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

- · 1.1 Product identifier
- · Trade name: COLD ZINC GALVANISING (BULK)
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Life cycle stages IS Use at industrial Sites
- Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- · Product category PC9a Coatings and paints, thinners, paint removers
- · Process category PROC7 Industrial spraying
- Environmental release category ERC12c Use of articles at industrial sites with low release
- · Technical function Other
- · Application of the substance / the mixture Coating compound/ Surface coating/ paint
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Spanjaard (Pty) Ltd.

748-750 Fifth Street, Wynberg

Sandton, SOUTH AFRICA, 2090

Tel: +27 11 386 7100

· Further information obtainable from:

Clinton Palmer - Operations Executive

clinton@spanjaard.biz

· 1.4 Emergency telephone number: NCEC: +44 1865 407333

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Repr. 1B H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · Hazard pictograms GHS02, GHS07, GHS08
- · Signal word Danger
- · Hazard-determining components of labelling: toluene

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Trade name: COLD ZINC GALVANISING (BULK)

(Contd. of page 1)

· Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

H336 May cause drowsiness or dizziness.

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

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

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

smoking.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

[or shower].

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

present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

CAS: 108-88-3	toluene	25-35%
EINECS: 203-625-9 Index number: 601-021-00-3 RTECS: XS 5250000	 Flam. Liq. 2, H225 Repr. 1B, H360; STOT RE 2, H373; Asp. Tox. 1, H304 Skin Irrit. 2, H315; STOT SE 3, H336 	
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 RTECS: NT 8050000	propan-2-ol Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	10-15%
CAS: 78-93-3 EINECS: 201-159-0 Index number: 606-002-00-3 RTECS: EL 6475000	methyl ethyl ketone Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	10-15%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 RTECS: ZE 2100000	xylene Flam. Liq. 3, H226 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	10%

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(Contd. of page 2) CAS: 7429-90-5 aluminium 5-10% EINECS: 231-072-3 🔅 Pyr. Sol. 1, H250; Water-react. 2, H261 Index number: 013-001-00-6 RTECS: BD 0330000 · Additional information: For the wording of the listed hazard phrases refer to section 16. · Non-hazardous components CAS: 7440-66-6 zinc powder -zinc dust (pyrophoric) 5-10% EINECS: 231-175-3 Index number: 030-001-00-1 RTECS: ZG 8600000

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- 5.3 Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

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 $(Contd.\ of\ page\ 3)$

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see item 7.

108-88-3 toluene		
IOELV (EU)	Short-term value: 384 mg/m³, 100 ppm Long-term value: 192 mg/m³, 50 ppm Skin	
WEL (Great Britain)	Short-term value: 384 mg/m³, 100 ppm Long-term value: 191 mg/m³, 50 ppm Sk	
AGW (Germany)	Long-term value: 190 mg/m³, 50 ppm 2(II);DFG, EU, H, Y	
67-63-0 propan-2-ol		
WEL (Great Britain)	Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm	
AGW (Germany)	Long-term value: 500 mg/m³, 200 ppm 2(II);DFG, Y	
78-93-3 methyl ethyl	ketone	
IOELV (EU)	Short-term value: 900 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm	
WEL (Great Britain)	Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm Sk, BMGV	

. on page 3

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Trade name: COLD ZINC GALVANISING (BULK)

1CW (C)	(Contd. of pa		
AGW (Germany)	Long-term value: 600 mg/m³, 200 ppm l(I);DFG, EU, H, Y		
1330-20-7 xylene			
	Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin		
	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV		
	Long-term value: 220 mg/m³, 50 ppm 2(II);DFG, EU, H		
7440-66-6 zinc powde	er -zinc dust (pyrophoric)		
	Long-term value: 0.1A* 2E** mg/m³ *alveolengängig; **einatembar		
Ingredients with biolo	ogical limit values:		
108-88-3 toluene	<u>. </u>		
BGW (Germany)	600 µg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: unmittelbar nach Exposition Parameter: Toluol		
	1.5 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende, bei Langzeitexposition: a Schichtende nach mehreren vorangegangenen Schichten Parameter: o-Kresol (nach Hydrolyse)		
	75 µg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Toluol		
67-63-0 propan-2-ol			
BGW (Germany)	25 mg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton		
	25 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton		
78-93-3 methyl ethyl	ketone		
BMGV (Great Britain	itain) 70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one		
BGW (Germany)	2 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: 2-Butanon		

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- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

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SECTION 9: Physical and chemi	cat properties
9.1 Information on basic physical and c General Information Appearance:	hemical properties
Form:	Liquid
Colour:	Silver-coloured
Odour:	Aromatic
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition Melting point/freezing point: Initial boiling point and boiling range	Undetermined. : 79-80.5°C
Flash point:	4 °C
Flammability (solid, gas):	Highly flammable.
Ignition temperature:	425 °C
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vape mixtures are possible.
Explosion limits:	
Lower:	1.1 Vol %
Upper:	12 Vol %
Vapour pressure at 20 °C:	105 hPa
Density at 20 °C:	1 g/cm^3
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	69.0 %
VOC (EC)	69.00 %
Solids content:	10.0 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

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- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50	· LD/LC50 values relevant for classification:		
ATE (Acu	ATE (Acute Toxicity Estimates)		
Dermal	LD50	20000 mg/kg (rabbit)	
Inhalative	LC50/4 h	110 mg/l	
108-88-3 t	108-88-3 toluene		
Oral	LD50	5000 mg/kg (rat)	
Dermal	LD50	12124 mg/kg (rabbit)	
Inhalative	LC50/4 h	5320 mg/l (mouse)	
78-93-3 m	78-93-3 methyl ethyl ketone		
Oral	LD50	3300 mg/kg (rat)	
Dermal	LD50	5000 mg/kg (rabbit)	
67-63-0 pr	67-63-0 propan-2-ol		
Oral	LD50	5045 mg/kg (rat)	
Dermal	LD50	12800 mg/kg (rabbit)	
Inhalative	LC50/4 h	30 mg/l (rat)	
1330-20-7	1330-20-7 xylene		
Oral	LD50	4300 mg/kg (rat)	
Dermal	LD50	2000 mg/kg (rabbit)	
Inhalative	LC50/4 h	11 mg/l (ATE)	
n			

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Additional toxicological information:
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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

May damage fertility or the unborn child.

· STOT-single exposure

May cause drowsiness or dizziness.

· STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

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· Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTI	ON 14	: Transp	ort int	form at	ion
	UIVIIT	. Trunsp	וווו ווע	Or mui	uvu

· 14.1 UN-Number · ADR, IMDG, IATA	UN1993
· 14.2 UN proper shipping name · ADR · IMDG, IATA	1993 FLAMMABLE LIQUID, N.O.S. (TOLUENE, ETHYL METHYL KETONE (METHYL ETHYL KETONE)) FLAMMABLE LIQUID, N.O.S. (TOLUENE, ETHYL METHYL KETONE (METHYL ETHYL KETONE))

- · 14.3 Transport hazard class(es)
- · ADR, IATA



Class 3 Flammable liquids.

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	(Contd. of page
Label	3
IMDG	
- Class	2 Elammahla liquida
Label	3 Flammable liquids.
****	<u> </u>
14.4 Packing group ADR, IMDG, IATA	- II
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Flammable liquids.
Hazard identification number (Kemler code):	33 E.F.G.E.
EMS Number: Stowage Category	F-E, <u>S-E</u> B
·	
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	of Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
_	Maximum net quantity per outer packaging: 500 ml
Transport category	2
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ)	
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per inner packaging: 50 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Decorletion":	UN 1993 FLAMMABLE LIQUID, N.O.S. (TOLUENE, ETH)
UN "Model Regulation":	METHYL KETONE (METHYL ETHYL KETONE)), 3, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · Hazard pictograms GHS02, GHS07, GHS08
- · Signal word Danger
- · Hazard-determining components of labelling: toluene
- · Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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H360 May damage fertility or the unborn child.

H336 May cause drowsiness or dizziness.

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

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

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

smoking.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

[or shower].

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

present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 48
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H250 Catches fire spontaneously if exposed to air.

H261 In contact with water releases flammable gases.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eve irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H360 May damage fertility or the unborn child.

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

- · Department issuing SDS: Technical Department
- · Contact: Mr Clinton Palmer
- · Abbreviations and acronvms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids - Category 3 Pyr. Sol. 1: Pyrophoric solids - Category 1

Water-react. 2: Substances and mixtures which in contact with water emit flammable gases - Category 2

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Repr. 1B: Reproductive toxicity - Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard - Category 1

^{*} Data compared to the previous version altered.