

Date of last issue: 12/12/2018 Version Revision Date: SDS Number: 150000000079 2.2 10/25/2019 Date of first issue: 09/06/2016

PRD

SDSUS / Z8 / 0001

SECTION 1. IDENTIFICATION

Eastman(TM) CP 310W Water-Reducible Chlorinated Product name

Polyolefin Adhesion Promoter

13716-00, S1371603, S1371604, S1371607, P1371603, Product code

P1371604, P1371605

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

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

Recommended use of the chemical and restrictions on use

Recommended use Adhesion promoter

Restrictions on use None known.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
Water	7732-18-5	65 - 75
2,5-Furandione, reaction products	68609-36-9	22 - 25
with polypropylene, chlorinated		
C12-C14 ethoxylated secondary al-	84133-50-6	5 - 7
cohols		
chlorobenzene	108-90-7	1 - 5
ammonium hydroxide	1336-21-6	1 - 3

SECTION 4. FIRST AID MEASURES



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 1500000000079 SDSUS / Z8 / 0001

Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

If inhaled

Remove to fresh air.

Treat symptomatically.

In case of skin contact

: Wash off with warm water and soap.

Get medical attention if irritation develops and persists.

In case of eye contact

Rinse with plenty of water.

If eye irritation persists, consult a specialist.

If swallowed

Seek medical advice.

Most important symptoms and effects, both acute and

delayed

None known.

Notes to physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray to extinguish.

Carbon dioxide (CO2)

Dry chemical

Foam

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

None known.

Hazardous combustion prod-

ucts

No hazardous combustion products are known

Further information : None known.

Special protective equipment

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Wear appropriate personal protective equipment.

Prevent runoff from entering drains, sewers, or streams.

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).



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 150000000079 SDSUS / Z8 / 0001

Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

SECTION 7. HANDLING AND STORAGE

Advice on protection against :

fire and explosion

None known.

Advice on safe handling

: No special precautions required.

Conditions for safe storage

Keep container tightly closed.

Further information on stor-

age stability

Freezing will affect the physical condition but will not damage

the material.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
chlorobenzene	108-90-7	TWA	10 ppm	ACGIH
		TWA	75 ppm 350 mg/m3	OSHA Z-1
		TWA	75 ppm 350 mg/m3	OSHA P0

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 : Wear respiratory protection.

Hand protection

Remarks : Wear suitable gloves.

Eye protection : Safety glasses

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

practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 1500000000079 SDSUS / Z8 / 0001

Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

Color : off-white

Odor : mild, ammoniacal

Odor Threshold : not determined

pH : 9.4

Melting point/range : not determined

Boiling point/boiling range : 194 °F / 90 °C

Flash point : not applicable, combustible solid when dry

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

(estimated)

Solubility(ies)

Water solubility : negligible

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : not determined

Decomposition temperature : 498 °F / 259 °C

Decomposition energy (mass): 96.2 J/kg

Weak exotherm

Viscosity

Viscosity, dynamic : 8 mPa.s (77 °F / 25 °C)

Viscosity, kinematic : not determined

Explosive properties : No data available

Oxidizing properties : No data available



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 1500000000079 SDSUS / Z8 / 0001

Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Possibility of hazardous reac-

tions

: None known.

Conditions to avoid : Heat, flames and sparks.

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

Components:

C12-C14 ethoxylated secondary alcohols:

Acute oral toxicity : LD50 Oral (Rat): 3,250 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 3,180 mg/kg

chlorobenzene:

Acute oral toxicity : LD50 Oral (Rat): 2,262 mg/kg

Acute inhalation toxicity : LC50 (Rat): 29.7 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal (Guinea pig): > 20,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit Exposure time : 4 h

Result : No skin irritation



Version Date of last issue: 12/12/2018 Revision Date: SDS Number: 2.2 Date of first issue: 09/06/2016 10/25/2019 150000000079 SDSUS / Z8 / 0001

PRD

Components:

C12-C14 ethoxylated secondary alcohols:

Species Rabbit Exposure time 24 h Result slight

chlorobenzene:

Species Guinea pig Exposure time 24 h Result slight

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species Rabbit Result slight

Assessment No eye irritation Method unwashed eyes

Species Rabbit Result slight

Assessment No eye irritation Method washed eyes

Components:

chlorobenzene:

Species Rabbit Result slight

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Skin Sensitization Test Type Species Guinea pig Result non-sensitizing

Components:

chlorobenzene:

Test Type Skin Sensitization **Species** Guinea pig



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 150000000079 SDSUS / Z8 / 0001 Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

Result : non-sensitizing

Germ cell mutagenicity

Not classified based on available information.

Components:

chlorobenzene:

Genotoxicity in vitro : Test Type: Mutagenicity - Bacterial

Metabolic activation: +/- activation

Method: Bacterial Reverse Mutation Assay

Result: negative

Remarks: Published study

Test Type: Mutagenicity - Mammalian Metabolic activation: +/- activation

Method: In vitro Mammalian Chromosome Aberration Test

Result: negative

Remarks: Published study

Test Type: Mutagenicity - Mammalian Metabolic activation: +/- activation

Method: Genetic Toxicology: In Vitro Sister Chromatid Ex-

change Assay in Mammalian Cells

Result: negative

Remarks: Published study

Genotoxicity in vivo : Species: Drosophila melanogaster

Method: Genetic Toxicology: Sex-Linked Recessive Lethal

Test in Drosophila melanogaster

Result: negative

Remarks: Published study

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:



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 1500000000079 SDSUS / Z8 / 0001 Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

Effects on fertility : Remarks: No data available

STOT-single exposure

Not classified based on available information.

Product:

Remarks : No data available

Components:

chlorobenzene:

Routes of exposure : Inhalation
Target Organs : Narcotic effects

STOT-repeated exposure

Not classified based on available information.

Product:

Remarks : No data available

Components:

chlorobenzene:

Routes of exposure : Oral

Assessment : Based on available data, the classification criteria are not met.

Repeated dose toxicity

Components:

chlorobenzene:

Species : Rat, Male and Female

NOAEL : 120 mg/kg

Method : OECD Test No. 451: Carcinogenicity Studies

Remarks : Published study

Species : Rat, Male and Female

235 mg/m³

Method : OECD Test No. 416: Two-Generation Reproduction Toxicity

Study

Remarks : Published study

Aspiration toxicity

Not classified based on available information.

Product:

No data available



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 1500000000079 SDSUS / Z8 / 0001

Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

Components:

chlorobenzene:

May be harmful if swallowed and enters airways.

Information on likely routes of exposure

Product:

Inhalation : Remarks: None known.

Skin contact : Remarks: None known.

Eye contact : Remarks: None known.

Ingestion : Remarks: None known.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (sideswimmer): > 100 mg/l

Exposure time: 96 h

LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (daphnid): 15.2 mg/l

Exposure time: 48 h

Toxicity to fish (Chronic tox-

icity)

NOEC: (sideswimmer): 100 mg/l

Exposure time: 4 d

NOEC: (Pimephales promelas (fathead minnow)): 100 mg/l

Exposure time: 4 d

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: (Daphnia magna (Water flea)): 6.2 mg/l

Exposure time: 2 d

Components:

chlorobenzene:

Toxicity to fish : LC50 (goldfish): 73.03 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (daphnid): 4.3 mg/l

Exposure time: 48 h

Toxicity to fish (Chronic tox- : NOEC (Danio rerio (zebra fish)): 4.8 mg/l



Version 2.2 PRD

Revision Date: 10/25/2019

SDS Number: 150000000079 SDSUS / Z8 / 0001 Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

icity)

Exposure time: 28 d Remarks: Published study

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.32 mg/l

Exposure time: 16 d Remarks: Published study

ammonium hydroxide:

Ecotoxicology Assessment

Acute aquatic toxicity Very toxic to aquatic life.

Persistence and degradability

Components:

chlorobenzene:

Biochemical Oxygen Demand (BOD)

BOD-5: 30 mg/g

Chemical Oxygen Demand

(COD)

410 mg/g

BOD/COD BOD/COD: 7.32 %

ThOD 2,060 mg/g

Bioaccumulative potential

No data available Mobility in soil

Components:

chlorobenzene:

Distribution among environ-

mental compartments

log Koc: 2.4

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 150000000079 SDSUS / Z8 / 0001 Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
chlorobenzene	108-90-7	100	3333

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : The following components are subject to reporting levels

established by SARA Title III, Section 313:

chlorobenzene 108-90-7

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:

DSL : All components of this product are on the Canadian DSL

AICS : 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



Version 2.2 PRD Revision Date: 10/25/2019

SDS Number: 150000000079 SDSUS / Z8 / 0001

Date of last issue: 12/12/2018 Date of first issue: 09/06/2016

TSCA : All substances listed as active on the TSCA inventory

TSCA list

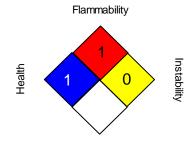
No substances are subject to a Significant New Use Rule.

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

SECTION 16. OTHER INFORMATION

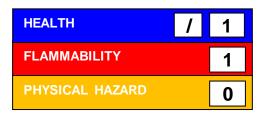
Further information

NFPA 704:



Special hazard

HMIS® IV:



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

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

OSHA PO : USA. OSHA - TABLE Z-1 Limits for Air Contaminants -

1910.1000

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average

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



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 12/12/2018

 2.2
 10/25/2019
 150000000079
 Date of first issue: 09/06/2016

2.2 10/25/2019 150000000079 Date of 1 PRD SDSUS / Z8 / 0001

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 : 10/25/2019

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