

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Glow sticks
Product code : S50152, S50153

1.2. Recommended use and restrictions on use

Use of the substance/mixture : glues
Restrictions on use : No additional information available

1.3. Supplier

Supplier

ITW Global Tire Repair Europe GmbH
Carl-Benz Str. 10, 88696 Owingen, Germany
Tel 0049 7551-9200-100
Email: Comments@itwgr.com

1.4. Emergency telephone number

Emergency number : 1-800-255-3924
ChemTel's local International number: +1-813-248-0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Dimethyl phthalate	CAS-No.: 131-11-3	≥ 40 – < 60	Not classified

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Name	Product identifier	%	GHS US classification
2-(6-hydroxy-3-oxo-(3H)-xanthen-9-yl)benzoic acid	CAS-No.: 2321-07-5	≥ 1 – < 2.5	Eye Irrit. 2, H319
Bis(2,4,5-trichloro-6-carbopentoxyphenyl) oxalate	CAS-No.: 30431-54-0	≥ 1 – < 2.5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center/doctor/physician if you feel unwell. Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Take off contaminated clothing. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get medical attention if symptoms occur.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.
First-aid measures after ingestion	: Rinse mouth out with water. Never give anything by mouth to an unconscious person. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Repeated or prolonged contact may cause allergic reactions in very susceptible persons.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/effects after ingestion	: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Carbon dioxide. Dry powder. Alcohol-resistant foam. Sand. Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: In case of fire and/or explosion do not breathe fumes. Burning produces stinking and toxic fumes. Heating will cause a rise in pressure with a risk of bursting.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Move containers from fire area if it can be done without personal risk. Exercise caution when fighting any chemical fire. Fight fire with normal precautions from a reasonable distance. Use water spray or fog for cooling exposed containers. Evacuate the danger area.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all contact with skin, eyes, or clothing.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Do not get in eyes, on skin, or on clothing. Evacuate unnecessary personnel. No action shall be taken without appropriate training or involving any personal risk.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak, if possible without risk.

Methods for cleaning up : Move containers from spill area. Prevent entry to sewers and public waters. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. Absorb remaining liquid with sand or inert absorbent and remove to safe place. Clean contaminated surfaces with an excess of water.

Other information : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid release to the environment. Keep in original containers.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Store in a dry place. Keep cool. Keep away from food, drink and animal feedingstuffs. Store away from other materials. Refer to Section 10 on Incompatible Materials. Store in accordance with local, regional, national or international regulation.

Incompatible products : Oxidizing agent. Strong reducing agents. Halogens. Strong acids. Strong bases.

Incompatible materials : Direct sunlight. Heat sources. Sources of ignition.

Storage temperature : ≤ 37 °C

Storage area : Store in a well-ventilated place. Store away from heat.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glow sticks	
No additional information available	
Dimethyl phthalate (131-11-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Dimethyl phthalate
ACGIH OEL TWA	5 mg/m ³
Remark (ACGIH)	TLV® Basis: Eye & URT irr
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Dimethylphthalate
OSHA PEL (TWA) [1]	5 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
2-(6-hydroxy-3-oxo-(3H)-xanthen-9-yl)benzoic acid (2321-07-5)	
No additional information available	
Bis(2,4,5-trichloro-6-carbopentoxyphenyl) oxalate (30431-54-0)	
No additional information available	
Monitoring methods	
Monitoring methods	Refer to all applicable national, international and local regulations or provisions. Workplace atmospheres. Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

8.2. Appropriate engineering controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation. Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure.
Environmental exposure controls	: Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Chemical resistant gloves (according to NIOSH standard)
Eye protection:
Use splash goggles when eye contact due to splashing is possible
Skin and body protection:
Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

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Respiratory protection:

No respiratory protection needed under normal use conditions

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Plastic shell containing colorless transparent liquid and glass tube (containing luminous liquid).
Color	: Colorless Transparent
Odor	: weak
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts vigorously with strong oxidizers and acids. Hazardous polymerization: Will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Heat. Water, humidity.

10.5. Incompatible materials

Strong oxidizing agents. Strong reducing agents. Strong acids. Strong bases.

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10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Bis(2,4,5-trichloro-6-carbopentoxyphenyl) oxalate (30431-54-0)

ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Repeated or prolonged contact may cause allergic reactions in very susceptible persons.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/effects after ingestion	: Not expected to present a significant hazard under anticipated conditions of normal use.
Other information	: No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Glow sticks

Persistence and degradability	Biodegradability in water: no data available.
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12.3. Bioaccumulative potential

Glow sticks

Bioaccumulative potential	No data available concerning bioaccumulation.
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12.4. Mobility in soil

Glow sticks	
Ecology - soil	No additional information available.

12.5. Other adverse effects

Other adverse effects : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not applicable

TDG
Transport hazard class(es) (TDG) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

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14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

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. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Dimethyl phthalate	CAS-No. 131-11-3	≥ 40 – < 60%
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Dimethyl phthalate (131-11-3)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

Dimethyl phthalate (131-11-3)

Listed on the Canadian DSL (Domestic Substances List)

2-(6-hydroxy-3-oxo-(3H)-xanthen-9-yl)benzoic acid (2321-07-5)

Listed on the Canadian DSL (Domestic Substances List)

Bis(2,4,5-trichloro-6-carboxyphenoxy) oxalate (30431-54-0)

Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

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15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources : ECHA (European Chemicals Agency). Supplier's safety documents.
Training advice : Training staff on good practice.

Full text of H-phrases	
H302	Harmful if swallowed
H312	Harmful in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled

Safety Data Sheet (SDS), USA

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.

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations


Printing date: July 10, 2017

Revision: July 10, 2017

1 Identification

- **Product identifier**
- **Trade name:** V1D
- **Product code:** 5004020, 5004030, 5001030, 5001030CN
- **Recommended use and restriction on use**
- **Recommended use:** Sealant
- **Restrictions on use:** Contact manufacturer/supplier
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
ITW Global Tire Repair, Inc.
125 Venture Drive, Suite 210, San Luis Obispo, CA 93401
Tel (805) 489-0490
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS07 GHS08
- **Signal word:** Warning
- **Hazard statements:**
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
- **Precautionary statements:**
P260 Do not breathe mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves and eye protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water.

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- P314 Get medical advice/attention if you feel unwell.
- P330 Rinse mouth.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

107-21-1	ethylene glycol <ul style="list-style-type: none"> ☠ STOT RE 2, H373 ☠ Acute Tox. 4, H302 	40-60%
9006-04-6	natural rubber latex <ul style="list-style-type: none"> ☠ Skin Sens. 1B, H317 	20-40%
1310-58-3	Potassium hydroxide <ul style="list-style-type: none"> ☠ Met. Corr. 1, H290; Skin Corr. 1A, H314 ☠ Acute Tox. 4, H302 	<0.5%
1336-21-6	ammonia, aqueous solution <ul style="list-style-type: none"> ☠ Skin Corr. 1B, H314 	<0.3%

· **Additional information:**

For the wording of the listed Hazard Statements refer to section 16.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation or rash occurs: Get medical advice/attention.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**

Allergic reactions

Gastric or intestinal disorders when ingested.

· **Danger:**

Harmful if swallowed.

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

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- **Indication of any immediate medical attention and special treatment needed:**
Contains etanodiol. Consult literature for specific antidotes.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
Contains natural rubber latex. May produce an allergic reaction.
Medical supervision for at least 48 hours.
If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
- **Environmental precautions** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up** Allow to solidify. Pick up mechanically.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:** Open and handle receptacle with care.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in cool, dry conditions in well sealed receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.

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· **Specific end use(s)** No relevant information available.

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8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

107-21-1 ethylene glycol

TLV (USA)	Short-term value: 10** mg/m ³ , 50* ppm Long-term value: 25* ppm *vapor fraction;**inh. fraction, aerosol only
EL (Canada)	Short-term value: 20** mg/m ³ Long-term value: 10** mg/m ³ Ceiling limit value: 100* mg/m ³ , 50*** ppm *Aerosol; **Particulate; ***Vapour
EV (Canada)	Ceiling limit value: 100 mg/m ³
LMPE (Mexico)	Ceiling limit value: 100* mg/m ³ A4, *solo aerosol

9006-04-6 natural rubber latex

TLV (USA)	Long-term value: 0.0001* mg/m ³ Skin; DSEN, RSEN;* inh. fraction
EL (Canada)	Long-term value: 0.001 mg/m ³ inhalable, Skin; S
EV (Canada)	Long-term value: 0.001 mg/m ³ as total proteins, inhalable, Skin
LMPE (Mexico)	Long-term value: 0.0001* mg/m ³ SEN, PIEL, *fracción inhalable

1310-58-3 Potassium hydroxide

REL (USA)	Ceiling limit value: 2 mg/m ³
TLV (USA)	Ceiling limit value: 2 mg/m ³
EL (Canada)	Ceiling limit value: 2 mg/m ³
EV (Canada)	Ceiling limit value: 2 mg/m ³
LMPE (Mexico)	Ceiling limit value: 2 mg/m ³

· **Exposure controls**

· **Engineering measures** Provide adequate ventilation.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.

· **Engineering controls:** No relevant information available.

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- **Breathing equipment:**
Not required under normal conditions of use.
For large spills, respiratory protection may be advisable.
- **Protection of hands:**



Protective gloves

Material: Nitrile
Thickness: ≥4 mil
Breakthrough time: 2 hours

- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
No relevant information available.
- **Risk management measures** No relevant information available.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Liquid

Color: Whitish

· **Odor:** Ammonia-like

· **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 9.0

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** 100 °C (212 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** 410 °C (770 °F)

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Not determined.

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Trade name: V1D

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- | | |
|---|------------------------------------|
| · Vapor pressure at 20 °C (68 °F): | 0.1 hPa |
| · Density: | |
| Relative density: | 1.00 |
| Vapor density: | Not determined. |
| Evaporation rate: | Not determined. |
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity | |
| Dynamic at 20 °C (68 °F): | 750-1200 mPas |
| Kinematic: | Not determined. |
| · Other information | No relevant information available. |

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Polymerization.
Reacts with strong acids and oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

107-21-1 ethylene glycol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primary irritant effect:**
- **On the skin:** Slight irritant effect on skin and mucous membranes.
- **On the eye:** Slight irritant effect on eyes.
- **Sensitization:** Sensitization possible through skin contact.
- **IARC (International Agency for Research on Cancer):**
Present in trace quantities.

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Trade name: V1D

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50-00-0	formaldehyde	1
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- **NTP (National Toxicology Program):**
Present in trace quantities.

50-00-0	formaldehyde	K
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- **OSHA-Ca (Occupational Safety & Health Administration):**
Present in trace quantities.

50-00-0	formaldehyde	
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- **Probable route(s) of exposure:**

- Ingestion.
- Inhalation.
- Eye contact.
- Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** Harmful if swallowed.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

- **Carcinogenicity:** Based on available data, the classification criteria are not met.

- **Reproductive toxicity:** Based on available data, the classification criteria are not met.

- **STOT-single exposure:** Based on available data, the classification criteria are not met.

- **STOT-repeated exposure:**

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity** The product contains materials that are harmful to the environment.

- **Persistence and degradability** No relevant information available.

- **Bioaccumulative potential:** No relevant information available.

- **Mobility in soil:** No relevant information available.

- **Additional ecological information**

- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

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- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- DOT, ADR, IMDG, IATA Not regulated.
- **UN proper shipping name**
- DOT, ADR, IMDG, IATA Not regulated.
- **Transport hazard class(es)**
- DOT, ADR, IMDG, IATA
- **Class** Not regulated.
- **Packing group**
- DOT, ADR, IMDG, IATA Not regulated.
- **Environmental hazards**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

107-21-1 | ethylene glycol

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

Present in trace quantities.

50-00-0 | formaldehyde

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- **Proposition 65 (California)**
- **Chemicals known to cause cancer:**
Present in trace quantities.

50-00-0	formaldehyde
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- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**
107-21-1 ethylene glycol

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency):**
None of the ingredients are listed.

- **IARC (International Agency for Research on Cancer):**
Present in trace quantities.

50-00-0	formaldehyde	1
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- **NIOSH-Ca (National Institute for Occupational Safety and Health):**
Present in trace quantities.

50-00-0	formaldehyde
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- **Canadian Domestic Substances List (DSL):**
All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** July 10, 2017 / -

- **Abbreviations and acronyms:**

LDLo: Lowest Lethal Dose Observed
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bio-accumulable, Toxique
 vPvB: very Persistent and very Bioaccumulative
 Met. Corr. 1: Corrosive to metals – Category 1
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Skin Sens. 1: Skin sensitisation – Category 1
 Skin Sens. 1B: Skin sensitisation – Category 1B
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

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Safety Data Sheets, Individual Manufacturers

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