SAFETY DATA SHEET



TEKNOZINC 90 SE - All variants

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

1.1 Product identifier

Product name : TEKNOZINC 90 SE - All variants

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person : Prod-safe@teknos.com

responsible for this SDS

National contact

Teknos (UK) Limited, 7 Longlands Rd, Bicester, Oxfordshire OX26 5AH, United Kingdom. Tel. +44 (0) 1869 208005.

1.4 Emergency telephone number

National advisory body/Poison Centre
Telephone number : NHS: 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

<u>Classification according to UK CLP/GHS</u>

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :









Label No: 77660

Signal word : Warning

Hazard statements : H226 - Flammable liquid and vapour.

H315 - Causes skin irritation.

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

H373 - May cause damage to organs through prolonged or repeated exposure.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

Date of issue/Date of revision: 23/02/2024Date of previous issue: No previous validationVersion: 11/22

SECTION 2: Hazards identification

: P280 - Wear protective gloves. Wear eye or face protection. **Prevention**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P273 - Avoid release to the environment.

P260 - Do not breathe vapour.

Response : P391 - Collect spillage.

Storage : Not applicable.

: P501 - Dispose of contents and container in accordance with all local, regional, **Disposal**

national and international regulations.

Supplemental label

elements

Annex XVII - Restrictions on the manufacture, placing on the market and

use of certain dangerous substances, mixtures and

articles

: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
Zinc powder - zinc dust (stabilized)	REACH #: 01-2119467174-37 EC: 231-175-3 CAS: 7440-66-6	≥75 - ≤90	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
Xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤17	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (oral, inhalation) Asp. Tox. 1, H304	[1] [2]
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	EC: 500-033-5 CAS: 25068-38-6	≤10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
Ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) (oral, inhalation) Asp. Tox. 1, H304	[1] [2]
iso-butanol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≤2.3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
1-Methoxy 2-propanol	REACH #: 01-2119457435-35	<1	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]

Date of issue/Date of revision : 23/02/2024 Date of previous issue Version :1 2/22 : No previous validation TEKNOZINC 90 SE - All variants **Label No: 77660**

SECTION 3: Composition	n/information on in	gredients		
O Mark and discrete darked a safety	EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	40.0	Flow Lin 2 U222	[4] [0]
2-Methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≤0.3	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
Ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≤0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319	[1] [2]
Propylene glycol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≤0.1	Not classified.	[2]
Formaldehyde	REACH #: 01-2119488953-20 EC: 200-001-8 CAS: 50-00-0 Index: 605-001-00-5	<0.1	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H335	[1] [2]
Propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≤0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1] [2]
Butanone	REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≤0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Date of issue/Date of revision : 23/02/2024 Date of previous issue : No previous validation Version :1 3/22 **Label No** :77660

SECTION 4: First aid measures

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation redness

: No specific data. Ingestion

4.3 Indication of any immediate medical attention and special treatment needed

: Treat symptomatically. Contact poison treatment specialist immediately if large Notes to physician

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Date of issue/Date of revision • 23/02/2024 4/22 Date of previous issue : No previous validation Version: 1 **Label No: 77660**

SECTION 5: Firefighting measures

Hazardous combustion products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

metal oxide/oxides

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Date of issue/Date of revision : 23/02/2024 Version :1 5/22 Date of previous issue : No previous validation **Label No: 77660**

SECTION 7: Handling and storage

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne
E1	100 tonne	200 tonne

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Xylene EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,

p- or mixed isomers] Absorbed through skin.

STEL: 441 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. TWA: 220 mg/m³ 8 hours. STEL: 100 ppm 15 minutes.

Ethylbenzene EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed

through skin.

STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m³ 8 hours.

iso-butanol EH40/2005 WELs (United Kingdom (UK), 1/2020).

STEL: 231 mg/m³ 15 minutes. STEL: 75 ppm 15 minutes. TWA: 154 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

1-Methoxy 2-propanol EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed

through skin.

STEL: 560 mg/m³ 15 minutes.

Date of issue/Date of revision: 23/02/2024Date of previous issue: No previous validationVersion: 16/22TEKNOZINC 90 SE - All variantsLabel No :77660

STEL: 150 ppm 15 minutes. TWA: 375 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

2-Methoxy-1-methylethyl acetate

EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed

through skin.

STEL: 548 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. TWA: 274 mg/m³ 8 hours. STEL: 100 ppm 15 minutes.

Toluene

EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed

through skin.

STEL: 384 mg/m³ 15 minutes. TWA: 191 mg/m³ 8 hours. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.

Ethanol

EH40/2005 WELs (United Kingdom (UK), 1/2020).

TWA: 1000 ppm 8 hours. TWA: 1920 mg/m³ 8 hours.

Propylene glycol

EH40/2005 WELs (United Kingdom (UK), 1/2020).

TWA: 10 mg/m³ 8 hours. Form: Particulate

TWA: 474 mg/m³ 8 hours. Form: total vapour and particulates TWA: 150 ppm 8 hours. Form: total vapour and particulates

Formaldehyde

EH40/2005 WELs (United Kingdom (UK), 1/2020).

STEL: 2.5 mg/m³ 15 minutes. STEL: 2 ppm 15 minutes. TWA: 2 ppm 8 hours. TWA: 2.5 mg/m³ 8 hours.

Propan-2-ol

EH40/2005 WELs (United Kingdom (UK), 1/2020).

STEL: 1250 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m³ 8 hours. TWA: 400 ppm 8 hours.

Butanone

EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed

through skin.

STEL: 899 mg/m³ 15 minutes. STEL: 300 ppm 15 minutes. TWA: 600 mg/m³ 8 hours. TWA: 200 ppm 8 hours.

Biological exposure indices

Product/ingredient name	Exposure indices
Xylene	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers] BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine]. Sampling time: post shift.
Butanone	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) BGV: 70 μmol/l, butan-2-one [in urine]. Sampling time: post shift.

Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Zinc powder - zinc dust (stabilized)	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.5 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic

Date of issue/Date of revision

: 23/02/2024

Date of previous issue

: No previous validation

Version :1 7/22

TEKNOZINC 90 SE - All variants

Label No :77660

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Xylene	DNEL	Long term	65.3 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	260 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	260 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term	221 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term Oral	12.5 mg/	General	Systemic
	DATE		kg bw/day	population	
	DNEL	Long term	65.3 mg/m ³	General	Systemic
	DATE	Inhalation	405 "	population	
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
	DAIE	D	bw/day	population	0
	DNEL	Long term Dermal	212 mg/kg	Workers	Systemic
	DATE		bw/day	\A	
	DNEL	Long term	221 mg/m ³	Workers	Systemic
	DATE	Inhalation	440 / 2	\A	
	DNEL	Short term	442 mg/m ³	Workers	Local
	DATE	Inhalation	440 / 2	\A	
	DNEL	Short term	442 mg/m ³	Workers	Systemic
Ethydh angan -	ראבי	Inhalation	4.6 "	Camaral	Curata waii-
Ethylbenzene	DNEL	Long term Oral	1.6 mg/kg	General	Systemic
	D	1 4:	bw/day	population	0
	DNEL	Long term	15 mg/m³	General	Systemic
	DATE	Inhalation	77 / 3	population	
	DNEL	Long term	77 mg/m³	Workers	Systemic
	DATE	Inhalation	400 "	\A	
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
	DAIE	Object to see	bw/day	NA7 1	1 1
	DNEL	Short term	293 mg/m ³	Workers	Local
	האבו	Inhalation	440/3	\\/ = =	Land
	DMEL	Long term	442 mg/m ³	Workers	Local
	DMEI	Inhalation	004 3	\\/ = w < = w=	Customia
	DMEL	Short term	884 mg/m ³	Workers	Systemic
ing hutanal	DNEL	Inhalation	EE malm3	Conoral	Local
iso-butanol	DINEL	Long term Inhalation	55 mg/m³	General	Local
	DNEL		210 mg/m3	population	Local
	DINEL	Long term Inhalation	310 mg/m ³	Workers	Local
1-Methoxy 2-propanol	DNEL	Long term Oral	33 mg/kg	General	Systemic
1-ivietiloxy 2-proparior	DIVLL	Long term Oral	bw/day	population	Systemic
	DNEL	Long term	43.9 mg/m ³	General	Systemic
	DIVLL	Inhalation	45.9 mg/m	population	Systemic
	DNEL	Long term Dermal	78 mg/kg	General	Systemic
	DINEL	Long term Delinal	bw/day	population	Cysternic
	DNEL	Long term Dermal	183 mg/kg	Workers	Systemic
	PINEL	Long term Dennal	bw/day	VVOINGIO	Сузіснію
	DNEL	Long term	369 mg/m ³	Workers	Systemic
	DIVLE	Inhalation	Joo mg/m	TTOINGIG	Cyclonic
	DNEL	Short term	553.5 mg/	Workers	Local
	DIVLE	Inhalation	m ³	TTOINGIG	
	DNEL	Short term	553.5 mg/	Workers	Systemic
	5.100	Inhalation	m ³	., 0, 1,0,10	2,0.0.1110
2-Methoxy-1-methylethyl acetate	DNEL	Long term	33 mg/m ³	General	Local
		Inhalation	, , , , , , , , , , , , , , , , , , ,	population	
	DNEL	Long term	33 mg/m³	General	Systemic
		Inhalation	, , , , , , , , , , , , , , , , , , ,	population	- , - , - , - , - , - , - , - , - , - ,
	DNEL	Long term Oral	36 mg/kg	General	Systemic
		11.9 15 5	bw/day	population	, · · · · ·
	DNEL	Long term	275 mg/m ³	Workers	Systemic
		Inhalation			- ,
	DNEL	Long term Dermal	320 mg/kg	General	Systemic
		J 2 3111101	bw/day	population	,
	DNEL	Short term	550 mg/m ³	Workers	Local
		Inhalation			
I	l	<u> </u>	l	<u> </u>	

Date of issue/Date of revision

: 23/02/2024 Date of previous issue

: No previous validation

Version :1 **Label No** :77660

8/22

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	DNEL	Long term Dermal	796 mg/kg bw/day	Workers	Systemic
Toluene	DNEL	Long term Oral	8.13 mg/	General	Systemic
		9	kg bw/day	population	-,
	DNEL	Long torm	56.5 mg/m ³	General	Local
	DINEL	Long term	30.5 mg/m		Local
		Inhalation	/ 2	population	
	DNEL	Long term	56.5 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term	192 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term	192 mg/m ³	Workers	Systemic
		Inhalation			-,
	DNEL	Long term Dermal	226 mg/kg	General	Systemic
	DIVLL	Long term Dermai	bw/day	population	Systemic
	DNE	Chart tarms			Lasal
	DNEL	Short term	226 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	226 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term Dermal	384 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Short term	384 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term	384 mg/m³	Workers	Systemic
	DINEL		304 mg/m	WOIKEIS	Systerric
Ethania I	ם אובי	Inhalation	07	0	0
Ethanol	DNEL	Long term Oral	87 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term	114 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term Dermal	206 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	343 mg/kg	Workers	Systemic
	DIVLL	Long term berman	bw/day	VVOIRCIS	Oysternic
	DNEL	Short term		Conoral	Local
	DINEL		950 mg/m ³	General	Locai
		Inhalation		population	
	DNEL	Long term	950 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term	1900 mg/	Workers	Local
		Inhalation	m³		
Propylene glycol	DNEL	Long term	10 mg/m³	General	Local
1, 3,		Inhalation		population	
	DNEL	Long term	10 mg/m³	Workers	Local
	DIVLL	Inhalation	10 1119/111	VVOIRCIS	Local
	DNEI		50 ma/m3	Conoral	Systemia
	DNEL	Long term	50 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term	168 mg/m ³	Workers	Systemic
		Inhalation			
Formaldehyde	DNEL	Long term	0.375 mg/	Workers	Local
		Inhalation	m³		
	DNEL	Short term	0.75 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term Dermal	12 µg/cm²	General	Local
		Long tom Domai	12 Mg/5111	population	
	DNEL	Long form Dormal	37 µg/cm²	Workers	Local
		Long term Dermal			
	DNEL	Long term	0.1 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Long term	3.2 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term Oral	4.1 mg/kg	General	Systemic
			bw/day	population	-
	DNEL	Long term	9 mg/m³	Workers	Systemic
		Inhalation	,g,		- ,
	DNEL		102 mg/kg	General	Systemic
	DINCL	Long term Dermal			Cystellic
	DAIE	Long town Dames	bw/day	population	Cyataraia
	DNEL	Long term Dermal	240 mg/kg	Workers	Systemic
			bw/day		
Propan-2-ol	DNEL	Long term Oral	26 mg/kg	General	Systemic
	02/2024	<u> </u>		ious validation Va	roion 11 0/22

Date of issue/Date of revision : 23/02/2024 Date of previous issue

: No previous validation

Version :1

9/22

TEKNOZINC 90 SE - All variants **Label No** :77660

			bw/day	population	
	DNEL	Long term Inhalation	89 mg/m³	General population	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	500 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
Butanone	DNEL	Long term Oral	31 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	106 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	412 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	,	Workers	Systemic
	DNEL	Long term Dermal	1161 mg/ kg bw/day	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommendations: Wear suitable gloves tested to EN374.

< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm

> 8 hours (breakthrough time): 4H / Silver Shield® gloves.

Wash hands before breaks and immediately after handling the product.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Label No: 77660

Date of issue/Date of revision : 23/02/2024 Date of previous issue : No previous validation Version : 1 10/22

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type: A

Filter type (spray application): A P

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.
Colour : Various
Odour : Slight
Odour threshold : Not available.

Melting point/freezing point

: Not available.

Initial boiling point and

boiling range

Ingredient name	°C	°F	Method
iso-butanol	108	226.4	OECD 103
Ethylbenzene	136.1	277	OECD 104

Flammability (solid, gas) : Not available.

Upper/lower flammability or : Lower: 0.8%

explosive limits : Upper: 6.7%

Flash point : Closed cup: 24°C (75.2°F)

Auto-ignition temperature

Ingredient name	°C	°F	Method
iso-butanol	415	779	
Xylene	432	809.6	

Decomposition temperature : Not available.pH : Not applicable.

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

Solubility(ies) :

Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure :

	Va	Vapour Pressure at 20°C			apour pre	ssure at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
iso-butanol	<12.00102	<1.6	DIN EN 13016-2			
Ethylbenzene	9.30076	1.2				

Relative density : Not available.

Date of issue/Date of revision: 23/02/2024Date of previous issue: No previous validationVersion: 111/22TEKNOZINC 90 SE - All variantsLabel No :77660

SECTION 9: Physical and chemical properties

: 2.9 g/cm³ **Density** Vapour density Not available. **Explosive properties** : Not available. **Oxidising properties** Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

: Reactive or incompatible with the following materials: 10.5 Incompatible materials

oxidising materials

10.6 Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene	LC50 Inhalation Vapour	Rat	21.7 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LC50 Inhalation Dusts and	Rat	29000 mg/l	4 hours
	mists			
	LD50 Dermal	Rabbit	15400 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
iso-butanol	LC50 Inhalation Vapour	Rat	19200 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	2460 mg/kg	-
1-Methoxy 2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
, , ,	LD50 Oral	Rat	6600 mg/kg	-
2-Methoxy-1-methylethyl	LD50 Dermal	Rabbit	>5 g/kg	-
acetate				
	LD50 Oral	Rat	8532 mg/kg	-
Toluene	LC50 Inhalation Vapour	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	_
Propylene glycol	LD50 Dermal	Rabbit	20800 mg/kg	_
	LD50 Oral	Rat	20 g/kg	-
Formaldehyde	LC50 Inhalation Gas.	Rat	250 ppm	4 hours
	LD50 Dermal	Rabbit	270 mg/kg	-
	LD50 Oral	Rat	100 mg/kg	-
Propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
'	LD50 Oral	Rat	5000 mg/kg	-
Butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Date of issue/Date of revision : 23/02/2024 Version :1 12/22 Date of previous issue : No previous validation **Label No: 77660**

SECTION 11: Toxicological information

Acute toxicity estimates

Route	ATE value
	10524.03 mg/kg 86.34 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc powder - zinc dust (stabilized)	Skin - Mild irritant	Human	-	72 hours 300 ug l	-
Xylene	Eyes - Mild irritant	Rabbit		87 mg	
Aylerie		Rabbit	-	24 hours 5	-
	Eyes - Severe irritant		-	mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 uL	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	_	500 mg	_
	Skin - Mild irritant	Rabbit	_	24 hours 15	_
4 Mathana Comment				mg	
1-Methoxy 2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Eyes - Mild irritant	Rabbit	_	870 ug	_
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
	Skin - Mild irritant	Pig	-	mg 24 hours 250 uL	-
	Skin - Mild irritant	Rabbit	_	435 mg	_
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
	Ckin Madarata irritant	Dobbit		mg 500 mg	
lea .	Skin - Moderate irritant	Rabbit	-	500 mg	-
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Moderate irritant	Rabbit	-	0.06666667 minutes 100 mg	-
	Eyes - Moderate irritant	Rabbit		100 uL	
			_		-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	400 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Propylene glycol	Eyes - Mild irritant	Rabbit	-	100 mg	-
9,500	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Skin - Mild irritant	Human	-	mg 168 hours 500 mg	-
	Skin - Mild irritant	Woman	-	96 hours 30 %	-
	Skin - Moderate irritant	Child	-	96 hours 30 % C	-
	Skin - Moderate irritant	Human	-	72 hours 104 mg I	-
Formaldehyde	Eyes - Mild irritant	Human	-	6 minutes 1	-
	Eyes - Severe irritant	Rabbit	-	ppm 24 hours 750	-
				ug	

Date of issue/Date of revision : 23/02/20

TEKNOZINC 90 SE - All variants

: 23/02/2024 Date of previous issue

: No previous validation

Version :1 13/22

Label No :77660

SECTION 11: Toxicological information

Severe irritant	Rabbit	-	750 ug	-
Mild irritant	Human	-	72 hours 150	-
			ug l	
Mild irritant	Rabbit	-	540 mg	-
Moderate irritant	Rabbit	-	24 hours 50	-
			mg	
Severe irritant	Human	-	0.01 %	-
Severe irritant	Rabbit	-	0.8 %	-
Severe irritant	Rabbit	-	24 hours 2	-
			mg	
Moderate irritant	Rabbit	-	10 mg	-
Moderate irritant	Rabbit	-	24 hours 100	-
			mg	
Severe irritant	Rabbit	-	100 mg	-
Mild irritant	Rabbit	-	500 mg	-
Mild irritant	Rabbit	-	24 hours 14	-
			mg	
Moderate irritant	Rabbit	-	24 hours 500	-
			mg	
	Mild irritant Moderate irritant Severe irritant Severe irritant Severe irritant Moderate irritant Moderate irritant Moderate irritant Mild irritant Mild irritant	Mild irritant Rabbit Rabbit Severe irritant Human Rabbit Rabbit Severe irritant Rabbit Rabbit Moderate irritant Rabbit Rabbit Moderate irritant Rabbit Rabbit Severe irritant Rabbit Rabbit Severe irritant Rabbit Rabbit Rabbit Rabbit Rabbit Rabbit Rabbit Rabbit	Mild irritant Moderate irritant Severe irritant Severe irritant Severe irritant Severe irritant Severe irritant Rabbit Rabbit - Rabbit - Moderate irritant Moderate irritant Rabbit Rabbit - Severe irritant Rabbit Rabbit - Rabbit	Mild irritant Rabbit - 540 mg Moderate irritant Rabbit - 24 hours 50 mg Severe irritant Rabbit - 0.8 % Severe irritant Rabbit - 24 hours 2 mg Moderate irritant Rabbit - 10 mg Moderate irritant Rabbit - 24 hours 100 mg Severe irritant Rabbit - 100 mg Severe irritant Rabbit - 500 mg Mild irritant Rabbit - 500 mg Mild irritant Rabbit - 24 hours 14 mg Moderate irritant Rabbit - 24 hours 500

Conclusion/Summary

Sensitisation

: Causes skin irritation.

Conclusion/Summary

: May cause an allergic skin reaction.

Mutagenicity

Conclusion/Summary

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

Carcinogenicity

Conclusion/Summary

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

Reproductive toxicity

Conclusion/Summary

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

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene	Category 3	-	Respiratory tract irritation
iso-butanol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
1-Methoxy 2-propanol	Category 3	-	Narcotic effects
2-Methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
Toluene	Category 3	-	Narcotic effects
Formaldehyde	Category 3	-	Respiratory tract irritation
Propan-2-ol	Category 3	-	Narcotic effects
Butanone	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene	Category 2	oral, inhalation	-
Ethylbenzene	Category 2	oral, inhalation	hearing organs
Toluene	Category 2	-	-

Aspiration hazard

Product/ingredient name	Result
Xylene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1

Date of issue/Date of revision : 23/02/2024 Date of previous issue Version :1 14/22 : No previous validation **Label No:77660**

SECTION 11: Toxicological information

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

: No known significant effects or critical hazards. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

> pain or irritation watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation redness

Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General May cause damage to organs through prolonged or repeated exposure. Once

sensitized, a severe allergic reaction may occur when subsequently exposed to very

Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards. Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc powder - zinc dust (stabilized)	Acute EC50 106 μg/l Fresh water	Algae - Green algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute EC50 10000 μg/l Fresh water	Aquatic plants - Duckweed - Lemna minor	4 days
	Acute IC50 65 μg/l Marine water	Algae - Diatom - <i>Nitzschia closterium</i> - Exponential growth phase	4 days
	Acute LC50 65 μg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 68 μg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	48 hours

Date of issue/Date of revision : 23/02/2024 Version :1 15/22 Date of previous issue : No previous validation TEKNOZINC 90 SE - All variants **Label No: 77660**

SECTION 12: Ecological information

		T	
	Acute LC50 12.21 μg/l Marine water	magna Fish - Mudskipper -	96 hours
	Chronic EC10 27.3 µg/l Fresh water	Periophthalmus waltoni - Adult Algae - Green algae - Pseudokirchneriella subcapitata	72 hours
	Chronic EC10 59.2 μg/l Fresh water	- Exponential growth phase Daphnia - Water flea - <i>Daphnia</i>	21 days
	Chronic NOEC 9 mg/l Fresh water	magna Aquatic plants - Coontail -	3 days
	Chronic NOEC 178 µg/l Marine water	Crustaceans - Rockpool prawn -	21 days
	Chronic NOEC 2.6 µg/l Fresh water	Palaemon elegans Fish - common carp - Cyprinus	4 weeks
iso-butanol	Acute LC50 600 mg/l Marine water	carpio Crustaceans - Brine shrimp - Artemia salina	48 hours
	Acute LC50 1030000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i> magna - Neonate	48 hours
	Acute LC50 1330000 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Green algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 μg/l Fresh water	Crustaceans - Scud - Gammarus pseudolimnaeus -	48 hours
	Acute EC50 5.56 mg/l Fresh water	Adult Daphnia - Water flea - <i>Daphnia</i> magna - Neonate	48 hours
	Acute LC50 5500 μg/l Fresh water	Fish - Coho salmon,silver salmon - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 μg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i> magna	21 days
Ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Green algae - <i>Ulva</i> pertusa	96 hours
	Acute EC50 2000 μg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i> magna	48 hours
	Acute LC50 25500 μg/l Marine water	Crustaceans - San Francisco Brine Shrimp - <i>Artemia</i>	48 hours
	Acute LC50 42000 μg/l Fresh water	franciscana - Larvae Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Green algae - <i>Ulva</i> pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Water flea - <i>Daphnia</i> magna - Neonate	21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Eastern mosquitofish - Gambusia holbrooki - Larvae	12 weeks
Propylene glycol	Acute EC50 19300 mg/l Fresh water Acute EC50 43500 mg/l Fresh water	Algae - Algae Daphnia - Daphnia - Daphnia	96 hours 48 hours
	Acute LC50 18340000 μg/l Fresh water	magna Crustaceans - Water flea - Ceriodaphnia dubia	48 hours
	Acute LC50 40613 mg/l Fresh water	Fish - Trout - Oncorhynchus	96 hours
Formaldehyde	Acute EC50 3.48 mg/l Fresh water	Algae - Green algae - Desmodesmus subspicatus	72 hours
	Acute EC50 0.788 mg/l Marine water	Algae - Green algae - Ulva pertusa	96 hours
	Acute EC50 12.98 mg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 5800 μg/l Fresh water	Daphnia - Water flea - Daphnia pulex - Neonate	48 hours
	Acute LC50 1.41 ppm Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.005 mg/l Marine	Algae - Haptophyte - <i>Isochrysis</i>	96 hours

Date of issue/Date of revision: 23/02/2024Date of previous issue: No previous validationVersion: 116/22TEKNOZINC 90 SE - All variantsLabel No :77660

SECTION 12: Ecological information

	water	galbana - Exponential growth	
		phase	
	Chronic NOEC 953.9 ppm Fresh water	Fish - Chinook salmon -	43 days
		Oncorhynchus tshawytscha -	
		Egg	
Propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	48 hours
		magna	
	Acute LC50 1400000 μg/l Marine water	Crustaceans - Common shrimp,	48 hours
		sand shrimp - Crangon crangon	
	Acute LC50 4200000 µg/l Fresh water	Fish - Harlequinfish, red	96 hours
		rasbora - <i>Rasbora</i>	
		heteromorpha	
Butanone	Acute EC50 >500000 µg/l Marine water	Algae - Diatom - Skeletonema	96 hours
		costatum	
	Acute EC50 5091000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	48 hours
		magna - Larvae	
	Acute LC50 3220000 µg/l Fresh water	Fish - Fathead minnow -	96 hours
		Pimephales promelas	

Conclusion/Summary

: Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
iso-butanol	-	74 % - Readily - 28 days	-	-

Conclusion/Summary : This product has not been tested for biodegradation.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
iso-butanol	-	-	Readily
Propylene glycol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene	3.12	8.1 to 25.9	Low
reaction product: bisphenol-	2.64 to 3.78	31	Low
A-(epichlorhydrin); epoxy			
resin			
Ethylbenzene	3.6	-	Low
iso-butanol	1	-	Low
1-Methoxy 2-propanol	<1	-	Low
2-Methoxy-1-methylethyl	1.2	-	Low
acetate			
Toluene	2.73	90	Low
Ethanol	-0.35	-	Low
Propylene glycol	-1.07	-	Low
Propan-2-ol	0.05	-	Low
Butanone	0.3	-	Low

12.4 Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

Date of issue/Date of revision : 23/02/2024 Version :1 Date of previous issue : No previous validation 17/22 TEKNOZINC 90 SE - All variants **Label No:77660**

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

European waste catalogue (EWC) : 080111*, 200127*

Packaging

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code (D/E)

ADN

The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IMDG

The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA

The environmentally hazardous substance mark may appear if required by other transportation regulations.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Date of issue/Date of revision : 23/02/2024 Version:1 18/22 Date of previous issue : No previous validation **Label No: 77660**

SECTION 14: Transport information

14.7 Transport in bulk according to IMO instruments

: Not relevant/applicable due to nature of the product.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **UK (GB)/REACH**

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
TEKNOZINC 90 SE	≥90	3
Toluene	≤0.1	48
Formaldehyde	<0.1	72

Labelling : Not applicable.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category	
P5c E1	

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
Formaldehyde	- · ·	formaldehyde; methanal	Carc.	-

EU regulations

Industrial emissions : Listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Listed

(integrated pollution prevention and control) -

Water

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Date of issue/Date of revision : 23/02/2024 19/22 Date of previous issue : No previous validation Version: 1 **Label No: 77660**

SECTION 15: Regulatory information

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety

assessment

: This product contains substances for which Chemical Safety Assessments are still

required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification	
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	
STOT RE 2, H373	Calculation method	
Aquatic Acute 1, H400	Calculation method	
Aquatic Chronic 1, H410	Calculation method	

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361d	Suspected of damaging the unborn child.
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.

Date of issue/Date of revision : 23/02/2024 20/22 Date of previous issue : No previous validation Version :1 **Label No: 77660**

SECTION 16: Other information

EUH066

Repeated exposure may cause skin dryness or cracking.

Full text of classifications

Acute Tox. 2 ACUTE TOXICITY - Category 2
Acute Tox. 3 ACUTE TOXICITY - Category 3
Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

Asp. Tox. 1 ASPIRATION HAZARD - Category 1 Carc. 1B CARCINOGENICITY - Category 1B

Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Flam. Liq. 2
FlamMABLE LIQUIDS - Category 2
Flam. Liq. 3
FLAMMABLE LIQUIDS - Category 3
Muta. 2
GERM CELL MUTAGENICITY - Category 2
Repr. 2
Skin Corr. 1B
Skin CORROSION/IRRITATION - Category 1B
Skin Irrit. 2
SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1 SKIN SENSITISATION - Category 1

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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TEKNOZINC 90 SE All variants

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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