 1,900 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg
Assessment: The component/mixture is minimally toxic after single contact with skin.

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : No data available

Serious eye damage/eye irritation

Causes serious eye irritation.

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

Product:

Remarks : No data available

Ingredients:**Poly(oxy-1,2-ethanediyl), alpha-[(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-:**

Species : Rabbit

Result : Risk of serious damage to eyes.

Respiratory or skin sensitization**Skin sensitization**

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Remarks : No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Product:

Remarks : This information is not available.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity**

Not classified based on available information.

Product:

Effects on fertility : Remarks: No data available

STOT-single exposure

Not classified based on available information.

Product:

Remarks : No data available

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

STOT-repeated exposure

Not classified based on available information.

Product:

Remarks : No data available

Aspiration toxicity

Not classified based on available information.

Product:

No data available

Information on likely routes of exposure**Product:**

Inhalation : Remarks: None known.

Skin contact : Remarks: None known.

Eye contact : Remarks: Causes serious eye irritation.

Ingestion : Remarks: None known.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Ingredients:****Poly(oxy-1,2-ethanediyl), alpha-[(1,1,3,3-tetramethylbutyl)phenyl]-omega-hydroxy-:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 7.2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : LC50 (Daphnia magna (Water flea)): 7.5 - 9.8 mg/l
aquatic invertebrates Exposure time: 48 h

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION**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**EPCRA - Emergency Planning and Community Right-to-Know**

SARA 311/312 Hazards : Acute Health Hazard

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

DSL	: On the inventory, or in compliance with the inventory
AICS	: On the inventory, or in compliance with the inventory
ENCS	: 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	: On the inventory, or in compliance with the inventory
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.

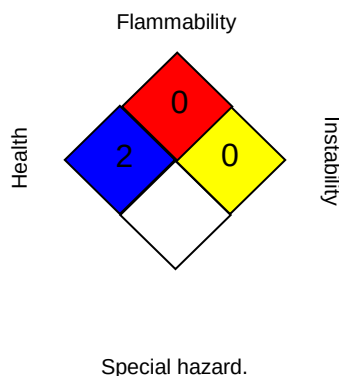
X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	1	2
FLAMMABILITY	0	
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

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 -

X-100 Application Solution

Version	Revision Date:	SDS Number:	Date of last issue: 05/21/2018
1.2	05/30/2018	150000097852	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0264	F69 / 0090169500 / 0001059182

United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 05/30/2018

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