

**Safety Data Sheet**
according to Regulation (EG) Nmr. 1907/2006
ZINC (INOX-STAINLESS STEEL, BRIGHT ZINC, 98% ZINC)

Safety Data Sheet dated 3/3/2014, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: ZINCO BRILLANTE SPRAY

Trade code: 70.0080

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

1.3. Details of the supplier of the safety data sheet

Company:

Como Tempera d.o.o., Avelina Turka 2b, 51000 Rijeka, Croatia

Telephone: +385(0)51 273 864; Fax: +385(0)51 273 859; e-mail: info@comotemper.hr

1.4. Emergency telephone number

Emergency telephone: 112

Phone number for medical informations: + 385/1/2348 342 Zagreb, HR

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

F+ Extremely flammable



R Phrases:

R12 Extremely flammable.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

EC regulation criteria 1272/2008 (CLP):

 Danger, Flam. Aerosol 1, Extremely flammable aerosol. Warning, Skin Irrit. 2, Causes skin irritation. Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:



Danger

Hazard statements:

H222 Extremely flammable aerosol.

H315 Causes skin irritation.



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H319 Causes serious eye irritation.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

Special Provisions:

AEROSOL Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

PRUDAEROSOL1 Extremely flammable aerosol. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of reach of children.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.


3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

>= 15% - < 20% propane

Index number: 601-003-00-5, CAS: 74-98-6, EC: 200-827-9


F+; R12; substance with a Community workplace exposure limit

 2.2/1 Flam. Gas 1 H220

>= 12.5% - < 15% methyl acetate

REACH No.: 01-2119459211-47-XXXX, Index number: 607-021-00-X, CAS: 79-20-9, EC: 201-185-2

F,Xi; R11-36-66-67

 2.6/2 Flam. Liq. 2 H225


 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H336

>= 12.5% - < 15% o-xylene

Index number: 601-022-00-9, CAS: 1330-20-7, EC: 215-535-7

Xn,Xi; R10-20/21-38


 2.6/3 Flam. Liq. 3 H226

 3.1/4/Dermal Acute Tox. 4 H312



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 3.1/4/Inhal Acute Tox. 4 H332

 3.2/2 Skin Irrit. 2 H315

>= 7% - < 10% butane

Index number: 601-004-00-0, CAS: 106-97-8, EC: 203-448-7


F+; R12; substance with a Community workplace exposure limit

 2.2/1 Flam. Gas 1 H220

>= 3% - < 5% butane

Index number: 601-004-00-0, CAS: 75-28-5, EC: 200-857-2


F+; R12; substance with a Community workplace exposure limit

 2.2/1 Flam. Gas 1 H220

>= 1% - < 3% n-butyl acetate

Index number: 607-025-00-1, CAS: 123-86-4, EC: 204-658-1

R10-66-67; substance with a Community workplace exposure limit


 2.6/3 Flam. Liq. 3 H226

 3.8/3 STOT SE 3 H335

>= 1% - < 3% acetone; propan-2-one; propanone

REACH No.: 01-2119472426-35-XXXX, Index number: 606-001-00-8, CAS: 67-64-1, EC: 200-662-2

F,Xi; R11-36-66-67

 2.6/2 Flam. Liq. 2 H225


 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H336

>= 1% - < 3% methanol

REACH No.: 01-2119433307-44-XXXX, Index number: 603-001-00-X, CAS: 67-56-1, EC: 200-659-6

F,T; R11-23/24/25-39/23/24/25

 2.6/2 Flam. Liq. 2 H225

 3.1/3/Dermal Acute Tox. 3 H311

 3.1/3/Inhal Acute Tox. 3 H331

 3.1/3/Oral Acute Tox. 3 H301

 3.8/1 STOT SE 1 H370

>= 0.5% - < 1% Low boiling point hydrogen treated naphtha





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Index number: 649-327-00-6, CAS: 64742-48-9, EC: 265-150-3
Xn; R10-66-65


 2.6/3 Flam. Liq. 3 H226

 3.10/1 Asp. Tox. 1 H304

>= 0.5% - < 1% Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consist

Index number: 649-356-00-4, CAS: 64742-95-6, EC: 265-199-0


Xn,Xi,N; R51/53-37-10-65-66-67

 2.6/3 Flam. Liq. 3 H226

 3.8/3 STOT SE 3 H335

 3.10/1 Asp. Tox. 1 H304

 3.8/3 STOT SE 3 H336


 4.1/C2 Aquatic Chronic 2 H411


DECLP*

>= 0.1% - < 0.25% zinc powder - zinc dust (stabilized)

Index number: 030-002-00-7, CAS: 7440-66-6, EC: 231-175-3

N; R50/53

 4.1/A1 Aquatic Acute 1 H400

 4.1/C1 Aquatic Chronic 1 H410

*DECLP: Substance classified accordingly to Note P of the Annex I of directive 67/548/EEC. The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0.1% weight/weight of benzene

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:



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None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media:
In case of fire, use vaporized water or foam.
Extinguishing media which must not be used for safety reasons:
None in particular.
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
- 5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Wash with plenty of water.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Always keep in a well ventilated place.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:



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- Cool and adequately ventilated.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- propane - CAS: 74-98-6
 - TLV TWA - 1000 ppm - 0 mg/m³
 - VLE short - 1000 ppm
- methyl acetate - CAS: 79-20-9
 - ACGIH, 200 ppm, 250 ppm
- o-xylene - CAS: 1330-20-7
 - ACGIH, 100 ppm, 150 ppm - Notes: Skin
 - EU - LTE(8h): 221 mg/m³, 50 ppm - STE(15 min): 442 mg/m³, 100 ppm - Notes: Skin
- butane - CAS: 106-97-8
 - TLV TWA - 1000 ppm
- butane - CAS: 75-28-5
 - TLV TWA - 1000 ppm - 0 mg/m³
 - VLE short - 1000 ppm
- n-butyl acetate - CAS: 123-86-4
 - TLV TWA - ppm 150
 - TLV STEL - ppm 200
- acetone; propan-2-one; propanone - CAS: 67-64-1
 - ACGIH, 500 ppm, 750 ppm
 - EU - LTE(8h): 1210 mg/m³, 500 ppm
- methanol - CAS: 67-56-1
 - ACGIH, 200 ppm, 250 ppm - Notes: SKIN
 - VLE 8h - ppm 200 mg/m³ 260 ,Skin

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- | | |
|------------------------|---|
| Appearance and colour: | Liquid aspect (under pressure), typical colour. |
| Odour: | Characteristic of solvent |
| Odour threshold: | N.A. |



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pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	Extremely flammable
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	> of air.
Flash point:	Inf. 0 ° C
Evaporation rate:	N.A.
Vapour pressure:	a 20°C - 4,0 bar a 50°C - 8,0 bar
Relative density:	0,75 - 0,80 g/ml
Solubility in water:	NO
Solubility in oil:	SI
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.
9.2. Other information	
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
Avoid contact with combustible materials. The product could catch fire.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the mixture:
N.A.
Toxicological information of the main substances found in the mixture:
Low boiling point hydrogen treated naphtha - CAS: 64742-48-9
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 3000 mg/kg
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified; [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consist - CAS: 64742-95-6
a) acute toxicity:



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Test: LD50 - Route: Oral - Species: Rat > 6800 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 3400 mg/kg
methyl acetate - CAS: 79-20-9
LD50 (RABBIT) ORAL: 3705 MG/KG

o-xylene - CAS: 1330-20-7
LD50 (RAT) ORAL: 5000 MG/KG

acetone; propan-2-one; propanone - CAS: 67-64-1
LD50 (RABBIT) ORAL: 5300 MG/KG

methanol - CAS: 67-56-1
LD50 (RAT) ORAL SINGLE DOSE: 5628 MG/KG
LD50 (RABBIT) SKINSINGLE DOSE: 15800 MG/KG

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
zinc powder - zinc dust (stabilized) - CAS: 7440-66-6
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Daphnia = 0.44 mg/l - Duration h: 96
- 12.2. Persistence and degradability
None
N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.



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SECTION 14: Transport information

- 14.1. UN number
ADR-UN number: 1950
IATA-Un number: 1950
IMDG-Un number: 1950
- 14.2. UN proper shipping name
ADR-Shipping Name: AEROSOL
IATA-Technical name: AEROSOL
IMDG-Technical name: AEROSOL
- 14.3. Transport hazard class(es)
ADR-Class: 2 5F
IATA-Class: 2.1
IATA-Label: 2.1
IMDG-Class: 2
- 14.4. Packing group
ADR-Packing Group: -
IATA-Packing group: -
IMDG-Packing group: -
- 14.5. Environmental hazards
Marine pollutant: Marine pollutant
- 14.6. Special precautions for user
IATA-Passenger Aircraft: ----
IATA-Cargo Aircraft: 203
IMDG-Technical name: AEROSOL
IMDG-Page: F-D, S-U
IMDG-EMS: F-D, SU
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Dir. 2006/8/EC
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 453/2010 (Annex I)
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
None
Volatile Organic compounds - VOCs = 590.85 g/l
Volatile CMR substances = 0.00 %
Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %
Organic Carbon - C = 0.00
Where applicable, refer to the following regulatory provisions :



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Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

15.2. Chemical safety assessment
No

SECTION 16: Other information

Text of phrases referred to under heading 3:

- R10 Flammable.
- R11 Highly flammable.
- R12 Extremely flammable.
- R20/21 Harmful by inhalation and in contact with skin.
- R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- R36 Irritating to eyes.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H226 Flammable liquid and vapour.
- H312 Harmful in contact with skin.
- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H335 May cause respiratory irritation.
- H311 Toxic in contact with skin.
- H331 Toxic if inhaled.
- H301 Toxic if swallowed.
- H370 Causes damage to organs.
- H304 May be fatal if swallowed and enters airways.
- H411 Toxic to aquatic life with long lasting effects.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.
This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold



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CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.