SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

EP02-S, EP80, EP83, EP85, EP85-L

Creation date	12. May 2015		
Revision date	03. March 2018	Version	4.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Substance / mixture	mixture
Other mixture names	Epoxidové základní barvy

1.2. Relevant identified uses of the substance or mixture and uses advised against

mixture's intended use	Painting of metal. Only for industrial use
Disapproved uses of mixture	The product should not be used in ways other then those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Downstream user

Name or trade name	COLOR WEST s.r.o.
Address	Konzumní 207/14, Plzeň 10, 30100 Czech Republic
Identification number (ID)	25229184
Phone	371519401
E-mail	nosek@colorwest.cz
Web address	http://www.colorwest.cz/

Competent person responsible for the safety data sheet

Name	Ing. Jan Gerstenberger
E-mail	gerstenberger.j@gmail.com

1.4. Emergency telephone number

National Health Service (NHS) 111
National poisoning information centre Scotland, NHS 24: 111

SECTION 2: Hazards identification

2.1. Substance or mixture classification

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Skin Sens. 1, H317
Eye Dam. 1, H318
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse physico-chemical effects

Flammable liquid and vapour.

Most serious adverse effects on human health and the environment

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

Reaction product: bisphenol-A-(epichlorhyd-rin); epoxy resin (number average molecular weight < 700)
n-butanol

Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a doctor.
P302+P352	IF ON SKIN: Wash with plenty of waterand soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to as hazardous waste.

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Index: 030-001-01-9 CAS: 7440-66-6 EC: 231-175-3	zinc powder - zinc dust (stabilised)	≤80	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
CAS: 7727-43-7 EC: 231-784-4	barium sulfate	≤25		
Index: 603-074-00-8 CAS: 25068-38-6 EC: 500-033-5	Reaction product: bisphenol-A-(epichlorhyd-rin); epoxy resin (number average molecular weight < 700)	20-30	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Specific concentration limit: Skin Irrit. 2, H315: C ≥ 5 % Eye Irrit. 2, H319: C ≥ 5 %	
Index: 601-022-00-9d CAS: 1330-20-7 EC: 215-535-7 Registration number: 01-2119488216-32-xxxx	Xylene	10-20	Flam. Liq. 3, H226 Acute Tox. 4, H312, H332 Skin Irrit. 2, H315	1
CAS: 14807-96-6 EC: 238-877-9	talc	≤12		

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Index: 603-004-00-6 CAS: 71-36-3 EC: 200-751-6	n-butanol	≤8	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335, H336	
CAS: 16389-88-1	dolomite	<5		
CAS: 7631-86-9 ES: 231-545-4	Silicon dioxide	≤5		
Index: 030-013-00-7 CAS: 1314-13-2 EC: 215-222-5	zinc oxide	≤5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
Index: 603-064-00-3 CAS: 107-98-2 EC: 203-539-1	1-methoxy-2-propanol	≤4	Flam. Liq. 3, H226 STOT SE 3, H336	4
Index: 607-195-00-7 CAS: 108-65-6 EC: 203-603-9	2-methoxy-1-methylethyl acetate	≤3	Flam. Liq. 3, H226	4
Index: 030-011-00-6 CAS: 7779-90-0 EC: 231-944-3	trizinc bis(orthophosphate)	≤3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
Index: 649-327-00-6 CAS: 64742-48-9 EC: 265-150-3	Naphtha (petroleum), hydrotreated heavy	≤2	Asp. Tox. 1, H304 Muta. 1B, H340 Carc. 1B, H350	2, 3
Index: 607-025-00-1 CAS: 123-86-4 EC: 204-658-1	n-butyl acetate	<1	Flam. Liq. 3, H226 STOT SE 3, H336	
Index: 601-023-00-4 CAS: 100-41-4 EC: 202-849-4	ethylbenzene	<1	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Acute Tox. 4, H332 STOT RE 2, H373	4

Notes

1 Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

2 Note P: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

3 Fulfilled Note P

4 Substance for which exposure limits of Community for working environment exist.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

not available

Inhalation

Put the affected person into the open air. Lay the victim to a quiet place, cover and keep warm. If not breathing or breathing is irregular give artificial respiration or oxygen. If adverse health effects persist or are severe, consult a physician. If unconscious, place in recovery position and get medical attention immediately. Keep air passages free

Skin contact

Remove the contaminated clothing and shoes. Rinse /Wash affected skin with plenty of water and soap. If symptoms persist, call for medical help.

Eye contact

If the afflicted person wears contact lenses, they must be removed immediately. Rinse the eyes with eyelids open by stream of drinking water for at least 15 minutes. If the irritation persists, call for a professional medical help

Ingestion

If the afflicted person is conscious:
First rinse the mouth with water. Move victim to fresh air and keep at rest in a position comfortable for breathing. Make the affected person to take a sip of water. Stop if victim feels sick. Do not make the person vomit. If vomit, keep head in such a position, so as vomit will not get into the lungs.
If the person is unconscious:
First rinse the mouth with water. Move victim to fresh air and keep at rest in a position comfortable for breathing. Never give anything by mouth. Get medical attention immediately. Keep air passages free.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

Possible irritation of respiratory pathways, cough, headache.

Skin contact

Skin irritation, redness, itching

Eye contact

Eye irritation, burning, lacrimation

Ingestion

Headache, dizziness, nausea, stomach ache, diarrhoea

4.3. Indication of any immediate medical attention and special treatment needed

There are no specific instructions.

More information

The mixture contains xylene. Specific instruction for xylene: chronical exposure of xylene can cause dermatitis. Aspiration can cause pulmonary oedema and pneumonia. After ingestion must be stomach evacuate by probang. Ingestion cas cause damage of CNS, liver, reins, blood and marrow.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist

Unsuitable extinguishing media

water - full jet

5.2. Special hazards arising from the substance or mixture

Fire produces heavy black smoke, it can be carbon oxides and another toxic gases produced. (aldehydes, acids and indefinableness mixtures of organic compounds). Inhalation of dangerous decomposition (pyrolytic) products can cause serious health damage. Solvent vapours are heavier than air and can be spread across the floor. Solvent vapours can create explosive mixtures with air.

5.3. Advice for firefighters

Cool closed containers exposed to fire with water spray. Do not allow contaminated extinguishing media to enter sewerage, ground- and surface waters. Use insulation breathing apparatus as well as complete protective clothing. Close the endangered area and secure the entry to authorized personnel only.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and goggles or face shield. Ensure adequate ventilation. Do not breathe vapour / aerosol. Remove all possible sources of ignition. No smoking and the use of naked flames. Ban on entry of unnecessary and unprotected personnel

6.2. Environmental precautions

Prevent the product from leaking into the environment, ground and surface water, sewerage, or into the soil. Prevent the liquid from leaking by closing or sealing the leak. If the product got into water, drains or soil, inform respective authorities dealing with environmental protection

6.3. Methods and material for containment and cleaning up

Contain and collect spillage by non-combustible, absorbent material e.g. sand, soil, diatomaceous earth and place in container for disposal according to local regulations. Dispose via company that has a license for waste disposal. Contaminated absorbent material may pose the same hazard as the spilled product

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use personal protective equipment (see Section 8). Provide good vapour ventilation of working area. Do not breathe vapours/ aerosol. Prevent contact with skin and eyes. When working, it is not allowed to drink, eat and smoke and it is necessary to maintain good personal hygiene. Keep container tightly closed. Prevent contact with heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges

7.2. Conditions for safe storage, including any incompatibilities

Store in original, tightly closed container protected from direct sunlight in dry, cool and well-ventilated spaces, away from incompatible materials (see Section 10) and food, feed and beverages. Containers must be properly labeled. Store away from: sources of ignition (open flames, sparks, hot surfaces), explosive substances. Store at temperatures of 2-40 ° C. Packaging should be stored either in the store, which also forms a collecting basin or must be stored under such conditions that if package is broken, it prevents leakage into the environment, water resources, drains or soil

Storage class	3A - Flammable liquids (flash point below 55 °C)
Storage temperature	min 2 °C, max 40 °C

7.3. Specific end use(s)

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

European Union

Substance name (component)	Type	Time of exposure	Value	Note	Source
1-methoxy-2-propanol (CAS: 107-98-2)	OEL	8 hours	375 mg/m³		směrnice EU
	OEL	8 hours	100 ppm		
	OEL	Short-term	568 mg/m³		
	OEL	Short-term	150 ppm		
2-methoxy-1-methylethyl acetate (CAS: 108-65-6)	OEL	8 hours	275 mg/m³		směrnice EU
	OEL	8 hours	50 ppm		
	OEL	Short-term	550 mg/m³		
	OEL	Short-term	100 ppm		
ethylbenzene (CAS: 100-41-4)	OEL	8 hours	442 mg/m³		směrnice EU
	OEL	8 hours	100 ppm		
	OEL	Short-term	884 mg/m³		
	OEL	Short-term	200 ppm		

DNEL

2-methoxy-1-methylethyl acetate

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	275 mg/m³	Systemic chronic effects	
Workers	Dermal	153.5 mg/kg	Systemic chronic effects	
Consumers	Oral	1.67 mg/kg	Systemic chronic effects	
Consumers	Inhalation	33 mg/m³	Systemic chronic effects	
Consumers	Dermal	54.8 mg/kg	Systemic chronic effects	

n-butyl acetate

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	960 mg/m³ of air	Systemic acute effects	
Workers	Inhalation	960 mg/m³ of air	Local acute effects	
Workers	Inhalation	480 mg/m³ of air	Systemic chronic effects	
Workers	Inhalation	480 mg/m³ of air	Local chronic effects	
Consumers	Inhalation	859.7 mg/m³ of air	Local acute effects	
Consumers	Inhalation	859.7 mg/m³ of air	Systemic acute effects	
Consumers	Inhalation	102.34 mg/m³ of air	Local chronic effects	
Consumers	Inhalation	102.34 mg/m³ of air	Systemic chronic effects	

Xylene

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Inhalation	174 mg/m³	Systemic acute effects	
Consumers	Dermal	108 mg/kg	Systemic chronic effects	
Consumers	Inhalation	14.8 mg/kg	Systemic chronic effects	
Consumers	Oral	1.6 mg/kg	Systemic chronic effects	
Workers	Inhalation	289 mg/m³	Systemic acute effects	
Workers	Inhalation	77 mg/m³	Systemic chronic effects	
Workers	Dermal	180 mg/kg	Systemic chronic effects	
Workers	Inhalation	289 mg/m³	Systemic acute effects	
Workers	Inhalation	77 mg/m³	Systemic chronic effects	

zinc powder - zinc dust (stabilised)

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Oral	5 mg/m³	Systemic chronic effects	
Workers	Oral	83 mg/kg bw/day	Systemic chronic effects	
Consumers	Oral	2.5 mg/m³	Systemic chronic effects	
Consumers	Oral	83 mg/kg bw/day	Systemic chronic effects	
Consumers	Oral	0.83 mg/kg bw/day	Systemic chronic effects	

PNEC

2-methoxy-1-methylethyl acetate

Route of exposure	Value	Determining method
Freshwater environment	0.635 mg/l	
Seawater	0.0635 mg/l	
Water (occasional leak)	6.35 mg/l	
Freshwater sediment	3.29 mg/kg	
Sea sediments	0.329 mg/kg	
Soil (agricultural)	0.29 mg/kg	
Microorganisms in wastewater treatment plants	100 mg/l	

n-butyl acetate

Route of exposure	Value	Determining method
Drinking water	0.18 mg/l	
Seawater	0.018 mg/l	
Freshwater sediment	0.981 mg/kg	
Sea sediments	0.0981 mg/kg	
Soil (agricultural)	0.0903 mg/kg	
Microorganisms in wastewater treatment plants	35.6 mg/l	
Freshwater sediment	0.36 mg/l	

zinc powder - zinc dust (stabilised)

Route of exposure	Value	Determining method
Drinking water	20.6 µg/l	
Seawater	6.1 µg/l	
Microorganisms in wastewater treatment plants	100 µg/l	
Freshwater sediment	117.8 mg/kg of dry substance of sediment	
Sea sediments	56.5 mg/kg of dry substance of sediment	
Soil (agricultural)	35.6 mg/kg of dry substance of soil	

8.2. Exposure controls

Ensure adequate ventilation. Use closed workplace, local exhaust ventilation or other engineering controls to prevent exceeding exposure limits

Eye/face protection

Protective goggles with side shields or a face shield

Skin protection

Wear suitable protective gloves. Throughput time> = 8 hours. Glove material consult with glove manufacturer. Protective clothing and rubber boots, exposed skin before work protect with cream

Respiratory protection

In case of short-term exposure or low concentrations use respirator with filter against organic vapours, against high concentrations and long-term exposure is required insulating respirator

Thermal hazard

not available

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

More information

Take off stained clothing immediately. Avoid contact with skin and eyes. Do not inhale gases, vapours and aerosols. When handling: do not eat, drink or smoke. Before breaks and after work wash your hands

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	thixotropic colour liquid
Physical state	liquid at 20°C
color	various
Odour	after organic solvents
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	>120 °C
Flash point	>25 - <60 °C
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	
bottom	1 %
upper	7 %
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	data not available
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

9.2. Other information

Density	1,5 - 2,5 g/cm^3
ignition temperature	data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

When used as recommended, it does not react

10.2. Chemical stability

When used as recommended, it does not decompose

10.3. Possibility of hazardous reactions

Avoid contact with strong acids, strong alkali, oxidizing agents

10.4. Conditions to avoid

Avoid contact with sources of ignition.

10.5. Incompatible materials

Strong acids, strong alkali, oxidizing agents. Xylene damages rubber after long exposure, which becomes softer after its effect and decompose.

10.6. Hazardous decomposition products

Decomposition happens only due to the heat (burning) - see section 5

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Human experiences: xylene - LCLo (inh, human): 10000 ppm (6h) TCLo (inh, human): 200 ppm; 2-methoxy-1- methylethyl-acetate - smell threshold for humans is about 100 ppm. Higher concentration cause eye irritation and respiratory irritation. Anesthetic effects are reflected at about 1000 ppm

Acute toxicity

Based on available data the classification criteria are not met.

1-methoxy-2-propanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD50	6600 mg/kg		Rat		
Dermal	LD50	13000 mg/kg		Rat		

2-methoxy-1-methylethyl acetate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD50	8532 mg/kg		Rat		

ethylbenzene

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD50	3500 mg/kg		Rat		
Dermal	LD50	17800 mg/kg		Rat		
Inhalation (vapor)	LC50	17400 mg/kg	4 hour	Rat		

Naphtha (petroleum), hydrotreated heavy

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Dermal	LD50	3160 mg/kg		Rat		ext. BL (MSDS)
Oral	LD50	5000 mg/kg		Rat		ext. BL (MSDS)

n-butyl acetate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD50	13100 mg/kg		Rat		externí bezpečnostní list
Inhalation	LC50	>21 mg/l	4 hour	Rat		externí bezpečnostní list
Dermal	LD50	>17600 mg/kg		Rabbit		externí bezpečnostní list
Oral	LD50	10760 mg/kg		Rat	F	externí bezpečnostní list

Xylene

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD50	4300 mg/kg		Rat		
Dermal	LD50	>4350 mg/kg		Rat		
Inhalation	LC50	0.6350 mg/kg	4 hour	Rat		

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Sensitization

n-butyl acetate

Route of exposure	Result	Time of exposure	Species	Sex	Source
Dermal	Negative		Guinea-pig		externí bezpečnostní list

Respiratory or skin sensitisation
May cause an allergic skin reaction.

Germ cell mutagenicity
Based on available data the classification criteria are not met.

Carcinogenicity
Based on available data the classification criteria are not met.

Reproductive toxicity
Based on available data the classification criteria are not met.

n-butyl acetate

	Parameter	Method	Value	Result	Species	Sex	Source
Effects on fertility		OECD 416		Negative	Rat (Rattus norvegicus)	F/M	externí bezpečnostní list
Evolution toxicity		OECD 414		Negative	Rat	F	externí bezpečnostní list

Toxicity for specific target organ - single exposure
Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure
Based on available data the classification criteria are not met.

Aspiration hazard
Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity
Data for the mixture are not available.

2-methoxy-1-methylethyl acetate

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	180 mg/l	96 hour	Fishes		
EC50	500 mg/l	48 hour	Daphnia		

ethylbenzene

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	5.1 mg/l	96 hour	Fishes (Menidia menidid)		registrační dokumentace
NOEC	3.3 mg/l		Fishes (Menidia menidid)		registrační dokumentace
LC50	2.6 mg/l	96 hour	Invertebrates (Mysidopsis Bahia)		registrační dokumentace
NOEC	1.0 mg/l		Invertebrates (Mysidopsis Bahia)		registrační dokumentace
EC50	3.6 mg/l	96 hour	Algae (Selenastrum capricornutum)		registrační dokumenatace
NOEC	3.4 mg/l		Algae (Selenastrum capricornutum)		registrační dokumentace

Naphtha (petroleum), hydrotreated heavy

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	2200 mg/l	96 hour	Pimephales promelas		ext. BL (MSDS)

n-butyl acetate

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	62 mg/l	96 hour	Fishes (Leuciscus idus)		externí bezpečnostní list
EC50	72.8 mg/l	24 hour	Daphnia (Daphnia magna)		externí bezpečnostní list
EC50	675 mg/l	72 hour	Algae (Desmodesmus subspicatus)		externí bezpečnostní list
EC50	959 mg/l	18 hour	Bacteria (Pseudomonas putida)		externí bezpečnostní list

Reaction product: bisphenol-A-(epichlorhyd-rin); epoxy resin (number average molecular weight < 700)

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	2.0 mg/l	96 hour	Fishes		reg.doc.
EC50	1.1 mg/l	48 hour	Invertebrates		reg.doc
EC50	11 mg/l		Algae		reg.doc.
EC50	100 mg/l		Microorganisms		reg.doc.

Silicon dioxide

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	5000 mg/l	96 hour	Fishes		

talc

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	>100000 mg/l	96 hour	Fishes		

Xylene

Parameter	Value	Time of exposure	Species	Environment	Source
LC50	26.7 mg/l	96 hour	Fishes		

zinc powder - zinc dust (stabilised)

Parameter	Value	Time of exposure	Species	Environment	Source
IC50	0.34 mg/l	48 hour	Crustaceans	Salt water	ext. bezp. list
LC50	68 µg/l	48 hour	Daphnia		ext. bezp. list
LC50	0.24 mg/l	96 hour	Fishes (Oncorhynchus mykiss)		ext. bezp. list

Chronic toxicity

zinc powder - zinc dust (stabilised)

Parameter	Value	Time of exposure	Species	Environment	Source
NOEC	9.72 µg/l	4 day	Fishes		ext. bezp. list

12.2. Persistence and degradability

Biodegradability

2-methoxy-1-methylethyl acetate

Parameter	Value	Time of exposure	Environment	Result	Source
	100 %	8 day			ext. BL(MSDS) metoda OECD TG 302 B

ethylbenzene

Parameter	Value	Time of exposure	Environment	Result	Source
	45 %				ext. BL(MSDS) Metoda: Kultivační metoda (test v uzavřené nádobce)

n-butanol

Parameter	Value	Time of exposure	Environment	Result	Source
	>70 %				ext. BL(MSDS) Zahn-Wellens Test

n-butyl acetate

Parameter	Value	Time of exposure	Environment	Result	Source
	80 %	5 day			ext. BL(MSDS)
	98 %	28 day		Easily biodegradable	externí bezpečnostní list

Reaction product: bisphenol-A-(epichlorhyd-rin); epoxy resin (number average molecular weight < 700)

Parameter	Value	Time of exposure	Environment	Result	Source
	5 %	28 day			ext. BL(MSDS) OECD Derived from OECD 301F (Biodegradation Test)

Xylene

Parameter	Value	Time of exposure	Environment	Result	Source
	88 %	28 day			ext. BL/MSDS

For product no information available

12.3. Bioaccumulative potential

2-methoxy-1-methylethyl acetate

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
BCF	<100					ext. BL (MSDS)
Log Pow	0.56					ext. BL (MSDS)

n-butyl acetate

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
Log Pow	1.85					ext. BL (MSDS)

Reaction product: bisphenol-A-(epichlorhyd-rin); epoxy resin (number average molecular weight < 700)

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
BCF	31					ext. BL (MSDS)
Log Pow	3.2					ext. BL (MSDS)

Xylene

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
BCF	6-23					ext. BL/MSDS
Log Pow	3.1-3.2					ext. BL/MSDS

For product no information available

12.4. Mobility in soil

2-methoxy-1-methylethyl acetate

Parameter	Value	Environment	Surrounding temperature	Source
Poc	0-50 %			ext. BL(MSDS)

Xylene

Parameter	Value	Environment	Surrounding temperature	Source
Log Koc	48-540			ext. BL/MSDS

For product no information available

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Prevent the product from leaking into the environment, water resources, sewerage, or soil. See Section 6.2

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended. Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

08 01 11	waste paint and varnish containing organic solvents or other dangerous substances
08 01 17	wastes from paint or varnish removal containing organic solvents or other dangerous substances

Packaging waste type code

15 01 10	packaging containing residues of or contaminated by dangerous substances
15 02 02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

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SECTION 14: Transport information

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

III - substances presenting low danger

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

Additional information

Hazard identification No.	**30** (Kemler Code)
UN number	**1263**
Classification code	F1
Safety signs	3+hazardous for the environment

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended.

15.2. Chemical safety assessment

Not done

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a doctor.
P302+P352	IF ON SKIN: Wash with plenty of waterand soap.

P331	Do NOT induce vomiting.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to as hazardous waste.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

A list of additional standard phrases used in the safety data sheet

EUH 066	Repeated exposure may cause skin dryness or cracking.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC50	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment

Aquatic Chronic	Hazardous to the aquatic environment
Asp. Tox.	Aspiration hazard
Carc.	Carcinogenicity
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Muta.	Germ cell mutagenicity
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the mixture.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

not available

The changes (which information has been added, deleted or modified)

Article(s): 11,12,13,14,15

Statement

The Safety Data Sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.