

X16 - PRIMER WITH HIGH ZINC CONTENT**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** X16 - PRIMER WITH HIGH ZINC CONTENT
Other means of identification:
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Printing
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
Industrias Titán, S.A.U.
Pol. Ind. Pratense, calle 114 n° 17-19
08820 El Prat de Llobregat - Barcelona - España
Phone.: +34 934 797 494 - Fax: +34 934 797 495
msds@titanlux.es
<http://www.titanlux.es>
- 1.4 Emergency telephone number:** +34 934 797 494 (7:30-14:30 h.) (working hours)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) No 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Aquatic Acute 1: Hazardous to the aquatic environment, acute hazard, Category 1, H400
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410
Lact.: Reproductive toxicity, effects on or via lactation, H362
Water-react. 1: Substances and mixtures giving off flammable gases when wet, Category 1, H260
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger
- The image shows two GHS hazard pictograms side-by-side. The first is a red diamond with a black flame, representing flammable gases (H260). The second is a red diamond with a black silhouette of a dead tree and fish, representing aquatic chronic (H410).
- Hazard statements:**
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Lact.: H362 - May cause harm to breast-fed children.
Water-react. 1: H260 - In contact with water releases flammable gases which may ignite spontaneously.
- Precautionary statements:**
P201: Obtain special instructions before use.
P231+P232: Handle and store contents under inert gas. Protect from moisture.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P263: Avoid contact during pregnancy and while nursing.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P335+P334: IF ON SKIN: Brush off loose particles from skin. Immerse in cool water.
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.
- Supplementary information:**
EUH208: Contains Hydrocarbons, C9-unsaturated, polymerised. May produce an allergic reaction.
- Substances that contribute to the classification**
alkanes, C14-17, chloro
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of additives, aggregates, pigments and resins in solvents

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | Concentration |
|---|--|--|
| CAS: 7440-66-6 EC: 231-175-3 Index: 030-001-00-1 REACH: 01-2119467174-37-XXXX | Zinc powder - zinc dust (pyrophoric)⁽¹⁾ Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Pyr. Sol. 1: H250; Water-react. 1: H260 - Danger | ATP CLP00 50 - <75 % |
| CAS: 1314-13-2 EC: 215-222-5 Index: 030-013-00-7 REACH: 01-2119463881-32-XXXX | zinc oxide⁽¹⁾ Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Warning | ATP CLP00 10 - <12,5 % |
| CAS: 64742-48-9 EC: 919-857-5 Index: Non-applicable REACH: 01-2119463258-33-XXXX | Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics⁽¹⁾ Regulation 1272/2008 Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Danger | Self-classified 10 - <12,5 % |
| CAS: 85535-85-9 EC: 287-477-0 Index: 602-095-00-X REACH: 01-2119519269-33-XXXX | alkanes, C14-17, chloro⁽¹⁾ Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Lact.: H362; EUH066 - Warning | ATP ATP01 1,5 - <2 % |
| CAS: 71302-83-5 EC: 615-276-3 Index: Non-applicable REACH: 01-2119555292-40-XXXX | Hydrocarbons, C9-unsaturated, polymerised⁽¹⁾ Regulation 1272/2008 Aquatic Chronic 3: H412; Skin Sens. 1A: H317 - Warning | Self-classified 0,05 - <0,1 % |

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

X16 - PRIMER WITH HIGH ZINC CONTENT**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media:****Suitable extinguishing media:**

In case of fire: Use D powder extinguisher to extinguish.

Unsuitable extinguishing media:

WARNING! In contact with water releases flammable gases which may ignite spontaneously. NEVER USE WATER TO EXTINGUISH THE FIRE.

5.2 Special hazards arising from the substance or mixture:

Product that reacts with water producing extremely flammable gases.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:**

AVOID CONTACT WITH WATER. Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those who do not have protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

DO NOT USE WATER TO CLEAN.

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling:****A.- Precautions for safe manipulation**

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

AVOID CONTACT WITH WATER. Transfer in well ventilated areas, preferably through localised extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres within containers, applying where possible inertization systems. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting security and health of the workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

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SECTION 7: HANDLING AND STORAGE (continued)

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

- Minimum Temp.: 5 °C
- Maximum Temp.: 40 °C
- Maximum time: 36 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

There are no occupational exposure limits for the substances contained in the product

DNEL (Workers):

| Identification | | Short exposure | | Long exposure | |
|---|------------|----------------|----------------|-----------------------|-----------------------|
| | | Systemic | Local | Systemic | Local |
| zinc oxide CAS: 1314-13-2 EC: 215-222-5 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 83 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 5 mg/m ³ | 0,5 mg/m ³ |
| alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 47,9 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 6,7 mg/m ³ | Non-applicable |

DNEL (General population):

| Identification | | Short exposure | | Long exposure | |
|---|------------|----------------|----------------|-----------------------|----------------|
| | | Systemic | Local | Systemic | Local |
| zinc oxide CAS: 1314-13-2 EC: 215-222-5 | Oral | Non-applicable | Non-applicable | 0,83 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 83 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 2,5 mg/m ³ | Non-applicable |
| alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0 | Oral | Non-applicable | Non-applicable | 0,58 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 28,75 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 2 mg/m ³ | Non-applicable |

PNEC:

| Identification | | | | | |
|---|--------------|----------------|-------------------------|-------------|--|
| zinc oxide CAS: 1314-13-2 EC: 215-222-5 | STP | 0,1 mg/L | Fresh water | 0,0206 mg/L | |
| | Soil | 35,6 mg/kg | Marine water | 0,0061 mg/L | |
| | Intermittent | Non-applicable | Sediment (Fresh water) | 117,8 mg/kg | |
| | Oral | Non-applicable | Sediment (Marine water) | 56,5 mg/kg | |
| alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0 | STP | 80 mg/L | Fresh water | 0,001 mg/L | |
| | Soil | 11,9 mg/kg | Marine water | 0,0002 mg/L | |
| | Intermittent | Non-applicable | Sediment (Fresh water) | 13 mg/kg | |
| | Oral | 0,01 g/kg | Sediment (Marine water) | 2,6 mg/kg | |

8.2 Exposure controls:



A.- General security and hygiene measures in the work place

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---------------------------|--|---------------------|--|
|  Compulsory use of face mask | Filter mask for particles |  CAT III | EN 149:2001+A1:2009 | Replace when an increase in resistance to breathing is observed. |

C.- Specific protection for the hands





| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---------------------------------------|--|--------------|--|
|  Mandatory hand protection | Protective gloves against minor risks |  CAT I | | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018 |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---|---|---------------------------------|---|
|  Mandatory face protection | Panoramic glasses against splash/projections. |  CAT II | EN 166:2002 EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|--|--|---|
|  Mandatory complete body protection | Antistatic and fireproof protective clothing |  CAT III | EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018 | Limited protection against flames. |
|  Mandatory foot protection | Safety footwear with antistatic and heat resistant properties |  CAT III | EN ISO 13287:2013 EN ISO 20345:2011 | Replace boots at any sign of deterioration. |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|--|--|
|  Emergency shower | ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011 |

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

| | |
|---------------------------|-------------------------------------|
| V.O.C. (Supply): | 12 % weight |
| V.O.C. density at 20 °C: | 364,8 kg/m ³ (364,8 g/L) |
| Average carbon number: | 10 |
| Average molecular weight: | 146 g/mol |

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

| | |
|--------------------------|------------------|
| Physical state at 20 °C: | Liquid |
| Appearance: | Viscous |
| Colour: | Grey |
| Odour: | Characteristic |
| Odour threshold: | Non-applicable * |

Volatility:

| | |
|--|-----------------------|
| Boiling point at atmospheric pressure: | 170 °C |
| Vapour pressure at 20 °C: | 199 Pa |
| Vapour pressure at 50 °C: | 1807,19 Pa (1,81 kPa) |
| Evaporation rate at 20 °C: | Non-applicable * |

Product description:

| | |
|--|-------------------------------|
| Density at 20 °C: | 2940 - 3140 kg/m ³ |
| Relative density at 20 °C: | 2,94 - 3,14 |
| Dynamic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 40 °C: | >20,5 cSt |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 20 °C: | Non-applicable * |
| Partition coefficient n-octanol/water 20 °C: | Non-applicable * |
| Solubility in water at 20 °C: | |
| Solubility properties: | Non-applicable * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |

Flammability:

| | |
|----------------------------|------------------|
| Flash Point: | >61 °C |
| Heat of combustion: | Non-applicable * |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | 270 °C |
| Lower flammability limit: | Non-applicable * |
| Upper flammability limit: | Non-applicable * |

Explosive:

| | |
|------------------------|------------------|
| Lower explosive limit: | Non-applicable * |
| Upper explosive limit: | Non-applicable * |

9.2 Other information:

| | |
|---------------------------|------------------|
| Surface tension at 20 °C: | Non-applicable * |
| Refraction index: | Non-applicable * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

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SECTION 10: STABILITY AND REACTIVITY (continued)
10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|------------|---|
| Not applicable | Precaution | Precaution | Precaution | In contact with water releases flammable gases which may ignite spontaneously |

10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|--------------------|---|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | In contact with water releases flammable gases which may ignite spontaneously | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
IARC: alkanes, C14-17, chloro (2B); Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclics, <2% aromatics (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: May cause harm to breast-fed children

E- Sensitizing effects:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|---|-----------------|----------------|-------|
| | LD50 | LD50 | |
| zinc oxide CAS: 1314-13-2 EC: 215-222-5 | LD50 oral | 7950 mg/kg | Mouse |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |
| Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics CAS: 64742-48-9 EC: 919-857-5 | LD50 oral | 5100 mg/kg | Rat |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

| Identification | Acute toxicity | Species | Genus |
|---|----------------|-----------------------|----------------------|
| | | | |
| Zinc powder - zinc dust (pyrophoric) CAS: 7440-66-6 EC: 231-175-3 | LC50 | >0.1 - 1 mg/L (96 h) | Fish |
| | EC50 | >0.1 - 1 mg/L (48 h) | Crustacean |
| | EC50 | >0.1 - 1 mg/L (72 h) | Algae |
| zinc oxide CAS: 1314-13-2 EC: 215-222-5 | LC50 | 0.82 mg/L (96 h) | Oncorhynchus kisutch |
| | EC50 | 3.4 mg/L (48 h) | Daphnia magna |
| | EC50 | Non-applicable | |
| alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0 | LC50 | >0.1 - 1 mg/L (96 h) | Fish |
| | EC50 | >0.1 - 1 mg/L (48 h) | Crustacean |
| | EC50 | >0.1 - 1 mg/L (72 h) | Algae |
| Hydrocarbons, C9-unsaturated, polymerised CAS: 71302-83-5 EC: 615-276-3 | LC50 | >10 - 100 mg/L (96 h) | Fish |
| | EC50 | >10 - 100 mg/L (48 h) | Crustacean |
| | EC50 | >10 - 100 mg/L (72 h) | Algae |

12.2 Persistence and degradability:

| Identification | Degradability | | Biodegradability | |
|---|---------------|----------------|------------------|----------------|
| | BOD5 | COD | Concentration | Period |
| Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics CAS: 64742-48-9 EC: 919-857-5 | BOD5 | Non-applicable | Concentration | Non-applicable |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 80 % |

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Not available

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|-----------|---|--|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances | Dangerous |

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP3 Flammable

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide; Zinc powder - zinc dust (pyrophoric))
- 14.3 Transport hazard class(es):** 9
- Labels:** 9
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
 - Special regulations: 274, 335, 375, 601
 - Tunnel restriction code: Non-applicable
 - Physico-Chemical properties: see section 9
 - Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

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SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide; Zinc powder - zinc dust (pyrophoric))
- 14.3 Transport hazard class(es):** 9
Labels: 9
- 14.4 Packing group:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions for user**
 Special regulations: 335, 969, 274
 EmS Codes: F-A, S-F
 Physico-Chemical properties: see section 9
 Limited quantities: 5 L
 Segregation group: Non-applicable
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:



- 14.1 UN number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide; Zinc powder - zinc dust (pyrophoric))
- 14.3 Transport hazard class(es):** 9
Labels: 9
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
 Physico-Chemical properties: see section 9
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

| Section | Description | Lower-tier requirements | Upper-tier requirements |
|---------|-----------------------|-------------------------|-------------------------|
| E1 | ENVIRONMENTAL HAZARDS | 100 | 200 |
| O2 | OTHER HAZARDS | 100 | 500 |

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

- CONTINUED ON NEXT PAGE -

X16 - PRIMER WITH HIGH ZINC CONTENT**SECTION 15: REGULATORY INFORMATION (continued)**

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION**Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H362: May cause harm to breast-fed children.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H260: In contact with water releases flammable gases which may ignite spontaneously.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Aquatic Acute 1: H400 - Very toxic to aquatic life.

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Lact.: H362 - May cause harm to breast-fed children.

Pyr. Sol. 1: H250 - Catches fire spontaneously if exposed to air.

Skin Sens. 1A: H317 - May cause an allergic skin reaction.

STOT SE 3: H336 - May cause drowsiness or dizziness.

Water-react. 1: H260 - In contact with water releases flammable gases which may ignite spontaneously.

Classification procedure:

Lact.: Calculation method

Aquatic Acute 1: Calculation method

Aquatic Chronic 1: Calculation method

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X16 - PRIMER WITH HIGH ZINC CONTENT**SECTION 16: OTHER INFORMATION (continued)****Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient

Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -