

ZINC

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1. Product identifier

ZINC

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

Zinc, spray version for professional use in car refinish.

1.3. Data of the supplier Safety Data Sheet

NOVOL Sp. z o.o.
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1.4. Emergency telephone number +48 61 810-99-09 (from 7.00 to 15.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The mixture was classified as dangerous pursuant to current regulations - see Section 15.

Classification 1272/2008/EC:

Aerosols, hazard category 1. Extremely flammable aerosol.

Aerosols, hazard categories 1. Pressurised container: May burst if heated.

Hazardous to the aquatic environment — AcuteHazard, Category 1 Aquatic Acute 1 Very toxic to aquatic life.

Hazardous to the aquatic environment – chronic hazard, Category 1 Aquatic Chronic 1. Very toxic to aquatic life with long lasting effects.

2.2. Label elements:

Contains:

Dimethyl ether

Pictograms:



Signal word:

Danger

H222
H229
H410

Extremely flammable aerosol.
Pressurised container: May burst if heated.
Very toxic to aquatic life with long lasting effects.

P102
P210

Keep out of the reach of children.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211
P251
P260
P273
P280

Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Do not breathe vapours/spray.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/
face protection.

P410+P412

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

2.3. Other hazards

No available data.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Product identifier

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Substance name	Identification numbers	Classification and marking	Concentration [wt%]
Dimethyl ether	EC: 204-065-8 CAS: 115-10-6 Index no.: 603-019-00-8 Registration no.: 01-2119472128-37-XXXX	Flam. Gas. 1; H220; Press. Gas.H280	25-50
Zinc powder - zinc dust (stabilised)	WE: 231-175-3 CAS: 7440-66-6 Nr Indeksu: 030-001-01-9 Nr rejestracji: 01-2119467174-XXXX	Aquatic Acute 1; H400 Aquatic Chronic 1;H410	25-50
Acetone	EC: 200-662-2 CAS: 67-64-1 Index no.: 606-001-00-8 Registration no.: 01-2119471330-49-XXXX	Flam. Liq. 2; H225; Eye Irrit.2; H319; STOT SE 3, H336 EUH066	<10
Hydrocarbons, C9, arom.	WE: 918-668-5 CAS: -- Index no.: -- Registration no.: 01-2119455851-35-XXXX	Flam.Liq. 2, H226 Asp. Tox. 1; H304 Aquatic Chronic 2, H411 STOT SE, H336	<10
Xylene	EC: 215-535-7 CAS: 1330-20-7 Index no.: 601-022-00-9 Registration no.: 01-2119488216-32-XXXX	Flam. Liq. 3; H226; Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit.2; H315	<5
Zinc oxide	EC: 215-222-5 CAS: 1314-13-2 Index no.: 030-013-00-7 Registration no.: 01-2119463881-32-XXXX	Aquatic Acute 1; H400 Aquatic Chronic1; H410	<2.5

The full text of the hazard statements (H) is provided in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:
See section 11 of the Safety Data Sheet.

Inhalation:

Take the victim outside into fresh air, ensure quiet surrounding; in case of no breath, apply artificial respiration. Call a doctor.

Skin:

Take off contaminated clothing. Rinse contaminated skin with plenty of lukewarm water for about 15 minutes. If irritation persists, consult a doctor.

Eyes:

Rinse immediately with plenty of lukewarm water for about 15 minutes, avoid strong water jet-risk of cornea damage, consult a doctor.

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Alimentary tract:

Do not provoke vomiting (choking risk). Rinse mouth with water. If conscious, administer 1-2 glasses of warm water. Call a doctor.

Person giving first aid should wear medical gloves.

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

Fumes might cause drowsiness and vertigo. Repeated exposure might cause skin dryness or rupture.

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

Special measures allowing for specialist and immediate aid should be available in the place of work.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Powder, foam resistant to alcohols, carbon dioxide, water mist.

5.2. Special hazards arising from the substance or mixture

Fire may cause generation of carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Fire-fighting teams should wear self-contained breathing apparatus and light protective clothing. Cool adjacent tanks by spraying water at a safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For persons not being the members of aid giving staff:

Eliminate sources of ignition. Ensure sufficient ventilation of the room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Personal protection measures - section 8 of the Safety Data Sheet.

For persons giving aid:

Persons giving aid should wear protective clothing made of coated, impregnated fabric, protective gloves (viton), tight protective glasses and breathing apparatus: gas mask with A type absorber.

6.2. Environmental precautions

Prevent leakage to the sewage system, surface waters, underground waters and soil.

6.3. Methods and materials for containment and cleaning up

Stop the leakage (close the liquid inflow, seal), place damaged container in an emergency container, remove the liquid mechanically and place it in an emergency container. In case of large leakage, embank the area. In case of small amounts, collect with the use of a binding agent (e.g. mica, diatomaceous earth, sand).

6.4. Reference to other sections

Personal protection measures - see section 8 of the Safety Data Sheet.

Disposal considerations - see section 13 of the Safety Data Sheet.

SECTION 7: HANDLING AND STORAGE OF THE SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

Pressurized container: Do not spray on a naked flame or any incandescent material. Keep away from source of ignition – No smoking. Prevent leakage to the sewage system, surface waters, underground waters and soil. Use in well ventilated rooms. Do not smoke. Do not inhale fumes. Avoid contact with skin and eyes. Take precaution measures against electrostatic discharge. Use personal protection measures - section 8 of the Safety Data Sheet.

7.2. Conditions for safe storage, including any incompatibilities

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from source of ignition – No smoking. Keep out of the reach of children Do not store near large amounts of organic peroxides and other strong oxidants. Take precaution measures against electrostatic discharge. Store in cool, well ventilated rooms.

7.3. Special end use(s)

For professional use in car refinish taking into consideration the information included in subsections 7.1 and 7.2.

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SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

Dimethyl ether CAS 115-10-6 according to:

- *TRGS 900*: MAK: 1000ppm, MAK: 1900 mg/m³, 8(II),DFG
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 400 ppm: 766 mg/m³, STEL 500ppm, 958 mg/m³

Acetone CAS 67-64-1 according to:

- *TRGS 900*: MAK: 500ppm, MAK: 1200 mg/m³, 2(I),DFG
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 500 ppm: 1210 mg/m³, STEL 1500ppm, 3620 mg/m³

8.2. Exposure control

Respiratory tract protection:

Gas mask with A type absorber (EN 141).

Hand protection:

Protective gloves PN-EN 374-3 (viton, 0.7 mm thick, penetration time > 480 min; butyl rubber, 0,5mm thick, penetration time >480min)

Eye protection:

Tight protective glasses.

Skin protection:

Proper protective clothing (coated impregnated fabrics).

Workplace:

Fixed fume extraction and general ventilation.

Environmental exposure control:

Prevent leakage to the sewage system, surface waters, underground waters and soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Liquid in aerosol
Colour	according to specification
Odour	strong, powerful
Odour threshold	no data
pH	not applicable
Melting/freezing point	not applicable
Boiling point	not applicable
Flash point	<0°C
Autoignition point	not applicable
Breakdown point	no data
Evaporation rate	not applicable
Flammability (solid, gas)	not applicable
Explosion limits	% lower: 3.3 vol% upper: 26.2 vol%
Vapour pressure	4000 hPa (20°C)
Vapour density (with regard to air)	No data
Density	about 1.0 g/cm ³ (20°C)
Solubility (in water)	poor
N-octanol/water division ratio	not applicable
Viscosity (rotation rheometer)	not applicable
Explosive properties	no data
Oxidizing properties	not applicable

9.2 Other informations

No available data.

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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is not reactive under normal conditions.

10.2. Chemical stability

The product remains stable under normal conditions.

10.3. Possibility of hazardous reactions

Carbon monoxide and other toxic gases are generated as a result of thermal decomposition.

10.4. Conditions to be avoided

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from source of ignition – No smoking. Keep out of the reach of children.

10.5. Incompatible materials

Avoid contact with large amounts of organic peroxides, strong acids and bases as well as other strong oxidants.

10.6. Hazardous decomposition products

Carbon monoxide and other toxic gases are generated as a result of thermal decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No experimental data available on the preparation. Evaluation was performed based on the data on dangerous ingredients included in the preparation.

a) Acute toxicity

Acetone	LD ₅₀ (rat, oral)	5800 mg/kg
	LD ₅₀ (rabbit, skin)	20000 mg/kg
	LC ₅₀ (rat, inhalation)	39 mg/ m ³ /4h
Dimethyl ether	LC ₅₀ (rat, inhalation)	308 mg/ m ³ /4h
Xylene	LD ₅₀ (rat, ingestion)	5000 mg/kg
	LC ₅₀ (rat, inhalation)	4550 ppm/4h
Zinc oxide	LD ₅₀ (rat, ingestion)	7950 mg/kg

b) Skin corrosion/irritation

No available data confirming the hazard class.

c) serious eye damage/irritation

No available data confirming the hazard class.

d) respiratory or skin sensitisation

The mixture has not been classified as allergenic. No available data confirming the hazard class.

e) germ cell mutagenicity

The mixture has not been classified as mutagenic. No available data confirming the hazard class.

f) carcinogenicity

The mixture has not been classified as cancerogenic. No available data confirming the hazard class.

g) reproductive toxicity

The mixture has not been classified as having any harmful effect on reproduction. No available data confirming the hazard class.

h) STOT-single exposure

No available data confirming the hazard class.

i) STOT- repeated exposure

No available data confirming the hazard class.

j) aspiration hazard

No available data confirming the hazard class.

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SECTION 11: TOXICOLOGICAL INFORMATION

Exposure methods:

Inhalation: May cause irritation.

Skin: May cause irritation.

Eyes: May cause irritation.

If swallowed, the substance may cause irritation of the alimentary tract, nausea, vomiting and diarrhoea.

Poisoning symptoms:

Headache and vertigo, fatigue, decreased muscle power, drowsiness and, in exceptional instances, loss of consciousness.

May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking

SECTION 12: ECOLOGICAL INFORMATION

No experimental data available on the preparation. Evaluation was performed based on the data on dangerous ingredients included in the preparation.

12.1. Toxicity

Acetone

Daphnia magna EC50 (48h) 8800 mg/l

Number in the catalogue of water hazardous substances: 6

Water hazard class: 1

Dimethyl ether

Daphnia magna EC50 (48h) >4000 mg/l

12.2. Persistence and degradability

No available data.

12.3. Bioaccumulative potential

No available data.

12.4. Mobility in soil

Product very poorly soluble in water.

12.5. Results of PBT and vPvB assessment

No available data.

12.6. Other adverse effects

Very toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

The product must be disposed of in compliance with proper local and statutory regulations with regard to waste - see point 15.

The product should be disposed with entities which are authorised to conduct activity in the area of collecting, recycling or utilization of waste.

Product remains:

Do not dispose the product into the sewage system. Do not store with communal waste. Remove the remains of the mixture carefully and leave to dry only in good ventilated rooms. The dried product is not harmful waste.

CAUTION: The remains should be dried in small portions. Keep them away from flammable products. High amounts of heat are released during chemical reaction!

Contaminated container:

A container containing unhardened remains of the product is harmful waste. Do not store with communal waste. The contaminated container should be disposed with entities which are authorized to collection, recover or disposal.

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SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMO/IMGD	IATA-DGR
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name		AEROSOLS, flammable	
14.3. Transport hazard class(es)	2	2	2
14.4. Packaging group	--	--	--
14.5. Environmental hazards	yes	yes	--
14.6. Special precautions for user Do not transport together with materials of class 1 (excluding materials of class 1.4S) and some materials of classes 4.1 and 5.2. During transport, avoid direct contact with materials of classes 5.1 and 5.2. Do not use an open flame and do not smoke.			
14.7. Transport in bulk according to Annex II of MARPOL Convention and the IBC Code Not applicable.			

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Regulation 2006/1907/WE
 CLP - Regulation 1272/2008/WE

15.2. Chemical safety assessment

Not performed

SECTION 16: OTHER INFORMATION

Relevant hazard statements listed in Sections 2 to 15:

Flam. Liq.2 Flammable liquid. Category 2
 H225 Highly flammable liquid and vapour
 Asp. Tox. 1 Aspiration toxicity. Category 1
 H304 May be fatal if swallowed and enters airways
 Eye Irrit. 2 Eye irritation. Category 2
 H319 Causes serious eye irritation
 STOT SE 3 Specific target organ toxicity – single exposure, Category 3
 H336 May cause drowsiness or dizziness
 Flam. Gas. 1 Flammable gas. Category 1
 H220 Extremely flammable gas
 Press. Gas Pressurized gas
 H280 Contains gas under pressure; may explode if heated
 Flam.Liq.3 Liquid, flammable substances, category 3
 H226 Flammable liquid and vapour.
 Flam.Sol.1; Flammable solids, Category 1
 H228 Flammable solid.
 Skin Irrit. 2 Corrosive/irritating effect on skin. Category 2
 H315 Causes skin irritation
 Acute Tox. 4; Acute toxicity. Category 4
 H332 Harmful if inhaled
 H312 Harmful in contact with skin
 Aquatic Acute 1 Hazardous to the aquatic environment. Category 1
 H400 Very toxic to aquatic life
 Aquatic Chronic 1 Hazardous to the aquatic environment. Category 1
 H410 Very toxic to aquatic life with long lasting effects
 Aquatic Chronic 2 Hazardous to the aquatic environment. Category 2
 H411 Toxic to aquatic life with long lasting effects
 EUH066 Repeated exposure may cause skin dryness or cracking

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SECTION 16: OTHER INFORMATION

Explanation of the abbreviations and acronyms used in the Safety Data Sheet

CAS no – numerical symbol ascribed to a chemical substance by the American organization, Chemical Abstracts Service (CAS).

EC no. – a number ascribed to a chemical substance in the European List of Notified Chemical Substances (ELINCS) or a number in the European Inventory of Existing Chemical Substances mention in "No-longer polymers" publication (EINECS)

MPC – maximum permissible concentration of health hazardous substances in the work place

MPIC – maximum permissible instantaneous concentration

MPCC - maximum permissible ceiling concentration

PCB - permissible concentration in biological material

UN number - four-digit identification number of a substance, preparation or product pursuant to UN model regulations

ADR – European agreement on international road transport of hazardous materials

IMO – International Marine Organization

RID – Regulations for international rail transport of hazardous materials

IMDG-Code – International marine code for hazardous materials

ICAO /IATA – Technical Instructions for Safe Air Transport of Hazardous Materials

The information is based on our current knowledge. This document shall not constitute warranty for product characteristics. Classification was made by calculation method according to the classification rules contained in Regulation 1272/2008/WE.

Other sources of information

ECHA European Chemicals Agency

TOXNET Toxicology Data Network

IUCLID International Uniform Chemical Information Database

Changes: General update

Trainings:

With regard to handling, health and safety while working with hazardous substances and mixtures.

With regard to transport of hazardous goods pursuant to the requirements of ADR regulations.

Issued by: NOVOL Sp. z o.o.