

Productname : ZG-90
Ref.Nr.: BDS002295_3_20181010 (EN)

Creationdate : 10.10.18 Version : 1.2
Replaces: BDS002295_20180904

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

1.1. Product identifier

ZG-90
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 UK Ltd.
Wylds Road
Castlefield Industrial Estate
TA6 4DD Bridgwater Somerset
United Kingdom
Tel.: +44 1278 727200
Fax.: +44 1278 425644
E-mail : hse.uk@crcind.com

1.4. Emergency telephone number

(+44)(0)1278 72 7200 (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: Skin irritation, category 2
Causes skin irritation.
Eye irritation, category 2
Causes serious eye irritation.

Classification based on calculation method.

Environment: Hazardous to the aquatic environment, chronic category 3
Harmful to aquatic life with long lasting effects.

Classification based on calculation method.



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2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictogram(s):



Signal word:	Danger
Hazard statement(s):	H222 : Extremely flammable aerosol. H229 : Pressurised container: May burst if heated. H315 : Causes skin irritation. H319 : Causes serious eye irritation. H412 : Harmful 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. P280 : Wear protective gloves/protective clothing/eye protection/face protection. 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 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	30-60	Flam. Gas 1, Press. Gas	H220,H280	A
4-methylpentan-2-one; isobutyl methyl ketone	01-2119473980-30	108-10-1	203-550-1	5-10	Flam. Liq. 2, Acute Tox. 4, Eye Irrit. 2, STOT SE 3	H225,H332,H319,H335	A
ethylbenzene	01-2119489370-35	100-41-4	202-849-4	1-5	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1	H225,H332,H373,H304	A



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1-methoxy-2-propanol; monopropylene glycol methyl ether	01-2119457435-35	107-98-2	203-539-1	1-5	Flam. Liq. 3, STOT SE 3	H226,H336	A
trizinc bis(orthophosphate)	01-2119485044-40	7779-90-0	231-944-3	<1	Aquatic Acute 1, Aquatic Chronic 1	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
2-methoxy-1-methylethyl acetate	01-2119475791-29	108-65-6	203-603-9	0-1	Flam. Liq. 3	H226	A
Fatty acids, C6-19-branched, zinc salts	01-2119980048-32	68551-44-0	271-378-4	0-1	Aquatic Chronic 2	H411	
xylene	01-2119488216-32	1330-20-7	215-535-7	<12.5	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2	H226,H332,H312,H315	A,W
zinc oxide	01-2119463881-32	1314-13-2	215-222-5	<0.25	Aquatic Acute 1, Aquatic Chronic 1	H400,H410	B

Explanation notes

A : substance with Community workplace exposure limit

B : substance with national established workplace exposure limit

W : Note: substance mentioned on the list of CMR-substances of the Dutch Ministry of Social Affairs and Employment (SZW)

(* 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 do not induce vomiting because of risk of aspiration into the lungs. If aspiration is suspected obtain immediate medical attention

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 :	After vomiting of swallowed product aspiration into lungs is likely. Solvents may induce chemical pneumonia. Symptoms : sore throat, abdominal pain, nausea, vomiting
Skin contact :	Irritating to skin Symptoms : redness and pain
Eye contact :	Irritating to eyes Symptoms : redness and pain, impaired vision

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)



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If symptoms persist always call a doctor

SECTION 5: Firefighting measures

5.1. Extinguishing media

foam, carbon dioxide or dry agent
Do not use water jet extinguishing media, due to the risk of spreading fire.

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
This material and/or its container must be disposed of as hazardous waste.

6.4. Reference to other sections

For further information see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling



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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:			
ethylbenzene	100-41-4	TWA	100 ppm
		STEL	200 ppm
1-methoxy-2-propanol; monopropylene glycol methyl ether	107-98-2	TWA	100 ppm
		STEL	150 ppm
4-methylpentan-2-one; isobutyl methyl ketone	108-10-1	TWA	20 ppm
		STEL	50 ppm
2-methoxy-1-methylethyl acetate	108-65-6	TWA	50 ppm
		STEL	100 ppm
dimethyl ether	115-10-6	TWA	1000 ppm
xylene	1330-20-7	TWA	50 ppm
		STEL	100 ppm
National established exposure limits, United Kingdom			
ethylbenzene	100-41-4	TWA	100 ppm
		STEL	125 ppm
1-methoxy-2-propanol; monopropylene glycol methyl ether	107-98-2	TWA	100 ppm
		STEL	150 ppm
4-methylpentan-2-one; isobutyl methyl ketone	108-10-1	TWA	50 ppm
		STEL	100 ppm



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2-methoxy-1-methylethyl acetate	108-65-6	TWA	50 ppm
		STEL	100 ppm
dimethyl ether	115-10-6	TWA	400 ppm
		STEL	500 ppm
xylene	1330-20-7	TWA	50 ppm
		STEL	100 ppm
National established exposure limits, Ireland			
ethylbenzene	100-41-4	TWA	100 ppm
		STEL	200 ppm
1-methoxy-2-propanol; monopropylene glycol methyl ether	107-98-2	TWA	100 ppm
		STEL	150 ppm
4-methylpentan-2-one; isobutyl methyl ketone	108-10-1	TWA	20 ppm
		STEL	50 ppm
2-methoxy-1-methylethyl acetate	108-65-6	TWA	50 ppm
		STEL	100 ppm
dimethyl ether	115-10-6	TWA	1000 ppm
		STEL	-
xylene	1330-20-7	TWA	50 ppm
		STEL	100 ppm
2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime	96-29-7	TWA	3 ppm
		STEL	10 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 In all cases handle and use the product in accordance with good industrial hygiene practices.
inhalation :	In case of insufficient ventilation, wear suitable respiratory equipment.
recommended respiratory protection:	Air purifying respirator equipped with organic gas/vapor cartridge (type AX)
hands and skin :	When handling the product wear chemical-resistant gloves (standard EN 374).
Recommended gloves:	Nitrile 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. Depending on amount and duration of use and the risk of contact with the product the gloves manufacturer can assist you in the selection of the right glove material and breakthrough time.
eyes :	Wear safety eyewear according to EN 166.
Environmental protection:	Avoid release to the environment. Collect spillage.

SECTION 9: Physical and chemical properties



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9.1. Information on basic physical and chemical properties

(for aerosols data for the product without propellant)

Apperance : physical state : DME propelled liquid.
colour : See color cap.
odour : Characteristic odor.
pH : Not applicable.
Boiling point/range : Not available.
Flash point : 15 °C (Closed Cup)
Evaporation rate : Not available.
Explosion limits : upper limit : Not available.
lower limit : Not available.
Vapour pressure : Not available.
Relative density : 1.08 g/cm³ (@ 20°C).
Solubility in water : Insoluble in water
Auto-ignition : > 200 °C
Viscosity : Not available.

9.2. Other information

VOC = volatile organic compounds 618 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



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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:	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
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:	based on available data the classification criteria are not met
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

Information on likely routes of exposure:

Inhalation :	Inhalation of solvent vapours may give rise to nausea, headaches and dizziness
Ingestion :	After vomiting of swallowed product aspiration into lungs is likely. Solvents may induce chemical pneumonia.
Skin contact :	Irritating to skin
Eye contact :	Irritating to eyes

Toxicological data :

Hazardous ingredient	CAS-nr.	method	
1-methoxy-2-propanol; monopropylene glycol methyl ether	107-98-2	LD50 oral rat	4016 mg/kg
		LC50 inhal.rat	27596 mg/l
		LD50 derm.rabit	2000 mg/kg
4-methylpentan-2-one; isobutyl methyl ketone	108-10-1	LD50 oral rat	2080 mg/kg
2-methoxy-1-methylethyl acetate	108-65-6	LD50 oral rat	> 5000 mg/kg
		LC50 inhal.rat	10.8 mg/l
		LD50 derm.rat	> 5000 mg/kg
		LD50 derm.rabit	> 5000 mg/kg
dimethyl ether	115-10-6	LC50 inhal.rat	309 mg/l
zinc oxide	1314-13-2	LC50 inhal.rat	> 5.7 mg/l
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

SECTION 12: Ecological information

12.1. Toxicity



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Hazardous to the aquatic environment, chronic category 3
 Harmful to aquatic life with long lasting effects.

Ecotoxicological data:

Hazardous ingredient	CAS-nr.	method	
1-methoxy-2-propanol; monopropylene glycol methyl ether	107-98-2	LC50 fish	6812 mg/l
		EC50 daphnia	23300 mg/l
4-methylpentan-2-one; isobutyl methyl ketone	108-10-1	LC50 fish	505 mg/l
		LC50 fish	100-180 mg/l
2-methoxy-1-methylethyl acetate	108-65-6	EC50 daphnia	> 400 mg/l
		IC50 algae	154.9 mg/l
dimethyl ether	115-10-6	LC50 fish	4.1 mg/l
		EC50 daphnia	4.4 mg/l
		IC50 algae	0.136 mg/l
zinc oxide	1314-13-2	LC50 fish	0.169 mg/l
		EC50 daphnia	1.7 mg/l
		IC50 algae	11.8 mg/l
2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime	96-29-7	LC50 fish	> 100 mg/l
		EC50 daphnia	201 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
 GWP (global warming potential): 1

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : This material and its container must be disposed of in a safe way.



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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

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: No
IMDG - Marine pollutant: No
IATA/ICAO - Environmentally hazardous: No

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.



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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.
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.
H332 : Harmful 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.

acronyms and synonyms: TWA = time weight average
STEL = short time exposure limit
VOC = volatile organic compounds
PBT = persistent bioaccumulative toxic
vPvB = very persistent 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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