

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

LA-CO Industries, Inc.

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
according to Canadian Hazardous Products Regulations (HPR)
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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

Use of the substance/mixture : Marking.

1.3. Details of the supplier of the safety data sheet

LA-CO Industries, Inc.
1201 Pratt Boulevard
Elk Grove Village, IL. 60007-5746
Phone: (847) 956-7600
Fax: (847) 956-9885
E-mail: customer_service@laco.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 in accordance with the Globally Harmonized Standard

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

2.4. Unknown acute toxicity (GHS US)

0.28 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
0.28 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
0.28 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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3.2. Mixture

| Name | Product identifier | % (w/w) | GHS-US classification |
|---|--------------------|---|--|
| 1-Methoxy-2-propanol | (CAS No) 107-98-2 | 47.05 White 53.32 Yellow 56.66 Red 53.03 Black, CERTIFIED Black 55.56 Blue 56.4 Green 53.86 Orange 77.11 Aluminum 50.88 Purple 47.11 Pink 47.57 Light Blue 47.1 Light Green 56.53 Brown 71.2 Gold 42.53 Fluorescent Yellow, Fluorescent Orange 43.05 Fluorescent Green 42.29 Fluorescent Pink 50 Invisible UV 48.35 CERTIFIED White 53.71 CERTIFIED Yellow 56.8 CERTIFIED Red | Flam. Liq. 3, H226 STOT SE 3, H336 |
| ethanol | (CAS No) 64-17-5 | 13.07 White, CERTIFIED White 15.49 Yellow, CERTIFIED Yellow 13.47 Red, CERTIFIED Red 19.8 Black, CERTIFIED Black 14.18 Blue 12.89 Green 13.18 Orange, Brown 16.3 Purple 12.68 Pink 12.64 Light Blue 12.61 Light Green 8.04 Fluorescent Yellow, Fluorescent Orange 6.8 Fluorescent Green | Flam. Liq. 2, H225 |
| 2-methoxy-1-methylethyl acetate | (CAS No) 108-65-6 | 0.3 – 0.6 White, CERTIFIED White 0.36 – 0.73 Yellow, CERTIFIED Yellow 0.47 – 0.94 Red, CERTIFIED Red 0.55 – 1.1 Black, CERTIFIED Black 0.76 – 1.52 Blue 0.74 – 1.48 Green 0.86 – 1.72 Orange 0.05 – 0.1 Purple 0.4 – 0.8 Pink 0.42 – 0.85 Light Blue 0.48 – 0.96 Light Green 0.6 – 1.21 Brown 0.97 – 1.93 Gold 0.21 – 0.41 Fluorescent Yellow, Fluorescent Orange, Fluorescent Pink 0.22 – 0.45 Fluorescent Green | 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 | 3.64 Red, CERTIFIED Red 0.89 Pink 1.82 Brown 1.22 Gold | Skin Sens. 1, H317 |
| Isopropanol | (CAS No) 67-63-0 | 2.31 White, CERTIFIED White 2.73 Yellow, CERTIFIED Yellow 2.38 Red, CERTIFIED Red 3.49 Black, CERTIFIED Black 2.5 Blue 2.28 Green 2.33 Orange, Brown 2.88 Purple 2.24 Pink 2.23 Light Blue, Light Green 1.42 Fluorescent Yellow, Fluorescent Orange 1.2 Fluorescent Green 1.49 Fluorescent Pink 0.54 Invisible UV | Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336 |

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| Name | Product identifier | % (w/w) | GHS-US classification |
|---------------------------------|--------------------|---|--|
| Ethyl acetate | (CAS No) 141-78-6 | 0.76 White, CERTIFIED White 0.91 Yellow, Red, CERTIFIED Yellow, CERTIFIED Red 0.93 Black, CERTIFIED Black 0.83 Blue 0.87 Green 0.89 Orange, Brown 0.79 Aluminum 1.1 Purple 0.73 Pink, Light Blue, Light Green 0.64 Gold 0.65 Fluorescent Yellow, Fluorescent Orange, Fluorescent Pink 0.7 Fluorescent Green 2.22 Invisible UV | Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336 |
| Carbon black | (CAS No) 1333-86-4 | 1.84 Black, CERTIFIED Black | Carc. 2, H351 |
| 4-Methyl-7-diethylaminocoumarin | (CAS No) 91-44-1 | 1.43 Invisible UV | Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 |
| propyl acetate | (CAS No) 109-60-4 | 0.77 White, Orange, Brown, CERTIFIED White 0.91 Yellow, CERTIFIED Yellow 0.79 Red, CERTIFIED Red 1.16 Black, CERTIFIED Black 0.83 Blue 0.76 Green 0.96 Purple 0.75 Pink 0.74 Light Blue, Light Green 0.47 Fluorescent Yellow, Fluorescent Orange 0.4 Fluorescent Green 0.18 Invisible UV | Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336 |

Full text of 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.

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. |
| Reactivity | : No dangerous reactions known. |

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. |
|---------------------------|--|

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

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

| Valve Action® Paint Markers, CERTIFIED Valve Action® Paint Markers | | |
|--|---------------------------------|-----------------------|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |
| 1-Methoxy-2-propanol (107-98-2) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 369 mg/m ³ |
| ACGIH | ACGIH TWA (ppm) | 50 ppm |
| ACGIH | ACGIH STEL (mg/m ³) | 553 mg/m ³ |
| ACGIH | ACGIH STEL (ppm) | 100 ppm |

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| 1-Methoxy-2-propanol (107-98-2) | | |
|---|-------------------------------------|-----------------------------|
| ACGIH | Remark (ACGIH) | Eye irrit; CNS impair; A4 |
| OSHA | Not applicable | |
| Canada (Quebec) | VECD (mg/m ³) | 553 mg/m ³ |
| Canada (Quebec) | VECD (ppm) | 150 ppm |
| Canada (Quebec) | VEMP (mg/m ³) | 369 mg/m ³ |
| Canada (Quebec) | VEMP (ppm) | 100 ppm |
| Ethyl acetate (141-78-6) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 1440 mg/m ³ |
| ACGIH | ACGIH TWA (ppm) | 400 ppm |
| ACGIH | Remark (ACGIH) | URT & eye irrit |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 1400 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 400 ppm |
| Canada (Quebec) | VEMP (mg/m ³) | 1440 mg/m ³ |
| Canada (Quebec) | VEMP (ppm) | 400 ppm |
| 2-methoxy-1-methylethyl acetate (108-65-6) | | |
| ACGIH | Not applicable | |
| OSHA | Not applicable | |
| 4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7) | | |
| ACGIH | Not applicable | |
| OSHA | Not applicable | |
| ethanol (64-17-5) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 1884 mg/m ³ |
| ACGIH | ACGIH TWA (ppm) | 1000 ppm |
| ACGIH | ACGIH STEL (ppm) | 1000 ppm |
| ACGIH | Remark (ACGIH) | URT irrit |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 1900 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 1000 ppm |
| Canada (Quebec) | VEMP (mg/m ³) | 1880 mg/m ³ |
| Canada (Quebec) | VEMP (ppm) | 1000 ppm |
| Isopropanol (67-63-0) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 490 mg/m ³ |
| ACGIH | ACGIH TWA (ppm) | 200 ppm |
| ACGIH | ACGIH STEL (mg/m ³) | 960 mg/m ³ |
| ACGIH | ACGIH STEL (ppm) | 400 ppm |
| ACGIH | Remark (ACGIH) | Eye & URT irrit; CNS impair |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 980 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 400 ppm |
| Canada (Quebec) | VECD (mg/m ³) | 1230 mg/m ³ |
| Canada (Quebec) | VECD (ppm) | 500 ppm |
| Canada (Quebec) | VEMP (mg/m ³) | 983 mg/m ³ |
| Canada (Quebec) | VEMP (ppm) | 400 ppm |
| propyl acetate (109-60-4) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 835 mg/m ³ |
| ACGIH | ACGIH TWA (ppm) | 200 ppm |
| ACGIH | ACGIH STEL (mg/m ³) | 1040 mg/m ³ |
| ACGIH | ACGIH STEL (ppm) | 250 ppm |
| ACGIH | Remark (ACGIH) | Eye & URT irrit |

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| propyl acetate (109-60-4) | | |
|---|-------------------------------------|--|
| OSHA | OSHA PEL (TWA) (mg/m ³) | 840 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 200 ppm |
| Canada (Quebec) | VECD (mg/m ³) | 1040 mg/m ³ |
| Canada (Quebec) | VECD (ppm) | 250 ppm |
| Canada (Quebec) | VEMP (mg/m ³) | 835 mg/m ³ |
| Canada (Quebec) | VEMP (ppm) | 200 ppm |
| Carbon black (1333-86-4) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 3.5 mg/m ³ |
| ACGIH | Remark (ACGIH) | Bronchitis |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 3.5 mg/m ³ |
| Canada (Quebec) | VEMP (mg/m ³) | 10 mg/m ³ (Fibres de carbone et de graphite; Poussière totale) 5 mg/m ³ (Fibres de carbone et de graphite; Poussière respirable) 3.5 mg/m ³ |
| 4-Methyl-7-diethylaminocoumarin (91-44-1) | | |
| ACGIH | Not applicable | |
| OSHA | Not applicable | |

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. |
| 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. |
| 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. |
| 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 |
| 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) | : No data available |
| 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 |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |

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| | |
|----------------------|---------------------|
| 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 %

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

| 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 |
| 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 |
| 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 |
| 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 |

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| 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 |

| Carbon black (1333-86-4) | |
|---------------------------------|-----------------------------|
| LD50 oral rat | > 8000 mg/kg |
| LC50 inhalation rat (mg/l) | > 4.6 mg/m ³ 4 h |

| 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 |

| | |
|--|-------------------|
| 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. |

| Isopropanol (67-63-0) | |
|------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| Carbon black (1333-86-4) | |
|--|--|
| IARC group | 2B - Possibly carcinogenic to humans, Inhalation of dust |
| National Toxicology Program (NTP) Status | Not listed in carcinogenicity class |

| | |
|---|-------------------|
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified. |
| Specific target organ toxicity (repeated exposure) | : Not classified |

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms

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

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 |

| 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 |

| ethanol (64-17-5) | |
|--------------------------|------------|
| LC50 fish 1 | 14200 mg/l |
| EC50 Daphnia 1 | 5012 mg/l |

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| 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 |

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 |

| 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. |

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 |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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| | |
|---------------------------------|---|
| 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. |

SECTION 14: Transport information

In accordance with DOT and TDG

| | |
|----------------------------------|--|
| Transport document description | : UN1263 Paint (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base), 3, III |
| UN-No.(DOT) | : UN1263 |
| Proper Shipping Name (DOT) | : Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base |
| Transport hazard class(es) (DOT) | : 3 - Flammable liquid |
| Packing group (DOT) | : III - Minor Danger |

ADR

| | |
|----------------------------------|--------------------------------|
| Transport document description | : UN 1263 PAINT, 3, III, (D/E) |
| Proper Shipping Name (ADR) | : PAINT |
| Packing group (ADR) | : III |
| Transport hazard class(es) (ADR) | : 3 |

Transport by sea

| | |
|-----------------------------------|-----------|
| UN-No. (IMDG) | : UN 1263 |
| Proper Shipping Name (IMDG) | : PAINT |
| Transport hazard class(es) (IMDG) | : 3 |
| Packing group (IMDG) | : III |

Air transport

| | |
|-----------------------------------|-----------|
| UN-No. (IATA) | : UN 1263 |
| Proper Shipping Name (IATA) | : Paint |
| Transport hazard class(es) (IATA) | : 3 |
| Packing group (IATA) | : III |

SECTION 15: Regulatory information

15.1. US Federal regulations

| | |
|---|-------------|
| 1-Methoxy-2-propanol (107-98-2) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Ethyl acetate (141-78-6) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| RQ (Reportable quantity, section 304 of EPA's List of Lists) | 5000 lb |
| 2-methoxy-1-methylethyl acetate (108-65-6) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| 4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| ethanol (64-17-5) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Isopropanol (67-63-0) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| SARA Section 311/312 Hazard Classes | Fire hazard |
| propyl acetate (109-60-4) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Carbon black (1333-86-4) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| 4-Methyl-7-diethylaminocoumarin (91-44-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |

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15.2. International regulations

CANADA

| |
|---|
| 1-Methoxy-2-propanol (107-98-2) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| Ethyl acetate (141-78-6) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| 2-methoxy-1-methylethyl acetate (108-65-6) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| 4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| ethanol (64-17-5) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| Isopropanol (67-63-0) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| propyl acetate (109-60-4) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| Carbon black (1333-86-4) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |
| 4-Methyl-7-diethylaminocoumarin (91-44-1) |
| Listed on the Canadian DSL (Domestic Substances List) inventory. |

EU-Regulations

| |
|---|
| 1-Methoxy-2-propanol (107-98-2) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| Ethyl acetate (141-78-6) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| 2-methoxy-1-methylethyl acetate (108-65-6) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| 4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| ethanol (64-17-5) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| Isopropanol (67-63-0) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| propyl acetate (109-60-4) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| Carbon black (1333-86-4) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |
| 4-Methyl-7-diethylaminocoumarin (91-44-1) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |

National regulations

| |
|---|
| Valve Action® Paint Markers, CERTIFIED Valve Action® Paint Markers |
| All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS). All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL). All ingredients are listed in the Toxic Substances Control Act (TSCA). |

15.3. US State regulations

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| | |
|----------------------------|---|
| State or local regulations | The carbon black in this product is bound and is not respirable. California Prop. 65 warnings are not required. |
|----------------------------|---|

Carbon black (1333-86-4)

| | | | | |
|---|---|---|---|-----------------------------------|
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | Non-significant risk level (NSRL) |
| Yes | No | No | No | |

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

U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Right to Know List of Hazardous Chemicals

Ethyl acetate (141-78-6)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - List of Hazardous Substances

ethanol (64-17-5)

U.S. - New Jersey - Right to Know Hazardous Substance List

Isopropanol (67-63-0)

U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List

propyl acetate (109-60-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

Carbon black (1333-86-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

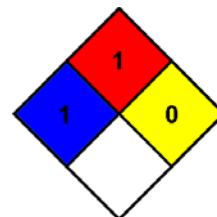
| | |
|----------------------------|---|
| Indication of changes | : Added. Product. |
| Data sources | : ACGIH (American Conference of Government Industrial Hygienists). European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database . 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. TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html . |
| Abbreviations and acronyms | : ATE: Acute Toxicity Estimate. CAS (Chemical Abstracts Service) number. 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 Weight Average. TSCA: Toxic Substances Control Act. |
| Other information | : None. |

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- NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA fire hazard : 1 - Must be preheated before ignition can occur.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



Full text of H-statements:

| | |
|---------------------------|--|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
| Carc. 2 | Carcinogenicity, Category 2 |
| Eye Irrit. 2A | Serious eye damage/eye irritation, Category 2A |
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Sensitisation — Skin, Category 1 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| H225 | Highly flammable liquid and vapour |
| H226 | Flammable liquid and vapour |
| 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 |
| H336 | May cause drowsiness or dizziness |
| H351 | Suspected of causing cancer |

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LACO NA GHS SDS

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