Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

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

- · 1.1 Product identifier
- · Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)
- · Article number: 362538
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Sector of Use SU21 Consumer uses: Private households / general public / consumers
- · Product category PC9a Coatings and paints, thinners, paint removers
- · Application of the substance / the mixture

Anticorrosion additive

Lacquer

- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

ROBERLO S.A.

CTRA N-II KM 706,5

17457 RIUDELLOTS DE LA SELVA

SPAIN

Tel. +34 972 478 060

e-mail: msds@roberlo.com

- · Further information obtainable from: Department Product Safety
- 1.4 Emergency telephone number: +34 972 478060 (working hours: 8:00-12:45 / 14:15-17:30 h.)

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame



Aerosol 1

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

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms







GHS02 GHS07 GHS09

· Signal word Danger

(Contd. on page 2)

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

(Contd. of page 1)

· Hazard-determining components of labelling:

xylene, mixture of isomers

acetone

· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

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.

P260 Do not breathe spray.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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

Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

- · 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: Mixture of substances listed below with nonhazardous additions.

CAS: 7440-66-6	zinc powder -zinc dust (stabilized)	25-<50%
EINECS: 231-175-3 Index number: 030-001-01-9 Reg.nr.: 01-2119467174-37	🔖 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49	acetone Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	12.5-<20%
	dimethyl ether Flam. Gas 1, H220 Press. Gas C, H280	12.5-<20%
	xylene, mixture of isomers Flam. Liq. 3, H226 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	10-<12.5%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1, H220 Press. Gas C, H280	5-<10%

GB

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

CAS: 106-97-8	butane	(Contd. of page 2
EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32	♦ Flam. Gas 1, H220	3 40/0
CAS: 78-93-3 EINECS: 201-159-0 Index number: 606-002-00-3 Reg.nr.: 01-2119457290-43	butanone Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	2.5-<5.0%
CAS: 64742-95-6 918-668-5 Index number: 649-356-00-4 Reg.nr.: 01-2119455851-35	Hydrocarbons	2.5-<5.0%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27	isobutane Flam. Gas 1, H220 Press. Gas C, H280	<2.5%
CAS: 1314-13-2 EINECS: 215-222-5 Index number: 030-013-00-7 Reg.nr.: 01-2119463881-32	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<2.5%
CAS: 100-41-4 EINECS: 202-849-4 Index number: 601-023-00-4 Reg.nr.: 01-2119489370-35	ethylbenzene Flam. Liq. 2, H225 STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H332 Aquatic Chronic 3, H412	<2.5%

· Additional information:

The content of Benzene (EINECS-Nr. 200-753-7) in the ingredients is less than 0,1% (Note P Annex 1A 1272/2008 EU), so the classification as carcinogen need not to apply.

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; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot 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. Larger fires with water spray or foam. Cool containers with water

- · 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:

Wear self-contained respiratory protective device.

(Contd. on page 4)

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

(Contd. of page 3)

Do not inhale explosion gases or combustion gases.

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.

Do not allow product to reach sewage system or any water course.

· 6.3 Methods and material for containment and cleaning up:

Do not flush with water or aqueous cleansing agents

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.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· 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:

Store in a cool location.

 $Observe\ of ficial\ regulations\ on\ storing\ packagings\ with\ pressurised\ containers.$

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Do not seal receptacle gas tight.

Protect from heat and direct sunlight.

- · Storage class: 2 B
- · 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 th	at require monitoring at the workplace:
------------------------------------	-----------------------------------------

67-64-1 acetone

WEL Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm

115-10-6 dimethyl ether

WEL Short-term value: 958 mg/m³, 500 ppm Long-term value: 766 mg/m³, 400 ppm

xylene, mixture of isomers

WEL Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm

Sk; BMGV

(Contd. on page 5)

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

	(Contd. of pag
106-97-	-8 butane
WEL S	hort-term value: 1810 mg/m³, 750 ppm
	ong-term value: 1450 mg/m³, 600 ppm
C	Carc (if more than 0.1% of buta-1.3-diene)
78-93- 3	B butanone
WEL S	hort-term value: 899 mg/m³, 300 ppm
	ong-term value: 600 mg/m³, 200 ppm
	k, BMGV
100-41-	-4 ethylbenzene
WEL S	hort-term value: 552 mg/m³, 125 ppm
	ong-term value: 441 mg/m³, 100 ppm
S	k
· Ingredi	ients with biological limit values:
xylene,	mixture of isomers
BMGV	650 mmol/mol creatinine
	Medium: urine
	Sampling time: post shift
	Parameter: methyl hippuric acid
78-93-3	Butanone
BMGV	$70~\mu mol/L$
	Medium: urine
	Sampling time: post shift

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· Respiratory protection:

Not necessary if room is well-ventilated.

Otherwise, filter class A / P2 or self contained.

Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:

In case of contact with spray dust protective gloves made of butyl should be used (min. 0.4 mm thick), e.g. KCL Camatril, article no. 898 or similar products



Protective gloves

Solvent resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · Material of gloves Butyl rubber, BR
- · Penetration time of glove material

Butyl rubber gloves with a thickness of 0.4 mm are resistant to:

Acetone: 480 min Butyl acetate: 60 min Ethyl acetate: 170 min Xylene: 42 min

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

(Contd. on page 6)

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

SECTION 9: Physical and chemical properties

(Contd. of page 5)

· Eye protection: Safety glasses

· 9.1 Information on basic physical a	and chemical properties
· General Information	
· Appearance:	
Form:	Aerosol
Colour:	Silver grey
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Not applicable, as aerosol.
· Flash point:	Not applicable, as aerosol.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	235 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.
· Explosion limits:	

1.1 Vol %

18.6 Vol %

5200 hPa

1.03 g/cm³

Not determined.

Not determined.

Not applicable.

Not miscible or difficult to mix. · Partition coefficient (n-octanol/water): Not determined.

Viscosity: Dynamic: Not determined. Kinematic: Not determined.

· Solvent content: VOC-(EU) 661.6 g/l 64.23 % · VOC-EU%

38.9 % · Solids content:

· 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability

Lower: Upper:

· Density at 20 °C:

· Relative density

· Vapour density

water:

· Evaporation rate

· Vapour pressure at 20 °C:

· Solubility in / Miscibility with

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.

(Contd. on page 7)

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

(Contd. of page 6)

- · 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

Harmful if inhaled.

· LD/LC50 v	· LD/LC50 values relevant for classification:		
7440-66-6	7440-66-6 zinc powder -zinc dust (stabilized)		
Oral	LD50	>2000 mg/kg (rat)	
Inhalative	LC50/4 h	5.4 mg/l (rat)	
67-64-1 ac	67-64-1 acetone		
Oral	LD50	5800 mg/kg (rat)	
Dermal	LD50	20000 mg/kg (rabbit)	
xylene, mix	xylene, mixture of isomers		
Oral	LD50	8700 mg/kg (rat)	
Dermal	LD50	>2000 mg/kg (rabbit)	
Inhalative	LC50/4 h	6350 mg/l (rat)	
1314-13-2	1314-13-2 zinc oxide		
Oral	LD50	7950 mg/kg (mouse)	

- Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure

May cause drowsiness or dizziness.

- · 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

. /	1 <i>au</i>	atic	toxi	citv:

xylene, mixture of isomers

LC50/96h 7.6 mg/l (oncorhynchus mykiss / Regenbogenforelle)

EC50 (24h) >175 mg/l (bacteria)

EC50 / 48h | 3.82 mg/l (daphnia magna / Wasserfloh)

EC50/72h 4.7 mg/l (Pseudokirchneriella subcapitata)

- · 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.
- · Ecotoxical effects:
- · Remark: Very toxic for fish

(Contd. on page 8)

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

(Contd. of page 7)

- · 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

- · 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.

· European	waste catalogue
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
15 01 04	metallic packaging
15 01 11*	metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers

- · Uncleaned packaging:
- · Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

SECTION	14: 1	transp	ort inj	formation
---------	-------	--------	---------	-----------

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name	UN1950 AEROSOLS, ENVIRONMENTALLY
· ADR	HAZARDOUS
· IMDG	AEROSOLS, MARINE POLLUTANT
· IATA	Aerosols, flammable

- · 14.3 Transport hazard class(es)
- $\cdot ADR$



· Class
 · Label
 2 5F Gases.
 2.1

 \cdot IMDG



· Class 2.1

(Contd. on page 9)

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

	(Contd. of page
· Label 	2.1
·IATA	
3	
· Class	2.1
· Label	2.1
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	
· Marine pollutant:	Yes
C	Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Gases.
· Danger code (Kemler):	- F D C II
· EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre
	Category A. For AEROSOLS with a maximum capacity of 1 litre
	Category B. For WASTE AEROSOLS: Category C, Clea
	of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre
2-66	Segregation as for class 9. Stow "separated from" class
	except for division 1.4. For AEROSOLS with a capacit
	above 1 litre: Segregation as for the appropriat
	subdivision of class 2. For WASTE AEROSOLS
	Segregation as for the appropriate subdivision of class 2.
· 14.7 Transport in bulk according to Anno	
Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
Limited quantities (LQ)	
· Excepted quantities (EQ)	Code: E0
T	Not permitted as Excepted Quantity
· Transport category	2 D
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	
· Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALL
	HAZARDOUS

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Printing date 15.08.2016 Version number 2 Revision: 15.08.2016

Trade name: AIRCOLOR Zinc Primer Spray 400ml (64719)

(Contd. of page 9)

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

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to the gastro-intestinal tract 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.

H412 Harmful to aquatic life with long lasting effects.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

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. Gas 1: Flammable gases, Hazard Category 1

Aerosol 1: Flammable aerosols, Hazard Category 1 Press. Gas C: Gases under pressure: Compressed gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3