

Valve Action® Paint Markers, CERTIFIED Valve Action® Paint Markers

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 16/04/2015

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Version: 1.1

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

1.1. Product identifier

Product form : Article
Trade name : Valve Action® Paint Markers, CERTIFIED Valve Action® Paint Markers
Synonyms : Valve Action® Paint Marker White, Yellow, Black, Blue, Green, Aluminum, Purple, Light Blue, Light Green, Fluorescent Yellow, Fluorescent Green, Fluorescent Orange, Fluorescent Pink, Invisible UV, Red, Orange, Pink, Brown, Gold / CERTIFIED Valve Action® Paint Marker White, Yellow, Red, Black

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Marking

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LA-CO Industries Europe S.A.S.
Parc Industriel de la Plaine de
l'Ain - Allée des Combes.
01150.BLYES.France.
Phone: +33 (0)4 74 46 23 23
Fax: +33 (0)4 74 46 23 29
E-mail: info@eu.laco.com
Web: http://www.markal.com

1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request
EUH208 - Contains 4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)(2786-76-7). May produce an allergic reaction

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-Methoxy-2-propanol	(CAS No) 107-98-2 (EC no) 203-539-1 (EC index no) 603-064-00-3	40 – 75	Flam. Liq. 3, H226 STOT SE 3, H336
aluminium powder (stabilised)	(CAS No) 7429-90-5 (EC no) 231-072-3 (EC index no) 013-001-00-1	0 – 65	Flam. Sol. 1, H228 Water-react. 2, H261

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
titanium dioxide	(CAS No) 13463-67-7 (EC no) 236-675-5	1 – 25	Not classified
zinc sulphide	(CAS No) 1314-98-3 (EC no) 215-251-3	0 – 25	Not classified
ethanol	(CAS No) 64-17-5 (EC no) 200-578-6 (EC index no) 603-002-00-5	5 – 20	Flam. Liq. 2, H225
2-methoxy-1-methylethyl acetate	(CAS No) 108-65-6 (EC no) 203-603-9 (EC index no) 607-195-00-7	0.01 – 2	Flam. Liq. 3, H226
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)	(CAS No) 2786-76-7 (EC no) 220-509-3	0 – 5	Skin Sens. 1, H317
Isopropanol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0	0 – 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Ethyl acetate	(CAS No) 141-78-6 (EC no) 205-500-4 (EC index no) 607-022-00-5	0.1 – 3	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Carbon black	(CAS No) 1333-86-4 (EC no) 215-609-9	0 – 3	Carc. 2, H351
4-Methyl-7-diethylaminocoumarin	(CAS No) 91-44-1 (EC no) 202-068-9	0 – 3	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Aluminum hydroxide	(CAS No) 21645-51-2 (EC no) 244-492-7	0.01 – 2	Not classified
propyl acetate	(CAS No) 109-60-4 (EC no) 203-686-1 (EC index no) 607-024-00-6	0 – 2	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Butyl acetate	(CAS No) 123-86-4 (EC no) 204-658-1 (EC index no) 607-025-00-1	< 1	Flam. Liq. 3, H226 STOT SE 3, H336
(2-Methoxymethylethoxy)-propanol	(CAS No) 34590-94-8 (EC no) 252-104-2	< 1	Not classified
Aluminum oxide	(CAS No) 1344-28-1 (EC no) 215-691-6	< 1	Not classified
2-methoxypropyl acetate	(CAS No) 70657-70-4 (EC no) 274-724-2 (EC index no) 607-251-00-0	< 0.1	Flam. Liq. 3, H226 Repr. 1B, H360D STOT SE 3, H335
barium sulfate	(CAS No) 7727-43-7 (EC no) 231-784-4	< 0.1	Not classified
Toluene	(CAS No) 108-88-3 (EC no) 203-625-9 (EC index no) 601-021-00-3	< 0.1	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336

Full text of R- and H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
First-aid measures after eye contact	: In case of contact, immediately flush eyes with plenty of water.
First-aid measures after ingestion	: Do NOT induce vomiting. Get medical advice/attention.

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

Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: May cause moderate irritation.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry chemical. Inert gas. Foam. Water spray. Water fog.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour. Burning produces irritating, toxic and noxious fumes.

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). Hydrocarbon.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses. Eliminate all ignition sources if safe to do so.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Eliminate all ignition sources. Stop the flow of material, if this is without risk.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take up in non-combustible absorbent material and shove into container for disposal.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid all eye and skin contact and do not breathe vapour and mist. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible products : Strong oxidizers.

Incompatible materials : Heat sources.

Heat and ignition sources : Keep away from heat, sparks and flame.

Prohibitions on mixed storage : Keep away from incompatible materials.

Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1-Methoxy-2-propanol (107-98-2)

EU	IOELV TWA (mg/m ³)	375 mg/m ³
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1-Methoxy-2-propanol (107-98-2)		
EU	IOELV TWA (ppm)	100 ppm
EU	IOELV STEL (mg/m³)	568 mg/m³
EU	IOELV STEL (ppm)	150 ppm
EU	Notes	Skin
United Kingdom	WEL TWA (mg/m³)	375 mg/m³
United Kingdom	WEL TWA (ppm)	100 ppm
United Kingdom	WEL STEL (mg/m³)	560 mg/m³
United Kingdom	WEL STEL (ppm)	150 ppm
Ethyl acetate (141-78-6)		
United Kingdom	WEL TWA (mg/m³)	730 mg/m³
United Kingdom	WEL STEL (mg/m³)	1460 mg/m³
Aluminum oxide (1344-28-1)		
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (inhalable aerosol) 4 mg/m³ (respirable aerosol)
aluminium powder (stabilised) (7429-90-5)		
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (inhalable dust) 4 mg/m³ (respirable dust)
Carbon black (1333-86-4)		
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m³)	3.5 mg/m³
United Kingdom	WEL STEL (mg/m³)	7 mg/m³
barium sulfate (7727-43-7)		
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ inhalable aerosol 4 mg/m³ respirable aerosol
Toluene (108-88-3)		
EU	IOELV TWA (mg/m³)	192 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m³)	384 mg/m³
EU	IOELV STEL (ppm)	100 ppm
EU	Notes	Skin
titanium dioxide (13463-67-7)		
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ inhalable aerosol 4 mg/m³ respirable aerosol

8.2. Exposure controls

Appropriate engineering controls	: Provide local exhaust ventilation of closed transfer systems to minimize exposures.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: None under normal use. It is a good industrial hygiene practice to minimize skin contact. Wear suitable gloves. rubber. EN 374.
Eye protection	: No special eye protection equipment recommended under normal conditions of use. Eye protection should only be necessary where liquid could be splashed or sprayed. EN 166.
Respiratory protection	: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges. EN 12083.
Consumer exposure controls	: Keep out of reach of children.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Solid marker containing liquid colored paint.
Colour	: Variable.
Odour	: Solvent.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: < 1
Melting point	: No data available

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Freezing point	: No data available
Boiling point	: 120 °C
Flash point	: 31 °C
Auto-ignition temperature	: 287 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapour
Vapour pressure	: 11.8
Relative vapour density at 20 °C	: No data available
Relative density	: 1 - 1.33
Solubility	: insoluble in water.
Log Pow	: 0.7
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: 50 - 60 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Flammable liquid and vapour.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May release flammable gases. Burning produces irritating, toxic and noxious fumes. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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1-Methoxy-2-propanol (107-98-2)	
LD50 oral rat	4016 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 inhalation rat (ppm)	> 7000 ppm 6 hr
ATE CLP (oral)	4016.000 mg/kg bodyweight
Ethyl acetate (141-78-6)	
LD50 oral rat	5620 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	> 18 mg/l/4h
ATE CLP (oral)	5620.000 mg/kg bodyweight
Aluminum oxide (1344-28-1)	
LD50 oral rat	> 15900 mg/kg
LC50 inhalation rat (mg/l)	7.6 mg/l/4h
ATE CLP (vapours)	7.600 mg/l/4h
ATE CLP (dust,mist)	7.600 mg/l/4h
Butyl acetate (123-86-4)	
LD50 oral rat	10760 mg/kg
LD50 dermal rabbit	> 14112 mg/kg

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Butyl acetate (123-86-4)	
LC50 inhalation rat (mg/l)	> 21 mg/l/4h
ATE CLP (oral)	10760.000 mg/kg bodyweight
2-methoxy-1-methylethyl acetate (108-65-6)	
LD50 oral rat	8532 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (ppm)	4345 ppm 6 h
ATE CLP (oral)	8532.000 mg/kg bodyweight
2-methoxypropyl acetate (70657-70-4)	
LC50 inhalation rat (ppm)	2700 ppm 6 h
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
LD50 oral rat	> 15000 mg/kg
LC50 inhalation rat (mg/l)	> 1580 mg/m ³ 4 h
(2-Methoxymethylethoxy)-propanol (34590-94-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 19020 mg/kg
LC50 inhalation rat (mg/l)	> 1667 mg/l/4h
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 1667 mg/l/4h
ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	133.8 mg/l/4h
ATE CLP (oral)	10470.000 mg/kg bodyweight
ATE CLP (vapours)	133.800 mg/l/4h
ATE CLP (dust,mist)	133.800 mg/l/4h
Isopropanol (67-63-0)	
LD50 oral rat	5840 mg/kg
LD50 dermal rabbit	16.4 ml/kg
LC50 inhalation rat (ppm)	> 10000 ppm/4h
ATE CLP (oral)	5840.000 mg/kg bodyweight
propyl acetate (109-60-4)	
LD50 oral rat	8700 mg/kg
LD50 dermal rabbit	> 17800 mg/kg
LC50 inhalation rat (mg/l)	32 mg/l/4h
ATE CLP (oral)	8700.000 mg/kg bodyweight
ATE CLP (vapours)	32.000 mg/l/4h
ATE CLP (dust,mist)	32.000 mg/l/4h
aluminium powder (stabilised) (7429-90-5)	
LD50 oral rat	> 15900 mg/kg
LC50 inhalation rat (mg/l)	> 2.3 mg/l/4h No mortality observed in this study.
Carbon black (1333-86-4)	
LD50 oral rat	> 8000 mg/kg
LC50 inhalation rat (mg/l)	> 4.6 mg/m ³ 4 h
zinc sulphide (1314-98-3)	
LD50 oral rat	> 15000 mg/kg
LC50 inhalation rat (mg/l)	> 5410 mg/m ³ read-across Zinc
4-Methyl-7-diethylaminocoumarin (91-44-1)	
LD50 oral rat	> 5000 mg/kg
ATE CLP (dermal)	1100.000 mg/kg bodyweight
ATE CLP (dust,mist)	1.500 mg/l/4h
barium sulfate (7727-43-7)	
LD50 oral rat	307 g/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	307000.000 mg/kg bodyweight

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Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg EU Method B.1 (Acute Toxicity (Oral))
LC50 inhalation rat (mg/l)	> 20 mg/l/4h OECD Guideline 403 (Acute Inhalation Toxicity)
ATE CLP (oral)	5580.000 mg/kg bodyweight
titanium dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 6.82 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.
barium sulfate (7727-43-7)	
NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	75 mg/kg bodyweight
titanium dioxide (13463-67-7)	
NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight rat
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified. May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	: Not classified
Toluene (108-88-3)	
LOAEL (inhalation, rat, gas, 90 days)	1250 ppmv/6h/day
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight/day EU Method B.26. Increased relative weights of liver and kidney are interpreted as toxicologically insignificant differences in the absence of histological findings.
NOAEL (inhalation, rat, gas, 90 days)	300 ppmv/6h/day OECD Guideline 453
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

1-Methoxy-2-propanol (107-98-2)	
LC50 fish 1	20800 mg/l
EC50 Daphnia 1	23300 mg/l
ErC50 (algae)	> 1000 mg/l
Ethyl acetate (141-78-6)	
LC50 fish 1	220 mg/l
EC50 Daphnia 1	1200 mg/l
NOEC chronic fish	< 9.35 mg/l
Aluminum oxide (1344-28-1)	
EC50 Daphnia 1	> 1470 mg/l
NOEC (acute)	> 50 mg/l
2-methoxy-1-methylethyl acetate (108-65-6)	
LC50 fish 1	100 - 180 mg/l
EC50 Daphnia 1	> 500 mg/l 48 h
ErC50 (algae)	> 1000 mg/l
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
LC50 fish 1	> 500 mg/l 96 h
EC50 Daphnia 1	> 110 mg/l 48 h
(2-Methoxymethylethoxy)-propanol (34590-94-8)	
LC50 fish 1	> 1000 mg/l Poecilia reticulata
ErC50 (algae)	> 1000 mg/l

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ethanol (64-17-5)	
LC50 fish 1	14200 mg/l
EC50 Daphnia 1	5012 mg/l
Isopropanol (67-63-0)	
LC50 fish 1	10000 mg/l
propyl acetate (109-60-4)	
LC50 fish 1	60 mg/l 96 h
EC50 Daphnia 1	91.5 mg/l 48 h
aluminium powder (stabilised) (7429-90-5)	
LC50 fish 1	> 218.64 mg/l ASTM 2000; test material: aluminium chloride hexahydrate; Pimephales promelas
EC50 Daphnia 1	1.4 mg/l OECD Guideline 202; test material: Aluminium hydroxide
LOEC (acute)	72.89 mg/l
NOEC (acute)	37.2 mg/l
zinc sulphide (1314-98-3)	
LC50 fish 1	> 0.25 mg/l 96 h
EC50 Daphnia 1	> 29 µg/l 48 h
barium sulfate (7727-43-7)	
LC50 fish 1	> 3.5 mg/l 96 h
EC50 Daphnia 1	14500 µg/l 48 h
Toluene (108-88-3)	
LC50 fish 1	5.5 mg/l
EC50 Daphnia 2	3.78 mg/l
ErC50 (algae)	134 mg/l
LOEC (chronic)	2.77 mg/l
NOEC chronic fish	1.39 mg/l
NOEC chronic crustacea	0.74 mg/l

12.2. Persistence and degradability

1-Methoxy-2-propanol (107-98-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % 28 d
Ethyl acetate (141-78-6)	
Persistence and degradability	Readily biodegradable.
2-methoxy-1-methylethyl acetate (108-65-6)	
Persistence and degradability	Readily biodegradable.
Biodegradation	89 % 10 d
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	0 % 28 d
(2-Methoxymethylethoxy)-propanol (34590-94-8)	
Persistence and degradability	Readily biodegradable.
ethanol (64-17-5)	
Biodegradation	> 96 % 28 d
Isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable.
propyl acetate (109-60-4)	
Persistence and degradability	Readily biodegradable.
Biodegradation	62 % 5 d
Carbon black (1333-86-4)	
Persistence and degradability	Not readily biodegradable.
Toluene (108-88-3)	
Persistence and degradability	Readily biodegradable.

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12.3. Bioaccumulative potential

Valve Action® Paint Markers, CERTIFIED Valve Action® Paint Markers	
Log Pow	0.7
1-Methoxy-2-propanol (107-98-2)	
Bioaccumulative potential	Not expected to bioaccumulate.
Ethyl acetate (141-78-6)	
Bioaccumulative potential	Not expected to bioaccumulate.
2-methoxy-1-methylethyl acetate (108-65-6)	
Log Pow	0.43
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
BCF fish 1	53 l/kg
Log Pow	1.28
ethanol (64-17-5)	
Bioaccumulative potential	Not expected to bioaccumulate.
Isopropanol (67-63-0)	
Bioaccumulative potential	Not expected to bioaccumulate.
propyl acetate (109-60-4)	
Log Pow	1.23
barium sulfate (7727-43-7)	
BCF fish 1	68.4 L/kg
Toluene (108-88-3)	
Bioconcentration factor (BCF REACH)	90
Log Kow	2.73

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Valve Action® Paint Markers, CERTIFIED Valve Action® Paint Markers	
PBT: not yet assessed	
vPvB: not yet assessed	
Component	
Ethyl acetate (141-78-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations	: Do not dispose of waste into sewer.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Handle empty containers with care because residual vapours are flammable.
European List of Waste (LoW) code	: For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	: 1263
UN-No. (IATA)	: 1263
UN-No. (IMDG)	: 1263
UN-No. (ADN)	: 1263

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Paint
Proper Shipping Name (IATA)	: Paint

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Proper Shipping Name (IMDG) : PAINT
Proper Shipping Name (ADN) : PAINT
Transport document description (ADR) : UN 1263 PAINT, 3, III, (D/E)

14.3. Transport hazard class(es)

Class (ADR) : 3
Classification code (ADR) : F1
Class (IATA) : 3
Class (IMDG) : 3
Class (ADN) : 3
Classification code (ADN) : F1

14.4. Packing group

Packing group (ADR) : III
Packing group (IATA) : III
Packing group (IMDG) : III
Packing group (ADN) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 30
Classification code (ADR) : F1
Orange plates :



Tunnel restriction code (ADR) : D/E
EAC code : •3YE

14.6.2. Transport by sea

EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Stowage category (IMDG) : A

14.6.3. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list
VOC content : 50 - 60 %

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

according to Regulation (EU) 2015/830

Indication of changes:

Added. Product.

Abbreviations and acronyms:

	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number

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	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	TWA: Time Weighted Average
	TSCA: Toxic Substances Control Act

Data sources : ESIS (European chemical Substances Information System; accessed at: <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>.
European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th edition.
OSHA 29CFR 1910.1200 Hazard Communication Standard.
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

Other information : None.

Full text of R-, H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 1	Flammable solids, Category 1
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H228	Flammable solid
H261	In contact with water releases flammable gases
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
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
H360D	May damage the unborn child
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
EUH208	Contains . May produce an allergic reaction

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EUH210	Safety data sheet available on request
R10	Flammable
R11	Highly flammable
R15	Contact with water liberates extremely flammable gases
R20/21	Harmful by inhalation and in contact with skin
R36	Irritating to eyes
R36/38	Irritating to eyes and skin
R37	Irritating to respiratory system
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R43	May cause sensitisation by skin contact
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R61	May cause harm to the unborn child
R63	Possible risk of harm to the unborn child
R65	Harmful: may cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant
Xn	Harmful

LA-CO EU CLP SDS United Kingdom

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product