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

1.1. Product identifier

ZINC PRO
Aerosol

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

Paints

1.3. Details of the supplier of the safety data sheet

CRC Industries Europe bvba
Touwslagerstraat 1
9240 Zele
Belgium
Tel.: +32(0)52/45.60.11
Fax.: +32(0)52/45.00.34
E-mail : hse@crcind.com

Subsidiaries		Tel	Fax
CRC Industries Finland Oy	Laurinkatu 57 A 23 B, 08100 Lohja	+358/(19)32.921	
CRC Industries France	6, avenue du marais, C.S. 90028, 95102 Argenteuil Cedex	01.34.11.20.00	01.34.11.09.96
CRC Industries Deutschland GmbH	Südring 9, D-76473 Iffezheim	(07229) 303 0	(07229)30 32 66
CRC INDUSTRIES IBERIA S.L.U.	GREMIO DEL CUERO-PARC.96, POLIGONO INDUSTR. DE HONTORIA, 40195 SEGOVIA	0034/921.427.546	0034/921.436.270
CRC Industries Sweden	Laxfiskevägen 16, 433 38 Partille	0046/31 706 84 80	0046/31 27 39 91

1.4. Emergency telephone number

CRC Industries Europe, Belgium: Tel.: +32(0)52/45.60.11 (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Physical: Aerosols, category 1
Extremely flammable aerosol.
Pressurised container: May burst if heated.

Classification is based on test data.

Health:	Eye irritation, category 2 Causes serious eye irritation. Specific target organ toxicity - single exposure, category 3 May cause drowsiness or dizziness. Specific Target Organ Toxicity - Repeated Exposure Category 2 May cause damage to organs through prolonged or repeated exposure .

Classification based on calculation method.

Environment:	Hazardous to the aquatic environment, acute category 1 Very toxic to aquatic life. Hazardous to the aquatic environment, chronic category 1 Very toxic to aquatic life with long lasting effects.

Classification based on calculation method.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Product identifier:	Contains: hydrocarbons
Hazard pictogram(s):	
Signal word:	Danger
Hazard statement(s):	H222 : Extremely flammable aerosol. H229 : Pressurised container: May burst if heated. H319 : Causes serious eye irritation. H336 : May cause drowsiness or dizziness. H373 : May cause damage to organs through prolonged or repeated exposure . H410 : Very toxic to aquatic life with long lasting effects.
Precautionary statement(s):	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. P261 : Avoid breathing dust/fume/gas/mist/vapours/spray. P280 : Wear protective gloves/protective clothing/eye protection/face protection. P337/313 : If eye irritation persists: Get medical advice/attention. P333/313 : If skin irritation or rash occurs: Get medical advice/attention. P410/412 : Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501-2 : Dispose of contents/container to an authorised waste collection point.
Supplemental Hazard information:	Contains: 2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime Fatty acids, C18-unsatd., dimers, compds. with coco alkylamines May produce an allergic reaction.

2.3. Other hazards

No information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Hazardous ingredient	Registration number	CAS-nr.	EC-nr	w/w %	Hazard Class and Category	Hazard statement	Notes
dimethyl ether	01-2119472128-37	115-10-6	204-065-8	25-50	Flam. Gas 1, Press. Gas	H220,H280	A
zinc powder - zinc dust (stabilized)	01-2119467174-37	7440-66-6	231-175-3	10-25	Aquatic Acute 1, Aquatic Chronic 1	H400,H410	
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane	01-2119475514-35	-	(921-024-6)	<10	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2	H225,H315,H336,H304,H411	B,Q
butanone; ethyl methyl ketone	01-2119457290-43	78-93-3	201-159-0	<10	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3	H225,H319,H336	A
Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclic	01-2119458049-33	-	(919-446-0)	<10	Flam. Liq. 3, Asp. Tox. 1, STOT SE 3, STOT RE 1, Aquatic Chronic 2	H226,H304,H336,H372,H411	B,Q
zinc oxide	01-2119463881-32	1314-13-2	215-222-5	<5	Aquatic Acute 1, Aquatic Chronic 1	H400,H410	B
Fatty acids, C18-unsatd., dimers, compds. with coco alkylamines	-	68647-95-0	614-682-8	<1	Skin Irrit. 2, Skin Sens. 1, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1	H315,H317,H373,H400,H410	
2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime	01-2119539477-28	96-29-7	202-496-6	<1	Carc. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1	H351,H312,H318,H317	B
butan-1-ol; n-butanol	01-2119484630-38	71-36-3	200-751-6	<2.5	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, STOT SE 3	H226,H302,H315,H318,H335,H336	B

Explanation notes

A : substance with Community workplace exposure limit

B : substance with national established workplace exposure limit

Q : The CAS-no is only an indicative identifier to be used outside the EU for global inventory entries.

(* Explanation phrases : see chapter 16)

SECTION 4: First aid measures

4.1. Description of first aid measures

Contact with eyes :	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Contact with skin :	Take off contaminated clothing and wash before reuse. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Inhalation :	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Ingestion :	If swallowed accidentally, do not induce vomiting and seek medical advice.

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

Inhalation :	Excessive inhalation of solvent vapours may give rise to nausea, headaches and dizziness
Ingestion :	May cause gastrointestinal disturbances Symptoms : sore throat, abdominal pain, nausea, vomiting
Skin contact :	May cause irritation. Symptoms : redness and pain
Eye contact :	Irritating to eyes Symptoms : redness and pain

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

General Advice :	If you feel unwell, seek medical advice (show the label where possible If symptoms persist always call a doctor

SECTION 5: Firefighting measures

5.1. Extinguishing media

foam, carbon dioxide or dry agent

5.2. Special hazards arising from the substance or mixture

Aerosols may explode if heated above 50°C
Forms hazardous decomposition products
CO,CO2

5.3. Advice for firefighters

Keep container(s) exposed to fire cool, by spraying with water
In case of fire, do not breathe fumes

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Shut off all ignition sources
Ensure adequate ventilation

Wear suitable protective clothing and gloves.

6.2. Environmental precautions

Do not allow to enter public sewers and watercourses
If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities

6.3. Methods and material for containment and cleaning up

Absorb spillage in suitable inert material
Place in appropriate container

6.4. Reference to other sections

For further information see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from heat and sources of ignition
Take precautionary measures against static discharges
Equipment should be earthed
Use explosion-proof electrical/ventilating/lighting/.../equipment.
Use only non-sparking tools.
Do not breathe aerosols or vapours.
Ensure adequate ventilation
Avoid contact with skin and eyes.
Wash thoroughly after use
Wear protective gloves/protective clothing/eye protection/face protection.
Eyewash bottles should be available

7.2. Conditions for safe storage, including any incompatibilities

Pressurized container : protect from sunlight and do not expose to temperatures exceeding 50°C.
Keep out of reach of children.

7.3. Specific end use(s)

Paints

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits :

Hazardous ingredient	CAS-nr.	method

EU established exposure limits:			
dimethyl ether	115-10-6	TWA	1000 ppm
butanone; ethyl methyl ketone	78-93-3	TWA	200 ppm
		STEL	300 ppm
National established exposure limits, United Kingdom			
dimethyl ether	115-10-6	TWA	400 ppm
		STEL	500 ppm
butan-1-ol; n-butanol	71-36-3	STEL	50 ppm
butanone; ethyl methyl ketone	78-93-3	TWA	200 ppm
		STEL	300 ppm

8.2. Exposure controls

Control procedures :	Ensure adequate ventilation Keep away from heat and sources of ignition Take precautionary measures against static discharges
Personal protection :	Take precautions to avoid contact with skin and eyes when handling the product. Ensure adequate ventilation Wear suitable protective gloves
inhalation :	In case of insufficient ventilation, wear suitable respiratory equipment.
recommended respiratory protection:	Air purifying respirator equiped with organic gas/vapor cartridge (type AX)
hands and skin :	When handling the product wear chemical-resistant gloves (standard EN 374). The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through.
Recommended gloves:	Nitrile
eyes :	Wear safety eyewear according to EN 166.
Environmental protection:	Avoid release to the environment. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(for aerosols data for the product without propellant)

Apperance : physical state :	DME propelled liquid.
colour :	Grey.
odour :	Characteristic odor.
pH :	Not applicable.
Boiling point/range :	Not available.
Flash point :	< 0 °C
Evaporation rate :	Not available.
Explosion limits : upper limit :	Not available.
lower limit :	Not available.
Vapour pressure :	Not available.
Relative density :	1.45 g/cm3 (@ 20°C).
Solubility in water :	Insoluble in water
Auto-ignition :	> 200 °C

9.2. Other information

VOC = volatile organic compounds	640 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions known if used for its intended purpose

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose

10.4. Conditions to avoid

Avoid overheating

10.5. Incompatible materials

Strong oxidising agent

10.6. Hazardous decomposition products

CO,CO2

SECTION 11: Toxicological information

11.1. Information on toxicological effects

acute toxicity:	based on available data the classification criteria are not met
skin corrosion/irritation:	based on available data the classification criteria are not met
serious eye damage/irritation:	Causes serious eye irritation.
respiratory or skin sensitisation:	based on available data the classification criteria are not met
germ cell mutagenicity:	based on available data the classification criteria are not met
carcinogenicity:	based on available data the classification criteria are not met
toxicity for reproduction:	based on available data the classification criteria are not met
STOT-single exposure:	May cause drowsiness or dizziness.
STOT repeated exposure:	May cause damage to organs through prolonged or repeated exposure .
aspiration hazard:	based on available data the classification criteria are not met

Information on likely routes of exposure:

Inhalation :	Inhalation of solvent vapours may give rise to nausea, headaches and dizziness
Ingestion :	May cause gastrointestinal disturbances
Skin contact :	May cause irritation.
Eye contact :	Irritating to eyes

Toxicological data :

Hazardous ingredient	CAS-nr.	method	
dimethyl ether	115-10-6	LC50 inhal.rat	309 mg/l
zinc oxide	1314-13-2	LC50 inhal.rat	> 5.7 mg/l
butan-1-ol; n-butanol	71-36-3	LD50 oral rat	2292 mg/kg
		LC50 inhal.rat	> 17.76 mg/l
		LD50 derm.rabit	3430 mg/kg
butanone; ethyl methyl ketone	78-93-3	LD50 oral rat	> 2000 mg/kg
2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime	96-29-7	LD50 oral rat	2326 mg/kg
		LD50 derm.rabit	1000 mg/kg
Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclic	-	LD50 oral rat	> 5000 mg/kg
		LC50 inhal.rat	> 10 mg/l
		LD50 derm.rabit	> 4 mg/kg
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane	-	LD50 oral rat	> 5000 mg/kg
		LC50 inhal.rat	> 25000 mg/m3
		LD50 derm.rat	> 2000 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, acute category 1
Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic category 1
Very toxic to aquatic life with long lasting effects.

Ecotoxicological data:

Hazardous ingredient	CAS-nr.	method	
dimethyl ether	115-10-6	IC50 algae	154.9 mg/l
		LC50 fish	4.1 mg/l
		EC50 daphnia	4.4 mg/l
zinc oxide	1314-13-2	IC50 algae	0.136 mg/l
		LC50 fish	0.169 mg/l
		EC50 daphnia	1.7 mg/l
butan-1-ol; n-butanol	71-36-3	LC50 fish	1376 mg/l
		EC50 daphnia	1328 mg/l
2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime	96-29-7	IC50 algae	11.8 mg/l

		LC50 fish	> 100 mg/l
		EC50 daphnia	201 mg/l
Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclic	-	IC50 algae	4.6-10 mg/l
		LC50 fish	10-30 mg/l
		EC50 daphnia	10-22 mg/l
Hydrocarbons, C6-C7, n-alkanes,isoalkanes,cyclics,< 5% n-hexane	-	LC50 fish	> 10 mg/l
		EC50 daphnia	3 mg/l

12.2. Persistence and degradability

No experimental data available

12.3. Bioaccumulative potential

No experimental data available

12.4. Mobility in soil

Insoluble in water

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

No experimental data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : This material and its container must be disposed of in a safe way.
Do not discharge into drains or the environment, dispose to an authorised waste collection point.

National regulations : Disposal should be in accordance with local, state or national legislation

SECTION 14: Transport information

14.1. UN number

UN-number : 1950

14.2. UN proper shipping name

Proper shipping name: AEROSOLS (Zinc)

14.3. Transport hazard class(es)

Class:	2.1
ADR/RID - Classification code:	5F

14.4. Packing group

Packing group:	Not applicable.

14.5. Environmental hazards

ADR/RID - Environmentally hazardous:	Yes
IMDG - Marine pollutant:	Marine pollutant
IATA/ICAO - Environmentally hazardous:	Yes

14.6. Special precautions for user

ADR/RID - Tunnelcode:	(D)
IMDG - Ems:	F-D, S-U
IATA/ICAO - PAX:	203
IATA/ICAO - CAO	203

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

Not applicable.

SECTION 15: Regulatory information

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

The Safety Data Sheet is compiled according to the current European requirements.
Regulation (EC) No 1907/2006 (REACH)
Regulation (EC) No 1272/2008 (CLP)
Dir. 2013/10/EU, 2008/47/EC amendment of the aerosol dispenser directive 75/324/EEC.

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

*Explanation hazard statements:	H220 : Extremely flammable gas. H225 : Highly flammable liquid and vapour. H226 : Flammable liquid and vapour. H280 : Contains gas under pressure; may explode if heated. H302 : Harmful if swallowed. H304 : May be fatal if swallowed and enters airways.

	H312 : Harmful in contact with skin. H315 : Causes skin irritation. H317 : May cause an allergic skin reaction. H318 : Causes serious eye damage. H319 : Causes serious eye irritation. H335 : May cause respiratory irritation. H336 : May cause drowsiness or dizziness. H351 : Suspected of causing cancer . H372 : Causes damage to organs through prolonged or repeated exposure . 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.
REVISIONS IN CHAPTRE :	8.2. Exposure controls
acronyms and synonyms:	TWA = time weight average STEL = short time exposure limit VOC = volatile organic compounds PBT = persistant bioaccumulative toxic vPvB = very persitant very bioaccumulative

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation.

The information contained herewith is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It does not guarantee any specific properties.

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