



according to UK REACH Regulation

WS-Epoxid Zinkstaub-Grundierung E 2021

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

1.1. Product identifier

WS-Epoxid Zinkstaub-Grundierung E 2021

UFI: YUY5-097S-XVJF-5CX7

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

Use of the substance/mixture

industrial paint Paint, Varnish.

Uses advised against

Do not use for products which come into contact with the food stuffs.

1.3. Details of the supplier of the safety data sheet

Company name: W+S GmbH Lackchemie und Aerosol-Technik

Street: Am Sportplatz 5

Place: D-63791 Karlstein-Dettingen

Telephone: +49 6188 9575-0 Telefax: +49 6188 9575-30

E-mail: info@ws-lackchemie.de
Contact person: Abt. Produkt / Sicherheit
Responsible Department: Abt. Produkt / Sicherheit

1.4. Emergency telephone +49 551-19240 GIZ-Nord Poisons Centre

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

Signal word: Warning

Pictograms:

H410





Very toxic to aquatic life with long lasting effects.



Hazard statements

H226 Flammable liquid and vapour. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.



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Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P370+P378 In case of fire: Use sand, dry chemical or alcohol-resistant foam to extinguish.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P280 Wear suitable gloves and eye/face protection.

P273 Avoid release to the environment.

P501 Offer surplus and non-recyclable solutions to a licensed disposal company.

Special labelling of certain mixtures

EUH205 Contains epoxy constituents. May produce an allergic reaction.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (GB CLP Regulation)				
7440-66-6	zinc powder - zinc dust (stabilised)					
	231-175-3	030-001-01-9				
	Aquatic Acute 1, Aquatic Chronic 1	; H400 H410	•			
1330-20-7	xylene			5 - < 10 %		
	215-535-7	601-022-00-9				
	Flam. Liq. 3, Acute Tox. 4, Acute To	ox. 4, Skin Irrit. 2; H226 H332 H312 H	1 315			
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)					
	500-033-5	603-074-00-8				
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens.	1, Aquatic Chronic 2; H315 H319 H3	17 H411			
100-41-4	ethylbenzene					
	202-849-4	601-023-00-4				
	Flam. Liq. 2, Acute Tox. 4, STOT R	E 2, Asp. Tox. 1; H225 H332 H373 H	304			
78-83-1	2-methylpropan-1-ol; iso-butanol					
	201-148-0	603-108-00-1				
	Flam. Liq. 3, Skin Irrit. 2, Eye Dam	. 1, STOT SE 3, STOT SE 3; H226 H	315 H318 H335 H336			
1314-13-2	zinc oxide					
	215-222-5	030-013-00-7				
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410					

Full text of H and EUH statements: see section 16.





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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
1330-20-7	215-535-7	xylene	5 - < 10 %
	inhalation: ATE 1100 mg/kg	E = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE =	
25068-38-6	500-033-5	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	5 - < 10 %
	Skin Irrit. 2; H3	15: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100	
100-41-4	202-849-4	ethylbenzene	1 - < 5 %
		50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: mg/kg; oral: LD50 = 3500 mg/kg	
78-83-1	201-148-0	2-methylpropan-1-ol; iso-butanol	1 - < 5 %
	inhalation: LC: mg/kg	50 = > 24 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2830	
1314-13-2	215-222-5	zinc oxide	1 - < 5 %
	oral: LD50 = >	5000 mg/kg	

Further Information

Full text of R-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Give nothing to eat or drink.

After inhalation

In case of inhaling spray mists, consult a doctor immediately and show him box or label. If victim is at risk of losing consciousness, position and transport on their side. Provide fresh air.

After contact with skin

After contact with skin, wash immediately with: Water. Subsequently wash off with: Polyethylene glykol 400. Medical treatment necessary. Remove contaminated, saturated clothing immediately. Change contaminated clothing. Wash thoroughly the body (shower or bath).

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

If swallowed, immediately drink: Water. Do NOT induce vomiting. Call a physician immediately.

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

Frequently or prolonged contact with skin may cause dermal irritation.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam. Dry extinguishing powder. Carbon dioxide (CO2). ABC powder.

Unsuitable extinguishing media

High power water jet.



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5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Burning produces heavy smoke. In case of fire and/or explosion do not breathe fumes. Use water spray jet to protect personnel and to cool endangered containers. Contaminated fire-fighting water must be collected separately.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Contaminated fire-fighting water must be collected separately. Remove product from area of fire. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment. Remove all sources of ignition. Provide adequate ventilation. See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Preventive measures: If handled uncovered, arrangements with local exhaust ventilation have to be used. It is recommended to design all work processes always so that the following is excluded: inhalation. skin contact. Eye contact. Take precautionary measures against static discharges.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep only in the original container in a cool, well-ventilated place. Take precautionary measures against static discharges.

Hints on joint storage

Do not store together with: Material, rich in oxygen, oxidizing. Materials to avoid: Acid. Base. Material, combustible. Oxidizing agents.

Further information on storage conditions

Keep away from sources of ignition - No smoking. Protect against: heat. Keep/Store only in original container.



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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
78-83-1	2-Methylpropan-1-ol	50	154		TWA (8 h)	WEL
		75	231		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol		Post shift

8.2. Exposure controls

Appropriate engineering controls

Occupational exposure controls: Refer to chapter 7. No further action is necessary.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Framed glasses. Goggles.

Hand protection

Tested protective gloves are to be worn:

Suitable material: NBR (Nitrile rubber). , Butyl rubber.

Thickness of glove material: >0,4mm

penetration time (maximum wearing period): >480min

DIN-/EN-Norms EN ISO 374

Skin protection

Suitable protective clothing: Lab apron.

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values insufficient ventilation. insufficient absorbtion.

Environmental exposure controls

Refer to chapter 7 No further action is necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid Colour: grey

Odour: hydrocarbons, aromatic.

Odour threshold: not determined

Test method

135 °C

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Boiling point or initial boiling point and

boiling range:

Lower explosion limits: 1 vol. %



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Upper explosion limits:8 vol. %Flash point:30 °CAuto-ignition temperature:460 °CVapour pressure:7 hPa

(at 20 °C)

Density: 2,67 g/cm³ DIN 53217

9.2. Other information

Other safety characteristics

Solvent content: VOCV (CH): 14,9 % VOC (EU): 405,949 g/l

Solid content: 84 %

 Softening point:
 DIN 52025

 Flow time:
 600 (3 mm)
 3 DIN 53211

(at 20 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

10.2. Chemical stability

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

10.3. Possibility of hazardous reactions

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard. Conditions to avoid:

In case of warming: Danger of bursting container.

10.5. Incompatible materials

Alkalis (alkalis). Acid. Oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapors.

SECTION 11: Toxicological information

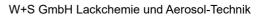
11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Toxicological data are not available.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation vapour) > 50 mg/l; ATE (inhalation dust/mist) > 12,5 mg/l





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CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
1330-20-7	xylene						
	dermal	ATE mg/kg	1100				
	inhalation vapour	ATE	11 mg/l				
	inhalation dust/mist	ATE	1,5 mg/l				
100-41-4	ethylbenzene						
	oral	LD50 mg/kg	3500	Rat	GESTIS		
	dermal	LD50 mg/kg	15400	Rabbit	GESTIS		
	inhalation (4 h) vapour	LC50	17,2 mg/l	Rat			
	inhalation dust/mist	ATE	1,5 mg/l				
78-83-1	2-methylpropan-1-ol; iso	-butanol					
	oral	LD50 mg/kg	> 2830	Rat			
	dermal	LD50 mg/kg	> 2000	Rat			
	inhalation (4 h) vapour	LC50	> 24 mg/l	Rat			
1314-13-2	zinc oxide						
	oral	LD50 mg/kg	> 5000	Rat	IUCLID		

Irritation and corrosivity

Evaluation: non-irritant.

Sensitising effects

@1501.B015584

STOT-repeated exposure

Has de-greasing effect on the skin.

Specific effects in experiment on an animal

Rat LD50: 4300 - 5800 mg/kg Acute toxicity, oral

Data apply to the main component.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

11.2. Information on other hazards

Further information

Toxicological data are not available.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Doesn't get into the sewage water as long as the process is carried out according to regulations. Very toxic for Water fleas.





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CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
100-41-4	ethylbenzene						
	Acute fish toxicity	LC50	4,2 mg/l	96 h	Oncorhynchus mykiss	ECHA	
	Acute algae toxicity	ErC50	3,6 mg/l	96 h	Algen	GESTIS	
78-83-1	2-methylpropan-1-ol; iso-butanol						
	Acute fish toxicity	LC50 mg/l	1430	96 h	Pimephales promelas		
	Acute algae toxicity	ErC50 mg/l	1250		Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 mg/l	1439	48 h	Daphnia magna		

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
100-41-4	ethylbenzene	3,15
78-83-1	2-methylpropan-1-ol; iso-butanol	0,79

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

No data available

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish

containing organic solvents or other hazardous substances; hazardous waste





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List of Wastes Code - contaminated packaging

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF

COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish

containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Hand over to officially registered waste disposal company.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:UN 126314.2. UN proper shipping name:PAINT14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1

Special Provisions: 163 367 650

Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Other applicable information (land transport)

If this product is transportet in containers of a maximum capacity of 450 I according to ADR/RID No. 2.2.3.1.5., it is not referred to as a dangerous good in terms of transport regulations.

Inland waterways transport (ADN)

14.1. UN number or ID number:UN 126314.2. UN proper shipping name:Paint14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1

Special Provisions: 163 367 650

Limited quantity: 5 L Excepted quantity: E1

Other applicable information (inland waterways transport)

If this product is transportet in containers of a maximum capacity of 450 I according to ADR/RID No. 2.2.3.1.5., it is not referred to as a dangerous good in terms of transport regulations.

Marine transport (IMDG)

14.1. UN number or ID number:UN 126314.2. UN proper shipping name:PAINT14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3





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Special Provisions: 163, 223, 367, 955

Limited quantity: 5 L

Excepted quantity: E1

EmS: F-E, S-E

Other applicable information (marine transport)

Transport in accordance with paragraph 2.3.2.5 of the IMDG Code.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:UN 126314.2. UN proper shipping name:PAINT14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Special Provisions: A3 A72 A192

Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1

IATA-packing instructions - Passenger:355IATA-max. quantity - Passenger:60 LIATA-packing instructions - Cargo:366IATA-max. quantity - Cargo:220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: zinc powder - zinc dust (stabilised)

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Directive 2004/42/EC on VOC in VOCV (CH): 14,9 % paints and varnishes: VOC (EU): 405,949 g/l

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water



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15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

Flam. Liq: Flammable liquids Acute Tox: Acute toxicity Asp. Tox: Aspiration hazard Skin Irrit: Skin irritation Eye Dam: Eye damage Eye Irrit: Eye irritation Skin Sens: Skin sensitisation

STOT SE: Specific target organ toxicity - single exposure STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Acute: Acute aquatic hazard Aquatic Chronic: Chronic aquatic hazard

Classification for mixtures and used evaluation method according to GB CLP Regulation

- incompanies in the second contraction in the second seco					
Classification	Classification procedure				
Flam. Liq. 3; H226	On basis of test data				
Skin Irrit. 2; H315	Calculation method				
Eye Irrit. 2; H319	Calculation method				
Skin Sens. 1; H317	Calculation method				
Aquatic Acute 1; H400	Calculation method				
Aquatic Chronic 1; H410	Calculation method				

Relevant H and EUH statements (number and full text)

_		(11111111111111111111111111111111111111
	H225	Highly flammable liquid and vapour.
	H226	Flammable liquid and vapour.
	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.
	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.
	EUH205	Contains epoxy constituents. May produce an allergic reaction.

Further Information

The product is classified and labelled according to EC directives or corresponding national laws.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)