



SAFETY DATA SHEET

Zinc Primer

According to Regulation (EC) No 1907/2006, Annex II, as amended., COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Zinc Primer
Product number 440.0010599.076.30012015

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

Identified uses Paint.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier PlastiKote Ltd.
 675 Eskdale Road,
 Winnersh,
 Wokingham, Berkshire,
 RG41 5TS
 UK
 T: +44 (0) 844 736 2235
 sds@plasti-kote.co.uk

1.4. Emergency telephone number

Emergency telephone +44(0) 844 736 2235
 08:00 - 17:00 h (UK)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards Aerosol 1 - H222, H229
Health hazards Skin Irrit. 2 - H315
Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H222 Extremely flammable aerosol.
 H229 Pressurised container: may burst if heated
 H315 Causes skin irritation.
 H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements	P102 Keep out of reach of children.
	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P211 Do not spray on an open flame or other ignition source.
	P251 Do not pierce or burn, even after use.
	P271 Use only outdoors or in a well-ventilated area.
	P302+P352 IF ON SKIN: Wash with plenty of water.
	P312 Call a POISON CENTER/ doctor if you feel unwell.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.	
P501 Dispose of contents/ container in accordance with national regulations.	

Supplementary precautionary statements	P332+P313 If skin irritation occurs: Get medical advice/ attention.
	P362+P364 Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Zinc powder (stabilised)	30-60%
CAS number: 7440-66-6	EC number: 231-175-3
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
isobutyl acetate	10-30%
CAS number: 110-19-0	EC number: 203-745-1
Substance with National workplace exposure limits.	
Classification	
Flam. Liq. 2 - H225	
Xylene	10-30%
CAS number: 1330-20-7	EC number: 215-535-7
Classification	
Flam. Liq. 3 - H226	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Propane	10-30%
CAS number: 74-98-6	EC number: 200-827-9
Classification	
Flam. Gas 1 - H220	
Press. Gas, Liquefied - H280	

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Butane	5-10%
CAS number: 106-97-8	EC number: 203-448-7
Classification	
Flam. Gas 1 - H220	
Press. Gas, Liquefied - H280	
Distillates (Petroleum), Hydrotreated light	1-5%
CAS number: 64742-47-8	EC number: 265-149-8
Classification	
Asp. Tox. 1 - H304	
Propan-2-ol	1-5%
CAS number: 67-63-0	EC number: 200-661-7
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
Ethylbenzene	1-5%
CAS number: 100-41-4	EC number: 202-849-4
Classification	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H332	
STOT RE 2 - H373	
Asp. Tox. 1 - H304	
Zinc Oxide	1-5%
CAS number: 1314-13-2	EC number: 215-222-5
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person warm and at rest. If in doubt, get medical attention promptly.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.

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Skin contact	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause nausea, headache, dizziness and intoxication.
Skin contact	Irritating to skin. Redness. Dryness and/or cracking.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically.
Specific treatments	No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Pressurised container: may burst if heated The product is extremely flammable. In use may form flammable/explosive vapour-air mixture.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water spray to reduce vapours.
Special protective equipment for firefighters	Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid heat, flames and other sources of ignition. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Avoid inhalation of vapours/spray and contact with skin and eyes.
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6.2. Environmental precautions

Environmental precautions	Exposure to aquatic environment unlikely. Avoid discharge into drains.
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6.3. Methods and material for containment and cleaning up

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Methods for cleaning up Provide adequate ventilation. Absorb spillage with oil-absorbing material.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. During application and drying, solvent vapours will be emitted. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Avoid exposing aerosol containers to high temperatures or direct sunlight. Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

isobutyl acetate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³

Short-term exposure limit (15-minute): WEL 187 ppm 903 mg/m³

Xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

Butane

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

Ethylbenzene

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

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Eye/face protection	Personal protective equipment for eye and face protection should comply with European Standard EN166. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.
Hand protection	To protect hands from chemicals, gloves should comply with European Standard EN374. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber. Frequent changes are recommended. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
Hygiene measures	When using do not eat, drink or smoke. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove non-impervious clothing that becomes contaminated.
Respiratory protection	This product must not be handled in a confined space without adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Contains low-boiling liquids. Use an air-supplied respirator, if necessary. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.
Thermal hazards	Contact with liquid form may cause frostbite.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Silver. Grey. Light (or pale).
Odour	Organic solvents.
pH	Not relevant. The product is insoluble in water.
Melting point	Not available. Technically not feasible.
Initial boiling point and range	-42 °C - 0°C @ 760 mm Hg
Flash point	< -60°C CC (Closed cup).
Evaporation rate	No information available. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 2 % Upper flammable/explosive limit: 10 %
Vapour pressure	1000 mbar @ 20°C
Vapour density	> 1 Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
Relative density	~ 0.85
Solubility(ies)	Immiscible with water. Soluble in the following materials: Organic solvents.
Auto-ignition temperature	~450°C
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	The product is extremely flammable.

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Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Volatility Highly volatile.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable.

10.4. Conditions to avoid

Conditions to avoid When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO₂). Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 9,640.67

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 86.65

Skin corrosion/irritation

Animal data Irritating.

Extreme pH Not relevant.

Serious eye damage/irritation

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

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

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Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant.

Inhalation

Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.

Ingestion

Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause nausea, headache, dizziness and intoxication.

Skin contact

Irritating to skin. Redness. Dryness and/or cracking.

Eye contact

May cause temporary eye irritation.

Acute and chronic health hazards

A single exposure may cause the following adverse effects: Drowsiness.

Route of entry

Inhalation Dermal

Target organs

No specific target organs known.

Medical symptoms

Fatigue. Headache. Coughing. Dry skin.

Medical considerations

Skin disorders and allergies.

Toxicological information on ingredients.

Zinc powder (stabilised)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,001.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available. Based on available data the classification criteria are not met.

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Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 5,410.0

Species Rat

Notes (inhalation LC₅₀) REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data No specific test data are available. Based on available data the classification criteria are not met.

Serious eye damage/irritation

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

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative.
REACH dossier information.

Genotoxicity - in vivo DNA damage and/or repair: Negative.
REACH dossier information.

Carcinogenicity

Carcinogenicity No specific test data are available.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 7.5 mg/kg/day, Oral, Rat F1
REACH dossier information. Estimated value.

Reproductive toxicity - development Teratogenicity: - NOAEL: 30 mg/kg/day, Oral, Mouse
REACH dossier information. Estimated value.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.
REACH dossier information.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.
REACH dossier information.

Aspiration hazard

Aspiration hazard Not relevant.

isobutyl acetate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 13,413.0

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Species	Rat
Notes (oral LD₅₀)	REACH dossier information. Conclusive data but not sufficient for classification.
ATE oral (mg/kg)	13,413.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	17,400.0
Species	Rabbit
Notes (dermal LD₅₀)	REACH dossier information. Conclusive data but not sufficient for classification.
ATE dermal (mg/kg)	17,400.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	30.0
Species	Rat
Notes (inhalation LC₅₀)	REACH dossier information. Conclusive data but not sufficient for classification.
ATE inhalation (vapours mg/l)	30.0
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.
Extreme pH	Moderate pH (> 2 and < 11.5).
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.

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Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEC 2500 ppm, Inhalation, Rat
REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOAEL: 10 mg/l, Inhalation,
REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOEL 316 mg/kg, Oral, Rat
REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Xylene

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,523.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Based on available data the classification criteria are not met.

ATE oral (mg/kg) 3,523.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ gases ppmV) 6,700.0

Species Rat

Acute toxicity inhalation (LC₅₀ vapours mg/l) 29.0

Species Rat

Notes (inhalation LC₅₀) Harmful by inhalation.

ATE inhalation (vapours mg/l) 11.0

Skin corrosion/irritation

Animal data Rabbit Primary dermal irritation index: 2.21
REACH dossier information. Moderately irritating.

Extreme pH Moderate pH (> 2 and < 11.5).

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Serious eye damage/irritation

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

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Not sensitising.
REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative.
REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative.
REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 1000 mg/kg/day, Oral, Rat
REACH dossier information. No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEC 500 ppm, Inhalation, Rat P
REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEC: 500 ppm, Inhalation,
REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 500 ppm, Inhalation, Rat
REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

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

Propane

Acute toxicity - oral

Notes (oral LD₅₀) Technically not feasible.

Acute toxicity - dermal

Notes (dermal LD₅₀) Technically not feasible.

Acute toxicity - inhalation

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Acute toxicity inhalation (LC₅₀ gases ppmV) 800,000.0

Species Rat

Notes (inhalation LC₅₀) REACH dossier information.

ATE inhalation (gases ppm) 800,000.0

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. Based on available data the classification criteria are not met.

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEC 9000 ppm, Inhalation, Rat P Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Butane

Acute toxicity - oral

Notes (oral LD₅₀) Technically not feasible.

Acute toxicity - dermal

Notes (dermal LD₅₀) Technically not feasible.

Acute toxicity - inhalation

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Acute toxicity inhalation (LC₅₀ gases ppmV)	539,600.0
Species	Mouse
Notes (inhalation LC₅₀)	REACH dossier information. Based on available data the classification criteria are not met.
ATE inhalation (gases ppm)	539,600.0
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Technically not feasible.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Not determined. Scientifically unjustified.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Fertility - NOAEC 9000 ppm, Inhalation, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEC 9000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

Zinc powder (stabilised)

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Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.33-0.78 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.8-2.9 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEC, 3 days: 0.05 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	NOEC, 4 hours: 0.1 mg/l, Activated sludge

Chronic aquatic toxicity

NOEC	
Degradability	--
M factor (Chronic)	1
Chronic toxicity - aquatic invertebrates	NOEC, 3 weeks: 0.1 mg/l, Daphnia magna

isobutyl acetate

Acute toxicity - fish	LC ₅₀ , 96 hours: 17 mg/l, Oryzias latipes (Red killifish) REACH dossier information.
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 25 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 370 mg/l, Selenastrum capricornutum REACH dossier information.
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 23 mg/l, Daphnia magna REACH dossier information.

Xylene

Acute toxicity - fish	LC ₅₀ , 96 hours: 2.6 mg/l, Onchorhynchus mykiss (Rainbow trout) REACH dossier information.
Acute toxicity - aquatic invertebrates	NOEC, 48 hours: 3.4 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EC ₅₀ , 73 hours: 4.36 mg/l, Selenastrum capricornutum REACH dossier information.

Propane

Acute toxicity - fish	LC ₅₀ , 96 hours: 27.98 mg/l, Estimated value.
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 14.22 mg/l, Estimated value.

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Acute toxicity - aquatic plants EC₅₀, 96 hours: 7.71 mg/l, Estimated value.

Chronic toxicity - fish early life stage No information available.

Butane

Acute toxicity - fish LC₅₀, 96 hours: 24.1 mg/l, Estimated value.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 14.2 mg/l, Estimated value.

Acute toxicity - aquatic plants EC₅₀, 96 hours: 7.7 mg/l, Estimated value.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. Volatile substances are degraded in the atmosphere within a few days.

Ecological information on ingredients.

Zinc powder (stabilised)

Biodegradation Not relevant.
Substance is inorganic.

isobutyl acetate

Phototransformation Water - Half-life : ~ 3.5 days
Estimated value.
REACH dossier information.

Stability (hydrolysis) pH7 - Half-life : ~ 3.3 years @ 25°C
Estimated value.
REACH dossier information.

Biodegradation Water - Degradation 81: 20 days
REACH dossier information.
The substance is readily biodegradable.

Xylene

Phototransformation Water - DT₅₀ : 1.09 days
Estimated value.
REACH dossier information.

Stability (hydrolysis) No significant reaction in water.

Biodegradation Water - Degradation 87.8: 28 days
REACH dossier information.
The substance is readily biodegradable.

Propane

Zinc Primer

Persistence and degradability	Highly volatile.
Phototransformation	Water - DT ₅₀ : 1906 days
Stability (hydrolysis)	Not applicable.
Biodegradation	Water - 100%: 385.5 hours

Butane

Phototransformation	Not determined.
Stability (hydrolysis)	No significant reaction in water.
Biodegradation	Water - DT ₅₀ : 3.5 days Estimated value. The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

Zinc powder (stabilised)

Bioaccumulative potential No data available on bioaccumulation.

isobutyl acetate

Bioaccumulative potential BCF: 15.3, Estimated value.
REACH dossier information. The product is not bioaccumulating.

Partition coefficient log Pow: 2.3

Xylene

Bioaccumulative potential BCF: < 25.9,
The product is not bioaccumulating. REACH dossier information.

Partition coefficient log Pow: ~ 3.1
REACH dossier information.

Propane

Partition coefficient log Pow: 1.09

Butane

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product is immiscible with water and will spread on the water surface. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.

Zinc powder (stabilised)

Zinc Primer

Mobility Slightly soluble in water.

isobutyl acetate

Mobility The product is insoluble in water and will spread on the water surface.

Adsorption/desorption coefficient Water - log Koc: < 3 @ °C Estimated value.
REACH dossier information.

Henry's law constant 41.6 Pa m³/mol @ °C
REACH dossier information.

Surface tension 62.5 mN/m @ 20°C
REACH dossier information.

Xylene

Mobility The product is insoluble in water and will spread on the water surface.

Adsorption/desorption coefficient Water - log Koc: ~ 2.7 @ 25°C
REACH dossier information.

Henry's law constant ~ 623 Pa m³/mol @ 25°C
REACH dossier information.

Surface tension ~ 29 mN/m @ 25°C
REACH dossier information.

Propane

Mobility Highly volatile.

Butane

Mobility The product is insoluble in water. Highly volatile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Zinc powder (stabilised)

Results of PBT and vPvB assessment Not relevant. Substance is inorganic.

isobutyl acetate

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Xylene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Propane

Zinc Primer

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Butane

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

Zinc powder (stabilised)

Other adverse effects None known.

isobutyl acetate

Other adverse effects None known.

Xylene

Other adverse effects None known.

Propane

Other adverse effects None known.

Butane

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Information given is applicable to the product as supplied. When handling waste, the safety precautions applying to handling of the product should be considered. Do not puncture or incinerate, even when empty. Reuse or recycle products wherever possible.

Disposal methods Do not empty into drains. Dispose of waste product or used containers in accordance with local regulations
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

Waste class Information given is applicable to the product as supplied. [08 01 11*] / [20 01 27*]

SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

Zinc Primer

UN No. (ICAO) 1950

UN No. (ADN) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) Aerosols, flammable

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2 (5F)

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-D, S-U

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant.

SECTION 15: Regulatory information

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

National regulations The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).
EH40/2005 Workplace exposure limits.

Zinc Primer

EU legislation	<p>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).</p> <p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</p> <p>Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.</p>
Health and environmental listings	<p>Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (as amended). Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants (as amended). Regulation (EC) 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals (as amended).</p> <p>None of the ingredients are listed.</p>
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.
SEVESO	P3a - Lower tier 150 tonnes, Upper tier 500 tonnes.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>LC₅₀: Lethal Concentration to 50 % of a test population.</p> <p>LOAEC: Lowest Observed Adverse Effect Concentration.</p> <p>NOAEC: No Observed Adverse Effect Concentration.</p> <p>EC₅₀: 50% of maximal Effective Concentration.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>BCF: Bioconcentration Factor.</p> <p>Kow: Octanol-water partition coefficient.</p>
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Classification abbreviations and acronyms	<p>Aerosol = Aerosol</p> <p>Skin Irrit. = Skin irritation</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p>
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Classification procedures according to Regulation (EC) 1272/2008	Aerosol 1 - H222, H229: Bridging principle (Aerosols). Skin Irrit. 2 - H315, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410: Calculation method.
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Revision date 08/03/2016

Revision 2

Zinc Primer

Supersedes date	30/01/2015
SDS number	986
Hazard statements in full	<p>H220 Extremely flammable gas. H222 Extremely flammable aerosol. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H226 Flammable liquid and vapour. H229 Pressurised container: may burst if heated H229 Pressurised container: may burst if heated H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H315 Causes skin irritation. H319 Causes serious eye irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H336 May cause drowsiness or dizziness. H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure. H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure. H400 Very toxic to aquatic life. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H410 Very toxic to aquatic life with long lasting effects.</p>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.