Safety Data Sheet

according to 29 CFR 1910.1200(g)

Zn-595 Zinc Spray

1. Identification

Product identifier

Zn-595 Zinc Spray

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

zincspray

Details of the supplier of the safety data sheet

Company name:	ITW Spraytec Nordic
Street:	Priorsvej 36
Place:	DK-8600 Silkeborg
Telephone:	+45 86 82 64 44
e-mail:	info@itw-spraytec.dk
Internet:	www.itwinfo.dk

Emergency phone number: Use your national or local emergency number
See section 4 “First aid measures”

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Hazard categories:
Gases under pressure: Compressed gas
Skin corrosion/irritation: Skin Irrit. 2
Hazard Statements:
Contains gas under pressure; may explode if heated
Causes skin irritation

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:

Hazard statements

Extremely flammable aerosol
Contains gas under pressure; may explode if heated
Causes skin irritation

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Protect from sunlight. Store in a well-ventilated place.
Do not expose to temperatures exceeding 50 °C/122 °F.

Hazards not otherwise classified

Contains: Solvent.

May cause damage to organs through prolonged or repeated exposure. (central nervous system, liver, kidneys)

3. Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Components	Quantity
90989-38-1	Aromatic hydrocarbons, C8; Light Oil Redistillate, high boiling	15 %
106-97-8	butane	10 %
74-98-6	propane	5 %
108-03-2	1-nitropropane	5 %
67-64-1	acetone; propan-2-one; propanone	5 %
1314-13-2	zinc oxide	5 %
1330-20-7	xylene	5 %

4. First-aid measures

Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Do not wash with: Solvents/Thinner. Take off immediately all contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

Most important symptoms and effects, both acute and delayed

Causes skin irritation.
Headache. Central nervous system depression. Spasms.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water spray, Carbonic acid, alcohol resistant foam, Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the chemical

Extremely flammable aerosol. Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.
Can be released in case of fire: Pyrolysis products, toxic. Carbon monoxide. Carbon dioxide (CO_2).

Special protective equipment and precautions for fire-fighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions

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

Methods and material for containment and cleaning up

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

For cleaning up, Unsuitable material: Solvent

Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Do not pierce or burn, even after use.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep/Store only in original container. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Pyrophoric or self-heating substances. Strong acid. Base. Oxidising agent, strong. Reducing agent, strong.

Further information on storage conditions

storage temperature: < 50 °C

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m³	f/cc	Category	Origin
108-03-2	1-Nitropropane	25	90		TWA (8 h)	PEL
		25	90		TWA (8 h)	REL
		25			TWA (8 h)	TLV
67-64-1	Acetone	1000	2400		TWA (8 h)	PEL
		250	590		TWA (8 h)	REL
		250			TWA (8 h)	TLV
		500			STEL (15 min)	TLV
106-97-8	Butane: n-butane	-	-		TWA (8 h)	TLV
		1000			STEL (15 min)	TLV
74-98-6	Propane	1000	1800		TWA (8 h)	PEL
		1000	1800		TWA (8 h)	REL
		-	-		Asphyxiant	TLV
1330-20-7	Xylene: mixed isomers	100			TWA (8 h)	TLV
		150			STEL (15 min)	TLV
1330-20-7	Xylenes (o-,m-,p-isomers)	100	435		TWA (8 h)	PEL
1314-13-2	Zinc oxide (Dust)	-	5		TWA (8 h)	REL
1314-13-2	Zinc oxide (Fume)	-	5		TWA (8 h)	REL
1314-13-2	Zinc oxide (respirable fraction)		2		TWA (8 h)	TLV
			10		STEL (15 min)	TLV
1314-13-2	Zinc oxide Respirable fraction	-	5		TWA (8 h)	PEL
1314-13-2	Zinc oxide fume	-	5		TWA (8 h)	PEL
106-97-8	n-Butane	800	1900		TWA (8 h)	REL

Biological Exposure Indices (BEI-ACGIH)

CAS No.	Substance	Determinant	Value	Test material	Sampling time
67-64-1	ACETONE	Acetone	25 mg/L	urine	End of shift
1330-20-7	XYLENES (technical or commercial grade)	Methylhippuric acids (creatinine)	1.5 g/g	urine	End of shift

Additional advice on limit values

none

Exposure controls




Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary . When using do not eat or

drink.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Filtering device (full mask or mouthpiece) with filter: AX

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	liquid (Aerosol)
Color:	grey
Odor:	characteristic

		Test method
pH-Value:	not determined	
Changes in the physical state		
Melting point/freezing point:	not determined	
Initial boiling point and boiling range:	not determined	
Flash point:	< 0 °C	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Explosive properties		
Vapours can form explosive mixtures with air.		
Heating causes rise in pressure with risk of bursting.		
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Ignition temperature:	not determined	
Auto-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	not determined	
Oxidizing properties		
Not oxidizing.		
Vapor pressure:	not determined	
Density:	1,292 g/cm³	
Water solubility:	insoluble	
Solubility in other solvents		
not determined		
Partition coefficient:	not determined	

Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Vapor density:	not determined
Evaporation rate:	not determined

Other information

Odour threshold: not determined

10. Stability and reactivity

Reactivity

Extremely flammable aerosol.

Chemical stability

Stability: Stable

The product is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions

Hazardous reactions: May occur

Vapours can form explosive mixtures with air.
Heating causes rise in pressure with risk of bursting.

Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Incompatible materials

Strong acid. Base. Oxidising agent, strong. Reducing agent, strong.

Hazardous decomposition products

Can be released in case of fire: Pyrolysis products, toxic. Carbon monoxide. Carbon dioxide (CO_2).

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

dermal

Acute toxicity

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

CAS No	Components				
	Exposure route	Dose		Species	Source
90989-38-1	Aromatic hydrocarbons, C8; Light Oil Redistillate, high boiling				
	dermal	ATE	1100 mg/kg		
108-03-2	1-nitropropane				
	oral	ATE	500 mg/kg		
	dermal	ATE	1100 mg/kg		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		
1314-13-2	zinc oxide				
	oral	LD50	7950 mg/kg	Mouse	Manufacturer
1330-20-7	xylene				
	dermal	ATE	1100 mg/kg		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

Irritation and corrosivity

Causes skin irritation

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

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

Aspiration hazard

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

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Practical experience

Other observations

Headache. Central nervous system depression. Spasms.

12. Ecological information

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

Waste treatment methods

Advice on disposal

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

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number:	UN 1950
Proper shipping name:	AEROSOLS
Transport hazard class(es):	2.1
Hazard label:	2.1

Marine transport (IMDG)

UN number:	UN 1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2.1
Packing group:	-
Hazard label:	2.1

Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO)

UN number:	UN 1950
UN proper shipping name:	AEROSOLS, flammable
Transport hazard class(es):	2.1
Packing group:	-
Hazard label:	2.1

Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

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

Special precautions for user

Warning: Flammable gases.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National Inventory TSCA

zinc oxide: Yes.
Aromatic hydrocarbons, C8; Light Oil Redistillate, high boiling: No.
butane: Yes.
acetone; propan-2-one; propanone: Yes.
xylene: Yes.
propane: Yes.
1-nitropropane: Yes.

National regulatory information

SARA Section 304 CERCLA:
Acetone (67-64-1): Reportable quantity = 5,000 (2270) lbs. (kg)
Zinc compounds (-): Reportable quantity = &
Xylene (mixed isomers) (1330-20-7): Reportable quantity = 100 (45.4) lbs. (kg)
SARA Section 311/312 Hazards:
Aromatic hydrocarbons, C8; Light Oil Redistillate, high boiling (90989-38-1): Fire hazard, Immediate (acute) health hazard
Butane (106-97-8): Fire hazard
Acetone (67-64-1): Fire hazard, Immediate (acute) health hazard
Xylene (mixed isomers) (1330-20-7): Fire hazard, Immediate (acute) health hazard
Propane (74-98-6): Fire hazard
1-nitropropane (108-03-2): Fire hazard, Immediate (acute) health hazard
SARA Section 313 Toxic release inventory:
Zinc compounds (-): De minimis limit = 1.0 %, Reportable threshold = Standard
Xylene (mixed isomers) (1330-20-7): De minimis limit = 1.0 %, Reportable threshold = Standard
Clean Air Act Section 112(r):
Butane (106-97-8): Threshold quantities = 10,000 lbs.
Propane (74-98-6): Threshold quantities = 10,000 lbs.
Clean Air Act Section 112(b):
Xylene (mixed isomers) (1330-20-7)

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Hazardous Materials Information Label (HMIS)

Health: 1
Flammability: 4

Physical Hazard:	1

NFPA Hazard Ratings

Health:	1
Flammability:	4
Reactivity:	1
Unique Hazard:	
Revision date:	21.07.2016
Revision No:	1,0

Abbreviations and acronyms

ADR: Accord européen sur le transport 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
GHS: Globally Harmonized 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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Other data

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

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