1. Product and company identification

Product identifier

Trade name: Brushable Liquid Zinc Coating, bright

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

General use: Coating agent

Details of the supplier of the safety data sheet

Company name: WEICON Inc.
Street/POB-No.: 20 Steckle Place, Unit 20
Postal Code, city: Kitchener, Ontario N2E 2C3, CA
WWW: www.weicon.ca
E-mail: info@weicon.ca
Telephone: +1-519-896-5252
Telefax: +1-519-896-5254
Dept. responsible for information:
Product-Safety-Department
Telephone: +49(0)251 / 9322 - 0, Email: msds@weicon.de

Emergency phone number

EMERGENCY CONTACT – Canada (24h): Tel: ++1 866 928 0789 (Toll free)

Transport:
TRANSPORT EMERGENCY CONTACT - Canada (24h): Tel: ++1 866 928 0789 (Toll free)

2. Hazards identification

Emergency overview

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Color: silver gray

Odor: characteristic

Classification: Flammable Liquid 3; Specific Target Organ Toxicity (Single Exposure) 3; Aquatic toxicity - acute 1; Aquatic toxicity - chronic 1;

Hazard symbols:

Signal word: **Warning**

Hazard statements:
Flammable liquid and vapor.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Very toxic to aquatic life with long lasting effects.

Precautionary statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing vapors/spray.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
In case of fire: Use dry sand to extinguish.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may have a narcotic effect.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterisation: Mixture of the substance mentioned below with non-hazardous additions.

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 7440-66-6	Zinc powder-zinc dust	< 50 %	Aquatic toxicity - acute 1. Aquatic toxicity - chronic 1.
CAS 64742-95-6	Solvent naphtha (petroleum), light arom	< 25 %	Flammable Liquid 3. Specific Target Organ Toxicity (Single Exposure) 3. Aspiration Toxicity 1. Aquatic toxicity - chronic 2.
CAS 7429-90-5	Aluminium powder (pyrophoric)	< 10 %	Flammable Solid 1.
CAS 64742-48-9	Naphtha (petroleum), hydrotreated heavy	< 10 %	Aspiration Toxicity 1.
CAS 1330-20-7	Xylene (isomeric mixture)	< 10 %	Flammable Liquid 3. Acute Toxicity 4 (dermal). Acute Toxicity 4 (inhalative). Skin Irritation 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1.
CAS 100-41-4	Ethylbenzene	< 10 %	Flammable Liquid 2. Acute Toxicity 4 (inhalative).
CAS 68308-64-5	Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates	< 1 %	Acute Toxicity 4 (oral). Skin Corrosion 1B. Aquatic toxicity - acute 1.

4. First aid measures

General information: If medical advice is needed, have product container or label at hand.

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. If victim is at risk of losing consciousness, position and transport on their side. Seek medical attention.

Following skin contact: Keep airway open. Take off immediately all contaminated clothing.
After contact with skin, wash immediately with soap and plenty of water. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing.
Subsequently consult an ophthalmologist.

After swallowing: Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may have a narcotic effect. Headache, dizziness, fatigue, nausea, vomiting. Has degreasing effect on the skin.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:
36 °C

Auto-ignition temperature: No data available

Suitable extinguishing media::
Extinguishing powder, foam, sand

Extinguishing media which must not be used for safety reasons:
Water

Specific hazards arising from the chemical

Flammable liquid and vapor. Air combined with vapors may form potentially explosive mixtures that are heavier than air. Vapor may travel great distances and cause fire and backflashes.
Hazardous vapors may form during fires.

Protective equipment and precautions for firefighters:
Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Heating will lead to pressure increase: Danger of bursting and explosion. Cool exposed containers with water spray.
Move undamaged containers from immediate hazard area if it can be done safely.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Do not allow fire water to penetrate into surface or ground water.
Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

6. Accidental release measures

Personal precautions: Do not breathe vapors. Avoid contact with the substance.
Eliminate all ignition sources if safe to do so. Provide adequate ventilation.
Wear appropriate protective equipment. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

Environmental precautions:
Do not allow to enter into ground-water, surface water or drains. Danger of explosion!
In case of release, notify competent authorities.

Methods for clean-up: Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).
Beware of reignition. Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information: Use explosion-proof equipment and non-sparking tools/utensils.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe vapors.
Avoid contact with skin, eyes, and clothing. Wear appropriate protective equipment.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharges.
Use only explosion-protected equipment/instruments. Do not weld.
In partially filled containers explosive mixtures may form.

Storage

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight.
Store containers in upright position. Explosion protection required.

Hints on joint storage: Do not store together with combustible or self-igniting materials or any highly flammable solids. Keep away from food, drink and animal feedingstuffs. Do not store together with: Oxidising agent, strong acids, strong bases. Never allow product to get in contact with water during storage.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7429-90-5	Aluminium powder (pyrophoric)	Canada, Alberta: OEL 8 hour	10 mg/m³ (Metal Dust)
		Canada, Alberta: OEL 8 hour	5 mg/m³ (Pyro powders, calculated as Al)
		Canada, BC: OEL TWA	1 mg/m³
		Canada, Québec: VEMP	10 mg/m³ Metals
		NIOSH: Ceiling	5 mg/m³ (inhalable fraction)
		USA: ACGIH: TWA	1 mg/m³
		USA: NIOSH: TWA	10 mg/m³ (inhalable fraction)
		USA: NIOSH: TWA	5 mg/m³ (inhalable fraction)
		USA: OSHA: TWA	15 mg/m³ (inhalable fraction)
		USA: OSHA: TWA	5 mg/m³ (respirable fraction)
1330-20-7	Xylene (isomeric mixture)	Canada, BC: OEL STEL	150 ppm
		Canada, BC: OEL TWA	100 ppm
		USA: OSHA: TWA	435 mg/m³; 100 ppm
100-41-4	Ethylbenzene	Canada, Alberta: OEL 15 min	543 mg/m³; 125 ppm
		Canada, Alberta: OEL 8 hour	434 mg/m³; 100 ppm
		Canada, BC: OEL TWA	20 ppm
		Canada, Québec: VECD	543 mg/m³; 125 ppm
		Canada, Québec: VEMP	434 mg/m³; 100 ppm
		USA: ACGIH: TWA	87 mg/m³; 20 ppm
		USA: NIOSH: STEL	545 mg/m³; 125 ppm
		USA: NIOSH: TWA	435 mg/m³; 100 ppm
		USA: OSHA: TWA	435 mg/m³; 100 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
1330-20-7	Xylene (isomeric mixture)	USA: ACGIH-BEI, urine	1.5 g/g creatinine	Methylhippuric acids	end of exposure or end of shift
100-41-4	Ethylbenzene	USA: ACGIH-BEI, urine	0.15 g/g creatinine	Sum of mandelic acid and phenylglyoxylic acid in urine	end of shift at end of workweek

Engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Flame retardant, antistatic and chemical resistant protective clothing.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Butyl caoutchouc (butyl rubber)
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:

Use only non-sparking tools. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Do not breathe vapor or spray. Avoid contact with skin and eyes.
Take off immediately all contaminated clothing.
When using do not eat, drink or smoke.
Wash hands before breaks and after work. Provide a conveniently located eye rinse station.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Color: silver gray

Odor: characteristic

Odor threshold: No data available

pH value: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: 136 °C

Flash point/flash point range: 36 °C

Evaporation rate: No data available

Flammability: Flammable liquid and vapor.

Explosion limits: LEL (Lower Explosion Limit): 0.60 Vol-%
UEL (Upper Explosive Limit): 7.00 Vol-%

Vapor pressure: No data available

Vapor density: No data available

Density:	approx. 1.15 g/cm³
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Viscosity, kinematic:	at 40 °C: 21 mm²/s
Explosive properties:	Vapors may form explosive mixtures with air.
Additional information:	viscosity at 20 °C: flow time 70-90 s, 4 mm (DIN 53211)

10. Stability and reactivity

Reactivity: Flammable liquid and vapor.
Vapors may form explosive mixtures with air.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions
Heating will lead to pressure increase: Danger of bursting and explosion. Reacts with water, alkalis and acids, if metal is contained, with release of highly flammable hydrogen gas.

Conditions to avoid: Keep away from heat sources, sparks and open flames.
Protect against direct sunlight. Protect from moisture contamination.

Incompatible materials: Oxidising agent, strong acids, strong bases

Hazardous decomposition products:
Hazardous vapors may form during fires.

Thermal decomposition: No data available

11. Toxicological information

Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.
Acute toxicity (oral): Based on available data, the classification criteria are not met. ATEmix: > 2000 mg/l

Acute toxicity (dermal): Based on available data, the classification criteria are not met. ATEmix: > 2000 mg/l

Acute toxicity (inhalative): Based on available data, the classification criteria are not met. ATEmix: > 20 mg/l

Skin corrosion/irritation: Lack of data.

Eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Lack of data.

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

General remarks

For carcinogenic effects:

Information about CAS No. 1330-20-7 Xylene
IARC Rating: Group 3

OSHA Carcinogen: not listed

NTP Rating: not listed

Information about CAS No. 100-41-4 Ethylbenzene
IARC Rating: Group 2B

OSHA Carcinogen: not listed

NTP Rating: not listed

12. Ecological information

Ecotoxicity

Aquatic toxicity: Very toxic to aquatic life with long lasting effects.

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

General information: Do not allow to penetrate into soil, waterbodies or drains.
Avoid spills and leaks. Very small amounts contaminates drinking water. Do not bring higher quantities to clarification plants.

13. Disposal considerations

Product

Recommendation: Dispose of waste according to applicable legislation. Dispose of as hazardous waste.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.
Handle empty containers with care. Incineration may cause explosion.

14. Transport information

USA: Department of Transportation (DOT)

Identification number:	UN1263
Proper shipping name:	UN 1263, Paint
Hazard class or Division:	3
Packing Group:	III
Labels:	3
Special provisions:	367, B1, B52, IB3, T2, TP1, TP29
Packaging – Exceptions:	150
Packaging – Non-bulk:	173
Packaging – Bulk:	242
Quantity limitations – Passenger aircraft / rail:	60 L
Quantity limitations – Cargo only:	220 L
Vessel stowage – Location:	A

Canada: Transportation of Dangerous Goods (TDG)

UN Number:	UN1263
Shipping name:	UN 1263, Paint
TDG class:	3
Packing group:	III
Special provisions:	59, 142
Explosive limit and limited quantity index:	5L
Passenger carrying road or rail index:	60L

Sea transport (IMDG)

UN number:	UN 1263
Proper shipping name:	UN 1263, Paint
Class or division, Subsidary risk:	Class 3, Subrisk-
Packing Group:	III
EmS:	F-E, S-E
Special provisions:	163, 223, 367, 955
Limited quantities:	5 L
Excepted quantities:	E1
Contaminated packaging - Instructions:	P001, LP01
Contaminated packaging - Provisions:	PP1
IBC - Instructions:	IBC03
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T2
Tank instructions - Provisions:	TP1, TP29
Stowage and handling:	Category A.
Properties and observations:	Miscibility with water depends upon the composition.
Marine pollutant:	yes
Segregation group:	none

Air transport (IATA)

UN/ID number:	UN 1263
Proper shipping name:	UN 1263, Paint
Class or division, Subsidary risk:	Class 3
Packing Group:	III
Hazard label:	Flamm. liquid
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y344 - Max. Net Qty/Pkg. 10 L
Passenger and Cargo Aircraft:	Pack.Instr. 355 - Max. Net Qty/Pkg. 60 L
Cargo Aircraft only:	Pack.Instr. 366 - Max. Net Qty/Pkg. 220 L
Special provisions:	A3 A72 A192
Emergency Response Guide-Code (ERG):	3L

15. Regulatory information

National regulations - Canada

No data available

National regulations - U.S. Federal Regulations

Zinc powder-zinc dust:	TSCA Inventory: listed TSCA HPVC: not listed Clean Water Act: Priority Pollutant: yes Other Environmental Laws: CERCLA: RQ 1000* lbs. RCRA Groundwater Monitoring: Methods 6010, 7950 / PQL 20, 50 SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
Aluminium powder (pyrophoric):	TSCA Inventory: listed TSCA HPVC: not listed Other Environmental Laws: SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard NIOSH Recommendations: Occupational Health Guideline: 0022
Naphtha (petroleum), hydrotreated heavy:	TSCA Inventory: listed; EPA flags XU TSCA HPVC: not listed
Xylene (isomeric mixture):	TSCA Inventory: listed TSCA HPVC: not listed Carcinogen Status: IARC Rating: Group 3 OSHA Carcinogen: not listed NTP Rating: not listed Clean Air Act: Hazardous Air Pollutants: Code XOV SOCMI Chemical: yes Clean Water Act: Hazardous Substances: RQ 100 lbs. Other Environmental Laws: CERCLA: RQ 100 lbs. RCRA Hazardous Wastes: Code U239 RCRA Groundwater Monitoring: Methods 8020, 8240 / PQL 5, 5 SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
Ethylbenzene:	TSCA Inventory: listed; EPA flags T TSCA HPVC: not listed Carcinogen Status: IARC Rating: Group 2B OSHA Carcinogen: not listed NTP Rating: not listed Clean Air Act: Hazardous Air Pollutants: Code XOV SOCMI Chemical: yes Clean Water Act: Hazardous Substances: RQ 1000 lbs. Priority Pollutant: yes Other Environmental Laws: CERCLA: RQ 1000 lbs. RCRA Groundwater Monitoring: Methods 8020, 8240 / PQL 2, 5 SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard NIOSH Recommendations: Occupational Health Guideline: 0264*

National regulations - U.S. State Regulations

Xylene (isomeric mixture):

Delaware Air Quality Management List:
DRQ: 100 - RQ State: Federal Regulations Apply
Idaho Air Pollutant List:
Title 585 -- Title 586 --
Maine Hazardous Air Pollutants:
Me 2005: HAP - Hap Rpt: 2000
Massachusetts Haz. Substance codes: 2,4 F8 F9
Michigan Critical Material:
Note: - CMR: 44 - Parameter: 01330-20-7 - Annual Usage Parameter: 1
Minnesota Haz. Substance:
Codes: ANO - Ratings: 8.77 - Status: Air Pollutant. Title III. TRI.
New Jersey RTK Hazardous Substance:
DOT: 1307 - Sub No.: 2014 - TPQ: -
New York List of Hazardous Substances:
RQ -- Air: 1000 - RQ -- Land: 1 - Note: No Note Associated with this chemic
Pennsylvania Haz. Substance code: E
Washington Air Contaminant:
TWA: 100 ppm / 435 mg - STEL: 150 ppm / 655 mg

Ethylbenzene:

California Proposition 65 code: C
Delaware Air Quality Management List:
DRQ: 1000
RQ State: Federal Regulations Apply
Idaho Air Pollutant List:
Title 585 -- AAC: 21.75 -- EL: 29 -- WEL: 435
Title 586 -
Massachusetts Haz. Substance codes: 2,4,5,6 F7 F8 F9
Minnesota Haz. Substance:
Codes: AO -- Ratings: 8.95 -- Status: Air Pollutant. Title III. TRI. Water Poll
New Jersey RTK Hazardous Substance:
DOT 1175 - Sub No.: 0851 - TPQ: -
New York List of Hazardous Substances:
RQ -- Air: 1000 - RQ-Land: 1 - Note: No Note Associated with this chemica
Pennsylvania Haz. Substance code: E
Washington Air Contaminant:
TWA: 100 ppm - 435 mg, STEL: 125 ppm - 545 mg
California Proposition 65: cancer
Rhode Island HSL: listed

16. Other information

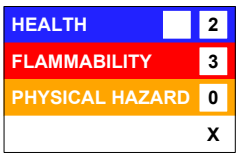
Text for labeling:

Contains < 50 % Zinc powder-zinc dust, < 25 % Solvent naphtha (petroleum), light arom, < 10 % Aluminium powder (pyrophoric), < 10 % Naphtha (petroleum), hydrotreated heavy, < 10 % Xylene (isomeric mixture), < 10 % Ethylbenzene, < 1 % Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates. Safety data sheet available on request.

Hazard rating systems:

NFPA Hazard Rating:
Health: 2 (Moderate)
Fire: 3 (Serious)
Reactivity: 0 (Minimal)

HMIS Version III Rating:
Health: 2 (Moderate)
Flammability: 3 (Serious)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor



Reason of change: ADR/RID 2017
Date of first version: 4/Apr/2016

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.