



THE PERFECT FINISH

## 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.

## Zinc Primer

<b>Precautionary statements</b>	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.	

<b>Supplementary precautionary statements</b>	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

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

## Zinc Primer

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

## Zinc Primer

<b>Skin contact</b>	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	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.
<b>Ingestion</b>	Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause nausea, headache, dizziness and intoxication.
<b>Skin contact</b>	Irritating to skin. Redness. Dryness and/or cracking.
<b>Eye contact</b>	May cause temporary eye irritation.

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

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

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

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

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	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.
<b>Special protective equipment for firefighters</b>	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

<b>Personal precautions</b>	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.
-----------------------------	---

### 6.2. Environmental precautions

<b>Environmental precautions</b>	Exposure to aquatic environment unlikely. Avoid discharge into drains.
----------------------------------	--

### 6.3. Methods and material for containment and cleaning up

## Zinc Primer

**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/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 187 ppm 903 mg/m<sup>3</sup>

##### Xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m<sup>3</sup>

Sk

##### Butane

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m<sup>3</sup>

##### Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

##### Ethylbenzene

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m<sup>3</sup>

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.

## Zinc Primer

<b>Eye/face protection</b>	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.
<b>Hand protection</b>	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.
<b>Hygiene measures</b>	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.
<b>Respiratory protection</b>	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.
<b>Thermal hazards</b>	Contact with liquid form may cause frostbite.

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

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

## Zinc Primer

**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 (CO<sub>2</sub>). Carbon monoxide (CO).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**ATE dermal (mg/kg)** 9,640.67

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** 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.

## Zinc Primer

### 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 (LD<sub>50</sub> mg/kg)** 2,001.0

**Species** Rat

**Notes (oral LD<sub>50</sub>)** REACH dossier information. Based on available data the classification criteria are not met.

##### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** No specific test data are available. Based on available data the classification criteria are not met.



## Zinc Primer

### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)** 5,410.0

**Species** Rat

**Notes (inhalation LC<sub>50</sub>)** 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 (LD<sub>50</sub> mg/kg)** 13,413.0

## Zinc Primer

<b>Species</b>	Rat
<b>Notes (oral LD<sub>50</sub>)</b>	REACH dossier information. Conclusive data but not sufficient for classification.
<b>ATE oral (mg/kg)</b>	13,413.0
<b><u>Acute toxicity - dermal</u></b>	
<b>Acute toxicity dermal (LD<sub>50</sub> mg/kg)</b>	17,400.0
<b>Species</b>	Rabbit
<b>Notes (dermal LD<sub>50</sub>)</b>	REACH dossier information. Conclusive data but not sufficient for classification.
<b>ATE dermal (mg/kg)</b>	17,400.0
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)</b>	30.0
<b>Species</b>	Rat
<b>Notes (inhalation LC<sub>50</sub>)</b>	REACH dossier information. Conclusive data but not sufficient for classification.
<b>ATE inhalation (vapours mg/l)</b>	30.0
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	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.
<b>Extreme pH</b>	Moderate pH (> 2 and < 11.5).
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	No information available.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<b>Genotoxicity - in vivo</b>	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	No information available.

## Zinc Primer

### 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 (LD<sub>50</sub> mg/kg)** 3,523.0

**Species** Rat

**Notes (oral LD<sub>50</sub>)** 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 LD<sub>50</sub>)** Harmful in contact with skin.

**ATE dermal (mg/kg)** 1,100.0

### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> gases ppmV)** 6,700.0

**Species** Rat

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 29.0

**Species** Rat

**Notes (inhalation LC<sub>50</sub>)** 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).

## Zinc Primer

### 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 LD<sub>50</sub>)** Technically not feasible.

### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Technically not feasible.

### Acute toxicity - inhalation

## Zinc Primer

<b>Acute toxicity inhalation (LC<sub>50</sub> gases ppmV)</b>	800,000.0
<b>Species</b>	Rat
<b>Notes (inhalation LC<sub>50</sub>)</b>	REACH dossier information.
<b>ATE inhalation (gases ppm)</b>	800,000.0
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Based on available data the classification criteria are not met.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
<b>Genotoxicity - in vivo</b>	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Based on available data the classification criteria are not met.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Screening - NOAEC 9000 ppm, Inhalation, Rat P Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Not classified as a specific target organ toxicant after a single exposure.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	Not classified as a specific target organ toxicant after repeated exposure.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Not anticipated to present an aspiration hazard, based on chemical structure.

### Butane

<b><u>Acute toxicity - oral</u></b>	
<b>Notes (oral LD<sub>50</sub>)</b>	Technically not feasible.
<b><u>Acute toxicity - dermal</u></b>	
<b>Notes (dermal LD<sub>50</sub>)</b>	Technically not feasible.
<b><u>Acute toxicity - inhalation</u></b>	

## Zinc Primer

<b>Acute toxicity inhalation (LC<sub>50</sub> gases ppmV)</b>	539,600.0
<b>Species</b>	Mouse
<b>Notes (inhalation LC<sub>50</sub>)</b>	REACH dossier information. Based on available data the classification criteria are not met.
<b>ATE inhalation (gases ppm)</b>	539,600.0
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Based on available data the classification criteria are not met.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Technically not feasible.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Bacterial reverse mutation test: Negative. Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Not determined. Scientifically unjustified.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Fertility - NOAEC 9000 ppm, Inhalation, Rat P REACH dossier information. Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Maternal toxicity: - NOAEC: 12000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Not classified as a specific target organ toxicant after a single exposure.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	NOAEC 9000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	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)

## Zinc Primer

### Acute aquatic toxicity

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

### Chronic aquatic toxicity

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

### isobutyl acetate

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

### Xylene

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

### Propane

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

## Zinc Primer

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 96 hours: 7.71 mg/l, Estimated value.

**Chronic toxicity - fish early life stage** No information available.

### Butane

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 24.1 mg/l, Estimated value.

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 14.2 mg/l, Estimated value.

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 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 - DT<sub>50</sub> : 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

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

### Butane

<b>Phototransformation</b>	Not determined.
<b>Stability (hydrolysis)</b>	No significant reaction in water.
<b>Biodegradation</b>	Water - DT <sub>50</sub> : 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 m<sup>3</sup>/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 m<sup>3</sup>/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

<b>EU legislation</b>	<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>
<b>Health and environmental listings</b>	<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>
<b>Authorisations (Title VII Regulation 1907/2006)</b>	No specific authorisations are known for this product.
<b>Restrictions (Title VIII Regulation 1907/2006)</b>	No specific restrictions on use are known for this product.
<b>SEVESO</b>	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

<b>Abbreviations and acronyms used in the safety data sheet</b>	<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>LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>LC<sub>50</sub>: 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>EC<sub>50</sub>: 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>
<b>Classification abbreviations and acronyms</b>	<p>Aerosol = Aerosol</p> <p>Skin Irrit. = Skin irritation</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p>
<b>Classification procedures according to Regulation (EC) 1272/2008</b>	Aerosol 1 - H222, H229: Bridging principle (Aerosols). Skin Irrit. 2 - H315, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410: Calculation method.
<b>Revision date</b>	08/03/2016
<b>Revision</b>	2

## Zinc Primer

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