

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

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

1.1 Product identifier

Trade name: **DUALCURE ZINC PRIMER**

Article number: 306

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

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

Application of the substance / the mixture Paint

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Baril Coatings BV
 Zilverenberg 9
 NL-5234 GL 's-Hertogenbosch

Further information obtainable from:

Product Safety Department
 R&D department

1.4 Emergency telephone number:

NVIC: +31(030) 2748888

Only for the purpose of informing medical personnel in cases of acute intoxications.

Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen.

Sustainable Coating Solutions



SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: **DUALCURE ZINC PRIMER**

(Contd. of page 1)

Hazard pictograms

GHS02 GHS07 GHS08 GHS09

Signal word Danger**Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomers and homologues
 4-isocyanatosulphonyltoluene

Hazard statements

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H335 May cause respiratory irritation.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P241 Use explosion-proof electrical/ventilating/lighting equipment.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Resin mixture

Dangerous components:

CAS: 7440-66-6 EINECS: 231-175-3 Index number: 030-002-00-7 Reg.nr.: 01-2119467174-37	zinc powder -zinc dust (stabilized) ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	75-100%
CAS: 110-43-0 EINECS: 203-767-1 Index number: 606-024-00-3 Reg.nr.: 01-2119902391-49	heptan-2-one ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	5-<7%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31









Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER

(Contd. of page 2)

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues  Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373;  Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	5-<7%
EC number: 918-668-5 Index number: 649-356-00-4 Reg.nr.: 01-2119455851-35	Solvent naphtha (petroleum), light arom.  Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335-H336	3-<5%
CAS: 4083-64-1 EINECS: 223-810-8 Index number: 615-012-00-7	4-isocyanatosulphonyltoluene  Resp. Sens. 1, H334;  Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0.5-<1%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **5.2 Special hazards arising from the substance or mixture**

No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER

See Section 13 for disposal information.

(Contd. of page 3)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**
 Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

110-43-0 heptan-2-one

IOELV	Short-term value: 475 mg/m ³ , 100 ppm Long-term value: 238 mg/m ³ , 50 ppm Skin
-------	--

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
- **Respiratory protection:**
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER

(Contd. of page 4)

· Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.

· pH-value:	Not determined.
-------------	-----------------

· Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	151 °C

· Flash point:	41 °C
----------------	-------

· Flammability (solid, gas):	Not applicable.
------------------------------	-----------------

· Ignition temperature:	400 °C
-------------------------	--------

· Decomposition temperature:	Not determined.
------------------------------	-----------------

· Auto-ignition temperature:	Product is not selfigniting.
------------------------------	------------------------------

· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
-------------------------	---

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure:	Not determined.
--------------------	-----------------

· Density at 20 °C:	2.83 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
---	-----------------------------------

· Partition coefficient: n-octanol/water:	Not determined.
---	-----------------

· Viscosity:

Dynamic:	Not determined.
Kinematic at 20 °C:	100 s (ISO 6 mm)

· Solvent content:

Organic solvents:	10.9 %
VOC (EC)	10.88 %

Solids content:	89.1 %
-----------------	--------

· 9.2 Other information	No further relevant information available.
-------------------------	--

EU

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER

(Contd. of page 5)

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity**
Suspected of causing cancer.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER




(Contd. of page 6)

- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR/RID/ADN, ADN, IMDG, IATA | <p align="center">UN1263</p> |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR/RID/ADN, ADN · IMDG · IATA | <p align="center">1263 PAINT, ENVIRONMENTALLY HAZARDOUS PAINT (zinc powder -zinc dust (stabilized), Solvent naphtha (petroleum), light arom.), MARINE POLLUTANT PAINT</p> |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR/RID/ADN, IMDG | <div style="display: flex; justify-content: space-around; align-items: center;">   </div> |
| <ul style="list-style-type: none"> · Class · Label | <p align="center">3 Flammable liquids.
3</p> |
| <ul style="list-style-type: none"> · ADN · ADN/R Class: | <p align="center">3 Flammable liquids.</p> |
| <ul style="list-style-type: none"> · IATA | <div style="display: flex; justify-content: center; align-items: center;">  </div> |
| <ul style="list-style-type: none"> · Class · Label | <p align="center">3 Flammable liquids.
3</p> |
| <ul style="list-style-type: none"> · 14.4 Packing group · ADR/RID/ADN, IMDG, IATA | <p align="center">III</p> |
| <ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR/RID/ADN): | <p align="center">Product contains environmentally hazardous substances: zinc powder -zinc dust (stabilized)
Symbol (fish and tree)
Symbol (fish and tree)</p> |
| <ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: | <p align="center">Warning: Flammable liquids.
30
F-E,<u>S-E</u></p> |

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER

(Contd. of page 7)

· Stowage Category	A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07 GHS08 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
diphenylmethanediisocyanate, isomeres and homologues
4-isocyanatosulphonyltoluene
- **Hazard statements**
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER

(Contd. of page 8)

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

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
- E1 Hazardous to the Aquatic Environment
- P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** product safety department
- **Contact:** Mr. Frank van Hofwegen
- **Abbreviations and acronyms:**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Resp. Sens. 1: Respiratory sensitisation – Category 1
- Skin Sens. 1: Skin sensitisation – Category 1
- Carc. 2: Carcinogenicity – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Version number 1

Revision: 09.11.2017

Trade name: DUALCURE ZINC PRIMER

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

(Contd. of page 9)

EU