CHS-EPOXY 210 X 75

Safety Data Sheet

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Issue date: 4/24/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Trade name	:	CHS-EPOXY 210 X 75
Product code	:	USA 50463121
Other means of identification	:	Solution of epoxy resin in xylene.

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	Raw material for coatings.
Restrictions on use	:	There are no uses advised against identified

1.3. Supplier

Manufacturer
Spolek pro chemickou a hutní výrobu, a.s.
Revoluční 1930/86
Ústí nad Labem, 400 32
Czech Republic
T + 420 477 161 111 - F + 420 477 163 333
info@spolchemie.cz - http://www.spolchemie.cz
Contact: msds@spolchemie.cz

1.4. Emergency telephone number

Emergency number	:	CZ: +420 477 162 094/ EN: +420 476 163 111 non-stop service Listing of national helpdesks at: http://echa.europa.eu/help/nationalhelp_contact_en.asp.

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor	On basis of test data
Skin corrosion/irritation Category 2	H315	Causes skin irritation	Calculation method
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation	Calculation method
Skin sensitization, Category 1	H317	May cause an allergic skin reaction	Calculation method
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation	Calculation method
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure	Calculation method

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Warning
Hazard statements (GHS US) : H226 - Flammable liquid and vapor
H315 - Causes skin irritation

Precautionary statements (GHS US)	:	H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H335 - May cause respiratory irritation H373 - May cause damage to organs through prolonged or repeated exposure P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - If on skin: Wash with plenty of water. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Concentration (%)	GHS US classification
Reaction product: bisphenol-A-(epichlorhydrin); Epoxy resin (number average molecular weight 700-1100)	CAS-No.: 25068-38-6	70 – 80	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Xylene	CAS-No.: 1330-20-7	20 – 30	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
ethylbenzene	CAS-No.: 100-41-4	1 – 5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
In a life threatening condition soon carry out resuscitation affected and seek medical advice.
Respiratory arrest: immediately administer artificial respiration.
Cardiac arrest: immediately perform indirect heart massage.
Unconsciousness: place patient in recovery position.

First-aid measures after inhalation : Interrupt exposure source immediately and remove victim to fresh air. Remove contaminated clothing, protect the victim against cold. Get medical attention, especially if persists cough, breathlessness or other symptoms.

First-aid measures after skin contact : Take off contaminated clothing, wash the area with plenty of lukewarm water, if there was no injury to the skin, it is possible to use soap, soap or shampoo, get medical attention, especially if persists skin irritation.

First-aid measures after eye contact : Immediately flush eyes with running water, open the eyelids (even violence); If a victim has contact lenses, remove them immediately, rinse for at least 10 minutes and get medical, professional treatment if possible.

First-aid measures after ingestion : DO NOT INDUCE VOMITING - i alone induced vomiting can cause complications. If possible, give activated charcoal in an amount of 5 crushed tablets, obtain medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes eye irritation.

Chronic symptoms : May cause damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. carbon dioxide (CO2), dry chemical powder, hazy water.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Oxides of carbon, aldehydes, acids and unidentified mixtures of organic compounds.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Twilled fabric clothing (or working suit with rubber apron), rubber boots, rubber gloves, face shield or goggles.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release of product or components to the environment, sewers and surface water or soil.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Dam up spilled product, contain with inert material (e. g. kieselguhr, sand). Place into an impervious container and dispose of at hazardous chemical waste collection point or incinerate in a furnace where permitted under local regulations.

6.4. Reference to other sections

Additional advice : Refer to section 8, 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not eat, drink or smoke during work, observe working instructions. Wash your hands and exposed parts of body thoroughly with soap and water after work and before meal and possibly treat with suitable reparation lotion. Store in original packaging, storage tanks and containers should be placed into containment basins of corresponding content and construction.

Handling temperature : 5 – 25 °C

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container tightly closed. Store in a dry place. Provide local exhaust or general room ventilation.

Storage temperature : 5 – 25 °C

Heat-ignition : Keep away from sources of ignition.

Information on mixed storage : Store away from other materials.

Storage area : Drinking water. A first aid kit with appropriate content must be available. Store in a place accessible by authorized persons only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CHS-EPOXY 210 X 75

No additional information available

Reaction product: bisphenol-A-(epichlorhydrin); Epoxy resin (number average molecular weight 700-1100) (25068-38-6)

No additional information available

Xylene (1330-20-7)

USA - ACGIH - Occupational Exposure Limits	
Local name	Xylene, mixed isomers (Dimethylbenzene)
ACGIH OEL TWA [ppm]	20 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; hematologic eff; ototoxycity (for mixtures containing p-xylene); CNS impair. Notations: OTO (for mixtures containing p-xylene); A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Xylenes (o-, m-, p-isomers)

Xylene (1330-20-7)	
OSHA PEL (TWA) [1]	435 mg/m³
OSHA PEL (TWA) [2]	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

ethylbenzene (100-41-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethylbenzene
ACGIH OEL TWA [ppm]	20 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; ototoxicity; kidney eff; CNS impair. Notations: OTO (Ototoxicant); A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl benzene
OSHA PEL (TWA) [1]	435 mg/m³
OSHA PEL (TWA) [2]	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Local exhaustion recommended.

Environmental exposure controls : Avoid release of product or components to the environment, sewers and surface water or soil.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable gloves tested to EN374

Eye protection:
Protective goggles or face shield. Face shield

Skin and body protection:
Twilled fabric clothing, footwear.

Respiratory protection:
Use a mask with filter for acid gases, if higher concentrations (above the permissible limit) may occur.

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Yellow-brown

Odor	:	Xylene-like.
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	≥ 25 °C
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Density	:	1.09 g/cm³ (25°C)
Solubility	:	Soluble in ketones, glycol ethers, limited in toluene.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	> 450 °C
Decomposition temperature	:	No data available
Viscosity, kinematic	:	> 20.5 mm²/s (40°C)
Viscosity, dynamic	:	5000 – 12000 mPa·s (25°C)
Explosion limits	:	Lower explosion limit: 1 Upper explosion limit: 6
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

VOC content	:	24 – 26 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Not determined.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid static electricity discharges. elevated temperature.

10.5. Incompatible materials

Strong oxidising materials, strong Lewis or mineral acids, strong mineral and organic bases.

10.6. Hazardous decomposition products

Oxides of carbon, aldehydes, acids and unidentified mixtures of organic compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified

Acute toxicity (inhalation) : Not classified

Xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg body weight
LD50 dermal rabbit	12126 mg/kg body weight
LC50 Inhalation - Rat	27.1 mg/l/4h
ATE US (oral)	3523 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

ethylbenzene (100-41-4)	
LD50 oral rat	mg/kg bodyweight/day
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Xylene (1330-20-7)	
IARC group	3 - Not classifiable

ethylbenzene (100-41-4)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

Xylene (1330-20-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Xylene (1330-20-7)	
LOAEL (oral,rat,90 days)	150 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

ethylbenzene (100-41-4)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : > 20.5 mm²/s (40°C)

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes eye irritation.

Chronic symptoms : May cause damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

Xylene (1330-20-7)	
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

12.2. Persistence and degradability

CHS-EPOXY 210 X 75	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

CHS-EPOXY 210 X 75	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

CHS-EPOXY 210 X 75	
Ecology - soil	Not established.

12.5. Other adverse effects

Other adverse effects : Unknown.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Uncured or imperfectly cured residues (waste of category N, waste type code 08 04 09) should be placed in impermeable packaging and hand them over to an authorized person for disposal / recovery.
Perfectly cured residues (waste category O code of waste 08 04 10) should be placed in impermeable packaging and hand them over to an authorized person for disposal / recovery.
Contaminated packaging (waste of category N, waste code 15 01 10) should be hand them over to an authorized person for disposal / recovery.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
1866	1866	1866
14.2. Proper Shipping Name		
Resin solution	RESIN SOLUTION	Resin solution

DOT	IMDG	IATA
14.3. Transport hazard class(es)		
3	3	3
 Not applicable		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
Not declared as goods of class 3 if transported in containers of less than 450 litres capacity (ADR exemption 2.2.3.1.5.)		

14.6. Special precautions for user

Special transport precautions : Requirements for the material design of means of transport:
Tank-vehicles /tank-containers: stainless steel - 316
Seal: material resistant to petroleum substances and temperatures up to 100 °C (eg Teflon)

DOT

UN-No.(DOT) : UN1866

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Packaging Non Bulk (49 CFR 173.xxx) : 173

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L

DOT Vessel Stowage Location : A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

IMDG

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER

IATA

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y344
PCA limited quantity max net quantity (IATA)	:	10L
PCA packing instructions (IATA)	:	355
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	366
CAO max net quantity (IATA)	:	220L
Special provision (IATA)	:	A3
ERG code (IATA)	:	3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Reaction product: bisphenol-A-(epichlorhydrin); Epoxy resin (number average molecular weight 700-1100)	25068-38-6	Present	Active	XU
Xylene	1330-20-7	Present	Active	
ethylbenzene	100-41-4	Present	Active	

Xylene (1330-20-7)	
Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb

ethylbenzene (100-41-4)	
Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	1000 lb

15.2. International regulations

CANADA

CHS-EPOXY 210 X 75
Listed on the Canadian DSL (Domestic Substances List)

Reaction product: bisphenol-A-(epichlorhydrin); Epoxy resin (number average molecular weight 700-1100) (25068-38-6)
Listed on the Canadian DSL (Domestic Substances List)

Xylene (1330-20-7)
Listed on the Canadian DSL (Domestic Substances List)

ethylbenzene (100-41-4)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Xylene (1330-20-7)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

ethylbenzene (100-41-4)
Listed on IARC (International Agency for Research on Cancer) Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

ethylbenzene (100-41-4)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	54 µg/day (inhalation); 41 µg/day (oral)	

SECTION 16: Other information

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

Data sources : List of hitherto classified dangerous substances. Internet database of chemical substances. Safety data sheets of raw materials.

Training advice : Those who manipulate with the product must be demonstrably informed of its dangerous properties, principles of protecting the environment and health from its harmful effects and principles of first aid.

Other information : Not determined.

Full text of H-phrases	
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure

Abbreviations and acronyms	
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
DNEL	Derived-No Effect Level
PNEC	Predicted No-Effect Concentration
LD50	Median lethal dose
LC50	Median lethal concentration

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.