

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

SECTION 1. IDENTIFICATION

Product name : Eastman(TM) Chlorinated Polyolefin 164-1 (100% Solids)

Product code : 12075-0F, S12075F3, S12075F7

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 : Adhesion promoter

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

Precautionary Statements : **Disposal:**
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Components**

Chemical name	CAS-No.	Concentration (% w/w)
---------------	---------	-----------------------

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

modified chlorinated polyolefin	not assigned	> 92
epoxidized oil	61789-01-3	< 4
chlorobenzene	108-90-7	< 2

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.
Remove contaminated clothing and shoes.
Get medical attention if symptoms occur.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty
of water and seek medical advice.
- If swallowed : Seek medical advice.
- Most important symptoms and effects, both acute and delayed : Causes mild skin irritation.
- Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO2)
Dry chemical
Water spray
- Specific hazards during fire fighting : None 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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Local authorities should be advised if significant spillages cannot be contained.
- Environmental precautions : Avoid release to the environment.

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.
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 breathing dust.
Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
Wash thoroughly after handling.

Conditions for safe storage : Keep tightly closed.

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 : Ensure adequate ventilation.

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 : Safety glasses

Protective measures : Remove respiratory and skin/eye protection only after vapors have been cleared from the area.
Ensure that eye flushing systems and safety showers are

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

located close to the working place.
Use personal protective equipment as required.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: solid

Color : tan

Odor : odorless

Odor Threshold : not determined

pH : not determined

Softening point : 190 °F / 88 °C

Boiling point/boiling range : not determined

Flash point : not applicable, combustible solid

Evaporation rate : Not applicable

Upper explosion limit / Upper flammability limit : not determined

Lower explosion limit / Lower flammability limit : not determined

Vapor pressure : Not applicable

Relative vapor density : not determined

Relative density : 1.016 (77 °F / 25 °C)

Solubility(ies)
Water solubility : negligible

Partition coefficient: n-octanol/water : No data available

Autoignition temperature : not determined

Decomposition temperature : No exotherm to 400°C

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

Viscosity	
Viscosity, dynamic	: not determined
Viscosity, kinematic	: Not applicable
Explosive properties	: No data available
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 None known.
Conditions to avoid	: None known.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Carbon dioxide (CO ₂) 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:**chlorobenzene:**

Acute oral toxicity	: LD50 Oral (Rat): 2,262 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 29.7 mg/l Exposure time: 4 h

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

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

Skin corrosion/irritation

Not classified based on available information.

Product:

Species	:	Guinea pig
Exposure time	:	24 h
Result	:	slight

Components:**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
Method	:	unwashed eyes

Species	:	Rabbit
Result	:	slight
Method	:	washed eyes

Remarks : No data available

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:

Test Type	:	Skin Sensitization
Species	:	Guinea pig
Assessment	:	Not classified
Result	:	non-sensitizing

Components:**chlorobenzene:**

Test Type	:	Skin Sensitization
-----------	---	--------------------

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

Species : Guinea pig
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 Exchange 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.

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

Product:

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/m ³
Method	: OECD Test No. 416: Two-Generation Reproduction Toxicity Study
Remarks	: Published study

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Components:**chlorobenzene:**

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

May be harmful if swallowed and enters airways.

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

Inhalation	:	Remarks: None known.
Skin contact	:	Remarks: The molten product can cause serious burns.
Eye contact	:	Remarks: The molten product can cause serious burns.
Ingestion	:	Remarks: None known.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****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 toxicity)	:	NOEC (Danio rerio (zebra fish)): 4.8 mg/l Exposure time: 28 d Remarks: Published study
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.32 mg/l Exposure time: 16 d Remarks: Published study

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

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

Bioaccumulative potential

No data available

Mobility in soil**Components:****chlorobenzene:**

Distribution among environmental 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****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 (lbs)	Calculated product RQ (lbs)
chlorobenzene	108-90-7	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

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)
------------	---------	---------------------

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

SARA 311/312 Hazards : Fire Hazard

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:

TSCA

: All substances listed as active on the TSCA inventory

AICS : On the inventory, or in compliance with the inventory

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

ENCS : On the inventory, or in compliance with the inventory

NZIoC : Not listed

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

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**

Eastman(TM) Chlorinated Polyolefin 164-1 (100% Solids)

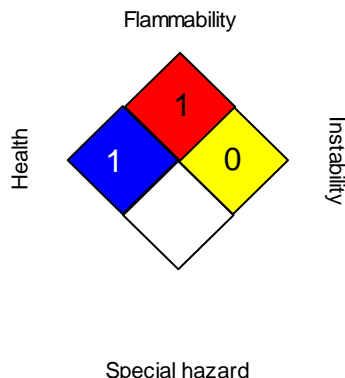
Version
2.2
PRD

Revision Date:
01/14/2020

SDS Number:
150000000073
SDSUS / Z8 / 0001

Date of last issue: 03/15/2017
Date of first issue: 09/06/2016

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

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
OSHA P0	:	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits 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 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)

**Eastman(TM) Chlorinated Polyolefin 164-1
(100% Solids)**

Version	Revision Date:	SDS Number:	Date of last issue: 03/15/2017
2.2	01/14/2020	150000000073	Date of first issue: 09/06/2016
PRD		SDSUS / Z8 / 0001	

tative) 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 : 01/14/2020

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