Safety Data Sheet

Whiteboard ink

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Creation Date:2022/10/25
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Color:Coloured
Country of Destination:EU
***Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878)**

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

1.1 Product identifier

Product Name	*Whiteboard ink*
Synonyms	—
CAS NO.	—
EC NO.	—
Chemical Formula	—

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

Relevant identified uses	*To write*
Uses advised against	—

1.3. Details of the supplier of the safety data sheet

Details of the supplier

Company	CLEVERPATCH PTY LTD
ABN	48 130 866 885
Online	www.cleverpatch.com.au
Email	info@cleverpatch.com.au
Phone	1300 836 522
Fax	1300 244 139
Address	9 Balbu Close, Beresfield, NSW 2322 Australia
Mail	PO Box 7, Hunter Region Mail Centre, NSW 2310 Australia

1.4. Emergency telephone number

Australia	13 11 26 (Poisons Information Centre)

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	 *GHS02* *H225 Flammable liquid and vapour; Category 2*

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008	*The product is classified and labelled according to the CLP regulation*

Hazard pictogram(s)	 GHS02
Signal word	Danger!
Hazard-determining components of labelling	Not Applicable
Hazard statements	H225 Highly flammable liquid and vapour.

2.2.1 Supplementary statement(s)

EUH210	Safety data sheet available on request.

2.3 Precautionary statements

- Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

- Precautionary statement(s) Response

P303+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P370+P378	In case of fire: Use ... to extinguish.

- Precautionary statement(s) Storage

P405	Store locked up.
P403+P235	Store in a well-ventilated place. Keep cool.

- Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.4 Other hazard

C.I. Pigment Blue 15	Listed in the Europe Regulation (EU) 2018/1881 Specific Requirements for Endocrine Disruptors.

SECTION 3 Composition/information on ingredients

3.1 Substance

See 'Composition on ingredients' in Section 3.2

3.2 Mixtures

- Description:Mixture of substances listed.

1.CAS No 2.EC/List No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC)No 1272/2008 [CLP] and amendments	Nanoform Particle Characteristics	SCL/M-Factor/ATE
Common ingredients on each color					
1.64-17-5 2.200-578-6 3.603-002-00-5 4.Not Available	30.0-40.0	Ethanol	Flam. Liquid. Category 2; H225	Not Applicable	Not Applicable
1.25322-68-3 2.500-038-2 3.Not Available 4.Not Available	10.0-15.0	Polyethylene glycol	Not Classified	Not Applicable	Not Applicable

1.57-55-6 2.200-338-0 3.Not Available 4.01-2119456809-23-0179	5.0-10.0	Propane-1,2-diol	Not Classified	Not Applicable	Not Applicable
1.25168-73-4 2.246-705-9 3.Not Available 4.Not Available	15.0	Sucrose stearate	Not Classified	Not Applicable	Not Applicable
1.63148-65-2 2.613-158-6 3.Not Available 4.Not Available	5.0	Poly(vinyl butyral)	Skin irritation Category 2; H315 Eye irritation Category 2A; H319 STOT SE Category 3; H335	Not Applicable	Not Applicable
1.67-63-0 2.200-661-7 3.Not Available 4.Not Available	0-15.0	Isopropanol	Flam Liquid Category 2; H225 Eye irritation Category 2A; H319 STOT SE Category 3; H336	Not Applicable	Not Applicable
1.9004-96-0 2.500-015-7 3.Not Available 4.Not Available	15.0	Polyethylene glycol monooleate	Not Classified	Not Applicable	Not Applicable
Additional ingredients on each color					
Orange					
1.988-26-7 2.213-561-3 3.Not Available 4.Not Available	2.0	C.I.Pigment Red 122	Not Classified	Not Applicable	Not Applicable
1.5590-18-1 2.226-999-5 3.Not Available 4.Not Available	3.0	C.I. Pigment Yellow 110	Not Classified	Not Applicable	Not Applicable
Pink					
1.81-77-6 2.201-375-5 3.Not Available 4.Not Available	1.0	C.I. Pigment Blue 60	Not Classified	Not Applicable	Not Applicable
1.84632-65-5 2.401-540-3 3.Not Available 4.Not Available	4.0	Pigment Red 254	Not Classified	Not Applicable	Not Applicable
Yellow					
1.5590-18-1 2.226-999-5 3.Not Available 4.Not Available	5.0	C.I. Pigment Yellow 110	Not Classified	Not Applicable	Not Applicable
Sky Blue					
1.147-14-8 2.205-685-1 3.Not Available 4.Not Available	5.0	C.I. Pigment Blue 15 [e]	Not Classified	Not Applicable	Not Applicable
Purple					
1.6358-30-1 2. 228-767-9 3.Not Available 4.Not Available	5.0	Pigment Violet 23	Not Classified	Not Applicable	Not Applicable
Brown					
1.6992-11-6 2.238-258-1 3.Not Available 4.Not Available	5.0	Pigment Brown 25	Not Classified	Not Applicable	Not Applicable
Coffee					
1.6992-11-6 2.238-258-1 3.Not Available 4.Not Available	5.0	Pigment Brown 25	Not Classified	Not Applicable	Not Applicable
1.1333-86-4 2.215-609-9 3.Not Available 4.Not Available	0.5	Carbon black	Not Classified	Not Applicable	Not Applicable
Grass green					
1.14302-13-7 2.238-238-4 3.Not Available 4.Not Available	5.0	C.I.Pigment Green 36	Not Classified	Not Applicable	Not Applicable
Rose red					
1.1047-16-1 2.213-879-2 3.Not Available 4.Not Available	5.0	C.I.Pigment Violet 19	Not Classified	Not Applicable	Not Applicable

Legend: [e] Substance identified as having endocrine disrupting properties

SECTION 4 First aid measures

4.1 Description of first aid measures

General advice	Seek medical attention if necessary. Show this Safety Data Sheet (SDS) to the physician present.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.

Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically	Periodic medical surveillance should be carried out on persons in occupations exposed to the manufacture or bulk handling of the product and this should include hepatic function tests and urinalysis examination. [ILO Encyclopaedia]
For acute or short term repeatedexposures to ethanol	
1	Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
2	Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
3	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
4	Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
5	Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.
6	Fructose administration is contra-indicated due to side effects.
For acute or short term repeated exposures to isopropanol	
1	Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.
2	Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
3	There are no antidotes. Management is supportive. Treat hypotension with fluids followed by vasopressors.
4	Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes
5	Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

SECTION 5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	CO_2,powder or water spray.Fight larger fires with water spray or alcohol resistant foam.
Unsuitable extinguishing media	Water with full jet.

5.2 Special hazards arising from the substrate or mixture

May form irritating fumes in the air under fire.

5.3 Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus(MSHA/NIOSH approved or equivalent)and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.
4	**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which maybe toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

4	Avoid contact with skin and eyes.

6.2 Environmental precautions

1	Do not allow to enter sewers/ surface or ground water.
2	Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

1	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
2	Dispose contaminated material as waste according to item 13.
3	Ensure adequate ventilation.

6.4 Reference to other sections

1	See section 7 for information on safe handling.
2	See section 8 for information on personal protection equipment.
3	See section 13 for disposal information.

SECTION 7 Handling and storage

7.1 Precautions for handling

- **Protective measure**

1	Ensure good ventilation/exhaustion at the workplace.
2	Keep receptacles tightly sealed.
3	Keep away from heat and direct sunlight.
4	Prevent formation of aerosols.
5	Avoid contact with skin and eyes.

- **Information about fire - and explosion protection**

1	Keep ignition sources away - Do not smoke.
2	Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry,cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and food stuff containers.

7.3 Specific end use(s)

In addition to use mentioned in the first parts, unforeseen other specific end uses.

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Propane-1,2-diol	Inhalation 10 mg/m³ (Local, Chronic) Inhalation 168 mg/m³ (Systemic, Chronic) Inhalation 10 mg/m³ (Local, Chronic)* Inhalation 50 mg/m³ (Systemic, Chronic)*	260 mg/L (Water (Fresh)) 183 mg/L (Water - Intermittent release) 26 mg/L (Water (Marine)) 572 mg/kg sediment dw (Sediment (Fresh Water)) 57.2 mg/kg sediment dw (Sediment (Marine)) 50 mg/kg soil dw (Soil) 20000 mg/L (STP)
Carbon black	Inhalation 1 mg/m³(Systemic, Chronic) Inhalation 0.06 mg/m³ (Systemic, Chronic) *	50 mg/L (Water (Fresh))

Ethanol	Inhalation 380 mg/m³(Systemic, Chronic) Inhalation 1900 mg/m³ (Local, Acute) Dermal 343 mg/kg bw/day (Systemic, Chronic) Inhalation 114 mg/m³(Systemic, Chronic)* Inhalation 950 mg/m³ (Local, Acute)* Dermal 206 mg/kg bw/day (Systemic, Chronic)* Oral 87 mg/kg bw/day (Systemic, Chronic)*	0.96 mg/L (Water (Fresh)) 2.75 mg/L (Water - Intermittent release) 0.79 mg/L (Water (Marine)) 3.6 mg/kg sediment dw (Sediment (Fresh Water)) 0.63 mg/kg soil dw (Soil) 580 mg/L (STP) 380 -720 mg/kg food(Secondary poisoning)
Polyethylene glycol	Inhalation 40.2 mg/m³ (Systemic, Chronic) Dermal 112 mg/kg bw/day (Systemic, Chronic) Inhalation 7.14 mg/m³(Systemic, Chronic)* Dermal 40 mg/kg bw/day (Systemic, Chronic)* Oral 40mg/kg bw/day (Systemic, Chronic)*	273 mg/L (Water (Fresh)) 1 mg/L (Water - Intermittent release) 27.3 mg/L (Water (Marine)) 0.01 mg/L (Marinewater-Intermittent release) 1030 mg/kg sediment dw (Sediment (Fresh Water)) 103 mg/kg sediment dw (Sediment (Marine)) 46.4 mg/kg soil dw (Soil)
Isopropanol	Inhalation 500 mg/m³ (Systemic, Chronic) Inhalation 1000 mg/m³ (Systemic,Acute) Dermal 888 mg/kg bw/day (Systemic, Chronic) Inhalation 89 mg/m³ (Systemic, Chronic)* Inhalation 178 mg/m³ (Systemic,Acute)* Dermal 319 mg/kg bw/day (Systemic, Chronic)* Oral 26 mg/kg bw/day (Systemic, Chronic)* Oral 51 mg/kg bw/day (Systemic, Acute)*	Not data available
C.I.Pigment Red 122	Inhalation 147mg/m³(Systemic, Chronic) Inhalation 3 mg/m³ (Local, Chronic) Dermal 42 mg/kg bw/day (Systemic, Chronic) Dermal 25 mg/kg bw/day (Systemic, Chronic)* Oral 25 mg/kg bw/day (Systemic, Chronic)*	Not data available
C.I. Pigment Blue 60	Inhalation 1.25 mg/m³ (Local, Chronic) Inhalation 1.25 mg/m³ (Local, Chronic)*	Not data available
Pigment Red 254	Inhalation 0.768 mg/m³(Systemic, Chronic) Inhalation 0.042 mg/m³(Local, Chronic) Dermal 3.33 mg/kg bw/day (Systemic, Chronic) Inhalation 0.14 mg/m³ (Systemic, Chronic) * Inhalation 0.0075 mg/m³(Local, Chronic)* Dermal 1.66 mg/kg bw/day (Systemic, Chronic)* Dermal 0.0075 mg/cm² (Local, Chronic)* Oral 1.66 mg/kg bw/day (Systemic, Chronic)*	0.499-10 mg/L (Water (Fresh)) 0.499-10 mg/L (Water-Intermittent release) 0.499-10 mg/L (Water (Marine)) 1 mg/L (STP) 377-688 mg/kg sediment dw (Sediment (Fresh Water)) 377-688 mg/kg sediment dw (Sediment (Marine)) 1mg/kg soil dw (Soil)
C.I. Pigment Blue 15	Inhalation 10 mg/m³(Local, Chronic)	Not data available
C.I.Pigment Violet 19	Inhalation 3 mg/m³(Systemic, Chronic) Inhalation 3 mg/m³(Local, Chronic)	Not data available

* *Values for General Population*

8.1.1 Occupational Exposure Limits (OEL)

- **Ingredient data**

Ingredient	Country	Limit value - Eight hours	Limit value - Short term
Propane-1,2-diol (particulates)	Ireland	10 mg/m³	Not data available
	Latvia	7 mg/m³	Not data available
	Poland	100 mg/m³	Not data available
	WELs(UK)	10 mg/m³	Not data available
Propane-1,2-diol (total vapour and particulates)	Ireland	150ppm 474 mg/m³	Not data available
	Norway	25ppm 79 mg/m³	Not data available
	WELs(UK)	150ppm 474 mg/m³	Not data available
Ethanol	Belgium	1000ppm 1907mg/m³	Not data available
	Austria	1000ppm 1900mg/m³	2000ppm 3800mg/m³
	Denmark	1000ppm 1900mg/m³	2000ppm 3800mg/m³
	Finland	1000ppm 1900mg/m³	1300ppm 2500mg/m³ [9]
	MAK(Germany)	0.3R mg/m³	Not data available
	VLEP (France)	1000ppm 1900mg/m³	5000ppm 9500mg/m³
	AGS(Germany)	200ppm 380mg/m³	800ppm 1520mg/m³ [9]
	DFG(Germany)	200ppm 380mg/m³	800ppm 1520mg/m³ [9]
	Hungary	1900mg/m³	3800mg/m³ [9]
	Ireland	Not data available	1000ppm (15 minutes reference period)

	Latvia	1000 mg/m³	Not data available
	Norway	500ppm 950mg/m³	Not data available
	Poland	1900mg/m³	Not data available
	Romania	1000ppm 1900mg/m³	5000ppm 9500mg/m³ [3]
	Spain	Not data available	1000ppm 1910mg/m³
	Sweden	500ppm 1000mg/m³	1000ppm 1910mg/m³ [3]
	Switzerland	500ppm 960mg/m³	1000ppm 1920mg/m³
	The Netherlands	260mg/m³(Skin)	1900mg/m³ (Skin)[3]
	WELs(UK)	1000ppm 1920mg/m³	Not data available
Carbon black	VLEP (France)	3.5mg/m³	Not data available
	WELs(UK)	3.5mg/m³	7mg/m³
	Belgium	3mg/m³	7mg/m³
	Finland	3.5mg/m³	7mg/m³ [3]
	Hungary	3mg/m³ Inhalable fraction	Not data available
	Ireland	3mg/m³ Inhalable fraction	Not data available
	Norway	3.5mg/m³	Not data available
	Poland	4mg/m³ Inhalable fraction	Not data available
	Spain	3.5mg/m³	Not data available
	Sweden	3mg/m³	Not data available
Isopropanol	Austria	200ppm 500mg/m³	800ppm 2000mg/m³
	Belgium	200ppm 500mg/m³	400ppm 1000mg/m³[3]
	Denmark	200ppm 490mg/m³	400ppm 980mg/m³
	Finland	200ppm 500mg/m³	250ppm 620mg/m³ [3]
	VLEP (France)	Not data available	400ppm 980mg/m³
	AGS(Germany)	200ppm 500mg/m³	400ppm 1000mg/m³ [3]
	DFG(Germany)	200ppm 500mg/m³	400ppm 1000mg/m³ [3]
	Hungary	500mg/m³ (Skin)[3]	1000mg/m³(Skin)[3]
	Ireland	200ppm	400ppm(15 minutes reference period)
	Latvia	350mg/m³	600mg/m³ [3]
	Norway	100ppm 245mg/m³	Not data available
	Poland	900mg/m³	1200mg/m³
	Romania	81ppm 200mg/m³	203ppm 500mg/m³ [3]
	Spain	200ppm 500mg/m³	400ppm 1000mg/m³
	Sweden	150ppm 350mg/m³	250ppm 600mg/m³ [3]
	Switzerland	200ppm 500mg/m³	400ppm 1000mg/m³
	WELs(UK)	400ppm 999mg/m³	500ppm 1250mg/m³
Polyethylene glycol	Austria	1000mg/m³ inhalable aerosol	4000mg/m³ inhalable aerosol
	Denmark	1000mg/m³	2000mg/m³
	AGS(Germany)	200mg/m³	400mg/m³ [3][5]
	DFG(Germany)	200mg/m³	500mg/m³ [3][4][5](Average molecular weight 200 – 600)
	Switzerland	500mg/m³	Not data available
C.I. Pigment Blue 15	Latvia	5mg/m³	Not data available

Remarks: 1. 15 minutes average value 2. Inhalable fraction 3.Because formation of a mist is possible, exposure should be minimized for reasons of occupational safety and hygiene.

- Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
Propane-1,2-diol	30mg/m³	1300mg/m³	7900mg/m³
Ethanol	1800E ppm	3300E* ppm	15000* ppm
Carbon black	9mg/m³	99mg/m³	590mg/m³
Polyethylene glycol	30mg/m³	1300mg/m³	7700mg/m³
Isopropanol	400ppm	2000* ppm	12000* ppm

- Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
Pigment Brown 25	E	≤ 0.01 mg/m³
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.	

8.2 Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

8.3 Personal protection equipment

General requirement	
Eye protection	Tightly fitting safety goggles (approved by EN166(EU) or NIOSH(US).
Hand protection	Wear protective gloves(such as butyl rubber, passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.
Respiratory protection	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and body protection	Wear fire/flame resistant/retardant clothing and antistatic boots.
Other protection	No special equipment needed when handling small quantities.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Coloured	Viscosity	Dynamic	Not determined
Physical state	Liquid		Kinematic:	Not determined
Odour	Odourless	Vapour density (Air = 1)		Not determined
Odour threshold	Not determined	Density/Relative density		Not determined
pH (as supplied)	Not determined	Decomposition temperature		Not determined
Melting point/freezing point(°C)	Not determined	Particle Size		Not determined
Flash point(Closed cup, °C)	20-22 °C	Vapour pressure (kPa)		Not determined
Flammability	Flammable liquid	Relative vapor density		Not determined
Evaporation rate	Not determined	Partition coefficient n-octanol/ water		Not determined
Upper Explosive Limit (%)	Not determined	Auto-ignition temperature(°C)		Not determined
Lower Explosive Limit (%)	Not determined	Explosive properties		Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
Self-igniting	Not determined	Oxidising properties		Not determined
Taste	Not determined	Surface Tension (dyn/cm or mN/m)		Not determined

Volatile Component (%vol)	Not determined	Gas group	Not determined
pH as a solution (1%)	Not determined	VOC g/L	Not determined

9.2 Other information

No further relevant information available

SECTION 10 Stability and reactivity

10.1 Stability and reactivity

Reactivity	No further relevant information available.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	No dangerous reactions known.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	See section 7.2.
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

Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence. Swallowing 10 millilitres of isopropanol may cause serious injury; 100 millilitres may be fatal if not properly treated. The adult single lethal dose is approximately 250 millilitres. Isopropanol is twice as poisonous as ethanol, and the effects caused are similar, except that isopropanol does not cause an initial feeling of well-being. Swallowing may cause nausea, vomiting and diarrhea; vomiting and stomach inflammation is more prominent with isopropanol than with ethanol.
Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Animal testing shows that the most common signs of inhalation overdose is inco-ordination and drowsiness. Aliphatic alcohols with more than 3-carbons cause headache, dizziness, drowsiness, muscle weakness and delirium, central depression, coma, seizures and behavioural changes. Secondary respiratory depression and failure, as well as low blood pressure and irregular heart rhythms, may follow. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headacheand dizziness, slowing of reflexes, fatigue and inco-ordination. The odour of isopropanol may give some warning of exposure, but odour fatigue may occur. Inhalation of isopropanol may produce irritation of the nose and throat with sneezing, sore throat and runny nose.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).Isopropanol vapour may cause mild eye irritation at 400 parts per million. Splashes may cause severe eye irritation, possible burns to the cornea and eye damage. Eye contact may cause tearing and blurring of vision.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents. Long term, or repeated exposure of isopropanol may cause inco-ordination and tiredness. Repeated inhalation exposure to isopropanol may produce sleepiness, inco-ordination and liver degeneration. Animal data show developmental effects only at exposure levels that produce toxic effects in adult animals. Isopropanol does not cause genetic damage.

Whiteboard ink	TOXICITY	IRRITATION
	Not data available	Not data available
Propane-1,2-diol	TOXICITY	IRRITATION
	Oral(rat)LD50: >22000 mg/kg[1] Inhalation(rat)LC50: >44.9 mg/L4h[1] Dermal(rabbit)LD50: >2000 mg/kg[1]	Eye:no adverse effect observed(not irritating)(Draize) Skin:no adverse effect observed(not irritating)(Draize)
Polyethylene glycol	TOXICITY	IRRITATION
	Oral(rat) LD50: >2000 mg/kg [1] Dermal(rat) LD50: >2000 mg/kg [1]	Skin (rabbit):non-irritating(Draize) Eye (rabbit):non-irritating (Draize)

Ethanol	**TOXICITY**	**IRRITATION**
	Inhalation(rat)LC50:>82.1-92.6 mg/L 6h[1] Inhalation(rat)LC50:>115.9-133.8 mg/L 4h[1] Inhalation(mouse) LC50:>60000 ppm 1h[1] Oral(mouse) LD50:>8300 mg/kg[1]	Skin(rabbit):non-irritating(Draize) Eye(rabbit):slight irritation(50% concentration)(Draize)
Sucrose stearate	**TOXICITY**	**IRRITATION**
	Oral(mouse)LD50:>28915 mg/kg[2] Oral(rat)LD50:>22000 mg/kg[2] Oral(rabbit)LD50:>14000 mg/kg[2] Dermal(rat)LD50:>2000 mg/kg[2]	Not data available
Isopropanol	**TOXICITY**	**IRRITATION**
	Oral(mouse)LD50:5840 mg/kg[1] Inhalation(rabbit)LC50:10000 ppm 6h[1] Dermal (rat) LD50:16.4 ml/kg[1]	Skin:no adverse effect observed (not irritating)(Draize) Eye(rabbit): Causes serious eye irritation(Draize)
C.I.Pigment Red 122	**TOXICITY**	**IRRITATION**
	Oral(rat)LD50:>2000 mg/kg[1] Inhalation(rat)LC50:>3.055 mg/L 4h[1] Dermal (rat)LD50:>3000 mg/kg[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
C.I. Pigment Yellow 110	**TOXICITY**	**IRRITATION**
	Oral(rat)LD50:>2000 mg/kg[1] Dermal(rat)LD50:>3000 mg/kg[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
C.I. Pigment Blue 60	**TOXICITY**	**IRRITATION**
	Oral(rat)LD50:>5000 mg/kg[1] Inhalation(rat)LC50:>3.055 mg/L 4h[1] Dermal(rat)LD50:>1050 mg/kg[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
Pigment Red 254	**TOXICITY**	**IRRITATION**
	Oral(rat)LD50:>5000 mg/kg[1] Inhalation(rat)LC50:>2.25 mg/L[1] Dermal(rat)LD50:>2000 mg/kg[1]	Eye:no adverse effect observed(not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
C.I. Pigment Blue 15	**TOXICITY**	**IRRITATION**
	Dermal(rat)LD50:>5000 mg/kg[1] Oral(rat) LD50:>6400 mg/kg[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
C.I. Pigment Brown 25	**TOXICITY**	**IRRITATION**
	Dermal(rat) LD50:>2000 mg/kg[1] Oral(rat)LD50:>2000 mg/kg[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
Carbon black	**TOXICITY**	**IRRITATION**
	Dermal(rabbit)LD50: >3000 mg/kg[2] Oral(rat)LD50:>8000 mg/kg[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
C.I.Pigment Green 36	**TOXICITY**	**IRRITATION**
	Oral(mouse)LD50:>16000 mg/kg[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
C.I.Pigment Violet 19	**TOXICITY**	**IRRITATION**
	Oral(rat)LD50:>10000 mg/kg[2] Inhalation(rat)LC0:>3.055 mg/L 4h[1]	Eye:no adverse effect observed (not irritating)(Draize) Skin:no adverse effect observed (not irritating)(Draize)
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.Value obtained from manufacturer's SDS.	

11.2 Carcinogenicity

Component	Cas No.	IARC	Component	Cas No.	IARC
Ethanol	64-17-5	1	C.I.Pigment Red 122	980-26-7	Not Listed
Polyethylene glycol	25322-68-3	Not Listed	Pigment Brown 25	6992-11-6	Not Listed
Propane-1,2-diol	57-55-6	Not Listed	C.I. Pigment Blue 15	147-14-8	Not Listed
Isopropanol	67-63-0	3	C.I.Pigment Green 36	14302-13-7	Not Listed
Sucrose stearate	25168-73-4	Not Listed	C.I. Pigment Blue 60	81-77-6	Not Listed
Poly(vinyl butyral)	63148-65-2	Not Listed	Pigment Red 254	84632-65-5	Not Listed
Polyethylene glycol monooleate	9004-96-0	Not Listed	C.I.Pigment Violet 19	1047-16-1	Not Listed
C.I. Pigment Yellow 110	5590-18-1	Not Listed	Carbon black	1333-86-4	2B

Pigment Violet 23	6358-30-1	Not Listed			

11.2.1 Endocrine Disruption Properties

The evidence linking adverse effects to endocrine disruptors is more compelling in the environment than it is in humans. Endocrine disruptors profoundly alter reproductive physiology of ecosystems and ultimately impact entire populations. Some endocrine-disrupting chemicals are slow to break-down in the environment.

That characteristic makes them potentially hazardous over long periods of time. Some well established adverse effects of endocrine disruptors in various wildlife species include; eggshell-thinning, displayed of characteristics of the opposite sex and impaired reproductive development. Other adverse changes in wildlife species that have been suggested, but not proven include; reproductive abnormalities, immune dysfunction and skeletal deformaties.

11.3 Primary irritant effect

Carcinogenicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	**Isopropanol and poly(vinyl butyral):** The substance does meet the criteria for classification and labelling for this endpoint(Category 2:causes serious eye irritation) in accordance with Annex VI of Regulation (EC) No. 1272/2008.
Skin sensitization	Based on available data, the classification criteria are not met.
Respiratory sensitization	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	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

SECTION 12 Ecological information

12.1 Toxicity

Whiteboard ink	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	No data available	No data available	No data available	No data available
Propane-1,2-diol	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	NOEC	168h	Aquatic invertebrates	13020 mg/L
	LC50	96h	Fish	40613 mg/L
	LC50	48h	Fish	18340 mg/L
	EC50	96h	Aquatic algae and cyanobacteria	19000 mg/L
	EC50	48h	Aquatic invertebrates	18340 mg/L
Ethanol	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	14.2-15.4 g/L
	NOEC	120h	Fish	250-1000 mg/L
	NOEC	240h	Aquatic invertebrates	2-9.6 mg/L
	EC50	240h	Aquatic invertebrates	1806 mg/L
	EC50	216h	Aquatic invertebrates	454 mg/L
	EC50	48h	Aquatic invertebrates	10 g/L
	EC50	168h	Aquatic plants other than algae	4.43-5.967 g/L
	NOEC	72h	Aquatic plants other than algae	11.5 mg/L
	EC50	72h	Aquatic algae and cyanobacteria	275 mg/L
Polyethylene glycol	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	100 mg/L
	NOEC	672h	Fish	13.672g/L

	LC50	168h	Fish	1.15g/L
	NOEC	504h	Aquatic invertebrates	17.475g/L
	EC50	192h	Aquatic algae and cyanobacteria	1g/L
	EC50	96h	Aquatic algae and cyanobacteria	100 mg/L
Carbon black	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	>100 mg/L
	EC50	24h	Aquatic invertebrates	>5600 mg/L
	EC50	72h	Aquatic algae and cyanobacteria	>10000 mg/L
Isopropanol	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	9.64-10 g/L
	NOELR	672h	Fish	1g/L
	EC50	24h	Aquatic invertebrates	10g/L
	LC50	24h	Aquatic invertebrates	10g/L
	NOELR	672h	Aquatic invertebrates	1g/L
C.I. Pigment Blue 15	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	EC50	48h	Aquatic invertebrates	500 mg/L
	NOEC	504h	Aquatic invertebrates	1 mg/L
	EC50	72h	Aquatic algae and cyanobacteria	100 mg/L
C.I.Pigment Red 122	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	100 mg/L
	NOEC	672h	Fish	100 mg/L
	EC50	48h	Aquatic invertebrates	100 mg/L
	NOEC	504h	Aquatic invertebrates	20-1000 µg/L
	EC50	72h	Aquatic algae and cyanobacteria	10-100 mg/L
Pigment Brown 25	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	1 mg/L
	EC50	48h	Aquatic invertebrates	100 mg/L
	NOEC	504h	Aquatic invertebrates	1 mg/L
	EC50	72h	Aquatic algae and cyanobacteria	1 mg/L
	NOEC	72h	Aquatic algae and cyanobacteria	1 mg/L

12.2 Persistence and degradability

Component	Cas No.	Persistence (water/soil)
Ethanol	64-17-5	Readily biodegradable in water
Propane-1,2-diol	57-55-6	Readily biodegradable in water
Polyethylene glycol	25322-68-3	Readily biodegradable in water
Isopropanol	67-63-0	Readily biodegradable in water
C.I. Pigment Blue 15	147-14-8	Not biodegradable
C.I. Pigment Yellow 110	5590-18-1	Readily biodegradable in water
C.I.Pigment Red 122	980-26-7	Not biodegradable
C.I.Pigment Green 36	14302-13-7	Poorly biodegradable
C.I. Pigment Blue 60	81-77-6	Not readily biodegradable
Pigment Red 254	84632-65-5	Not inherently biodegradable

C.I.Pigment Violet 19	1047-16-1	Not readily biodegradable
Pigment Brown 25	6992-11-6	Not inherently biodegradable

12.3 Bioaccumulative potential

Component	Cas No.	Bioaccumulative potential	Remarks
Ethanol	64-17-5	No potential for bioaccumulation	Log Kow=-0.35
Propane-1,2-diol	57-55-6	No potential for bioaccumulation	Log Kow=-1.07
Isopropanol	67-63-0	Potential for a low bioaccumulation	Log Kow=0.05 BCF=1.015
Polyethylene glycol	25322-68-3	Potential for a low bioaccumulation	Log Kow=-0.698 BCF=3.162
C.I. Pigment Blue 15	147-14-8	No potential for bioaccumulation	Log Kow=-1
C.I. Pigment Yellow 110	5590-18-1	No bioaccumulation potential expected	LogKow=5.2 BCF=1916 dimensionless
C.I.Pigment Red 122	980-26-7	Potential for a low bioaccumulation	Log Kow <3
C.I.Pigment Green 36	14302-13-7	No potential for bioaccumulation	Log Kow=-0.4
C.I. Pigment Blue 60	81-77-6	No bioaccumulation expected	Log Kow=1.78
Pigment Red 254	84632-65-5	No potential for bioaccumulation	Log Kow=2.4-3
C.I.Pigment Violet 19	1047-16-1	Potential for a low bioaccumulation	Log Kow <3
Pigment Brown 25	6992-11-6	No potential for bioaccumulation	Log Kow=1.15

12.4 Mobility in soil

Component	Cas No.	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
Ethanol	64-17-5	Koc=1
Polyethylene glycol	25322-68-3	Koc=1.857
Isopropanol	67-63-0	Koc=3.478
Propane-1,2-diol	57-55-6	Koc=2.9
C.I. Pigment Yellow 110	5590-18-1	Koc=3.089
Pigment Red 254	84632-65-5	Koc=341.5

12.5 Results of PBT and vPvB assessment

PBT	Not Available
vPvB	Not Available

12.6 Endocrine Disruption Properties

The evidence linking adverse effects to endocrine disruptors is more compelling in the environment than it is in humans.

Endocrine disruptors profoundly alter reproductive physiology of ecosystems and ultimately impact entire populations. Someendocrine-disrupting chemicals are slow to break-down in the environment.

That characteristic makes them potentially hazardous over long periods of time. Some well established adverse effects of endocrine disruptors in various wildlife species include; eggshell-thinning, displayed of characteristics of the opposite sex and impaired reproductive development. Other adverse changes in wildlife species that have been suggested, but not proven include; reproductive abnormalities, immune dysfunction and skeletal deformaties.

12.7 Other adverse effects

No further relevant information available.

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. 1. Do not allow wash water from cleaning or process equipment to enter drains. 2. It may be necessary to collect all wash water for treatment before disposal. 3. Recycle wherever possible 4. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

14.1 UN-Number

ADR/RID/ADN, IMDG, IATA	UN1170(Ethanol) UN1219(Isopropanol)

14.2 UN proper shipping name

ADR/RID/ADN, IMDG	Ethanol (ethyl alcohol) mixture Isopropanol mixture
IATA	Ethanol mixture Isopropanol mixture

14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA	
Class	3 Flammable liquids.
Label	3

14.4 Packing group

ADR/RID/ADN, IMDG, IATA	II

14.5 Environmental hazards

Not Applicable

14.6 Special precautions for user

Warning	Flammable liquids
Hazard identification number (Kemler code)	33
EMS Number:	F-E,S-D
Stowage Category	A

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

Not Applicable

14.8 Transport/Additional information

UN "Model Regulation"	UN 1170 Ethanol (ethyl alcohol) mixture, 3, II UN1219 Isopropanol mixture, 3, II

SECTION 15 Regulatory information

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

MAK (German Maximum Workplace concentration)		
64-17-5	Ethanol	5
1333-86-4	Carbon black	3B
Directive 2012/18/EU		
Named dangerous substances -ANNEX I	None of the ingredients is listed	
Other regulations, limitations and prohibitive regulations		

SVHC CandidateList of REACH Regulation Annex XIV Authorisation	None of the ingredients is listed
REACH Regulation Annex XVII Restriction	Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.
REACH Regulation Annex XIV Authorization List	None of the ingredients is listed

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.3 International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS
Propane-1,2-diol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Ethanol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Polyethylene glycol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Sucrose stearate	Listed	Not Listed	Listed	Listed	Listed	Listed	Listed	Listed
Poly(vinyl butyral)	Not Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Polyethylene glycol monooleate	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Isopropanol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
C.I. Pigment Yellow 110	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Pigment Violet 23	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Not Listed
Pigment Brown 25	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
C.I. Pigment Blue 15	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
C.I.Pigment Green 36	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
C.I. Pigment Blue 60	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Pigment Red 254	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
C.I.Pigment Violet 19	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Carbon black	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 United States Toxic Substances Control Act Inventory

【DSL】 Canadian Domestic Substances List

【IECSC】 China Inventory of Existing Chemical Substances

【NZIoC】 New Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECI】 Existing and Evaluated Chemical Substances

【AICS】 Australia Inventory of Chemical Substances

SECTION 16 Other information

16.1 Information on revision

Creation Date	2022/10/25
Revision Date	2022/10/25
Reason for revision	—

16.2 Full text Risk and Hazard codes

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation(inhalation).

H336	May cause drowsiness or dizziness.

16.3 Abbreviations and acronyms

SCL: Specific Concentration limits

ATE: Acute Toxicity Estimates

Cas : Chemical Abstracts Service

PC—TWA: Permissible Concentration-Time Weighted Average

PC—STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

NOEC: No Observed Effect Concentration

NOELR: No Observed Adverse Effect Level

BCF: BioConcentration Factors

ELINCS: European List of Notified Chemical Substances

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

16.4 Further information

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, its amendment Regulation (EU) No 2020/878 and (EC) No 1272/2008.

DISCLAIMER OF LIABILITY:

This Safety Data Sheet (SDS) was prepared according to REACH Regulation The data included was derived from international authoritative data base and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

Safety Data Sheet

Whiteboard ink

Version: 1.1
Creation Date: 2022/10/24
Revision Date: 2022/10/24
Color: black/red/blue/green
Country of Destination: EU
***Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878)**

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

1.1 Product identifier

Product Name	*Whiteboard ink (Black/Red/Blue/Green)*
Synonyms	—
CAS NO.	—
EC NO.	—
Chemical Formula	—

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

Relevant identified uses	*To write*
Uses advised against	—

1.3. Details of the supplier of the safety data sheet

Details of the supplier

Company	CLEVERPATCH PTY LTD
ABN	48 130 866 885
Online	www.cleverpatch.com.au
Email	info@cleverpatch.com.au
Phone	1300 836 522
Fax	1300 244 139
Address	9 Balbu Close, Beresfield, NSW 2322 Australia
Mail	PO Box 7, Hunter Region Mail Centre, NSW 2310 Australia

1.4. Emergency telephone number

Australia 13 11 26 (Poisons Information Centre)

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	 *GHS02* *H225 Flammable liquid and vapour; Category 2*

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008	*The product is classified and labelled according to the CLP regulation*

Hazard pictogram(s)	 GHS02
Signal word	Danger!
Hazard-determining components of labelling	Not Applicable
Hazard statements	H225 Highly flammable liquid and vapour.

2.2.1 Supplementary statement(s))

EUH210	Safety data sheet available on request.

2.3 Precautionary statements

- Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

- Precautionary statement(s) Response

P303+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P370+P378	In case of fire: Use ... to extinguish.

- Precautionary statement(s) Storage

P405	Store locked up.
P403+P235	Store in a well-ventilated place. Keep cool.

- Precautionary statement(s) Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.4 Other hazards

C.I. Pigment Blue 15	Listed in the Europe Regulation (EU) 2018/1881 Specific Requirements for Endocrine Disruptors.
C.I. Pigment Green 7	Listed in the Europe Regulation (EU) 2018/1881 Specific Requirements for Endocrine Disruptors.

SECTION 3 Composition/information on ingredients

3.1 Substances

See 'Composition on ingredients' in Section 3.2

3.2 Mixtures

- Description: Mixture of substances listed.

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC)No 1272/2008 [CLP] and amendments	Nanoform Particle Characteristics	SCL/M-Factor/ATE
Common ingredients on each color					
1.64-17-5 2.200-578-6 3.603-002-00-5 4.Not Available	33.0-35.0	Ethanol	Flam. Liquid. Category 2; H225	Not Applicable	Not Applicable

1.25322-68-3 2.500-038-2 3.Not Available 4.Not Available	10.0	Polyethylene glycol	Not Classified	Not Applicable	Not Applicable
1.57-55-6 2.200-338-0 3.Not Available 4.01-2119456809-23-0179	8.0	Propane-1,2-diol	Not Classified	Not Applicable	Not Applicable
1.25168-73-4 2.246-705-9 3.Not Available 4.Not Available	14.0-15.0	Sucrose stearate	Not Classified	Not Applicable	Not Applicable
1.63148-65-2 2.613-158-6 3.Not Available 4.Not Available	5.0	Poly(vinyl butyral)	Skin irritation Category 2; H315 Eye irritation Category 2A; H319 STOT SE Category 3; H335	Not Applicable	Not Applicable
1.67-63-0 2.200-661-7 3.Not Available 4.Not Available	9.0	Isopropanol	Flam. Liquid Category 2; H225 Eye irritation Category 2A; H319 STOT SE Category 3; H336	Not Applicable	Not Applicable
1.9004-96-0 2.500-015-7 3.Not Available 4.Not Available	16.0	Polyethylene glycol monooleate	Not Classified	Not Applicable	Not Applicable
Additional ingredients on each color					
Black					
1.1333-86-4 2.215-609-9 3.Not Available 4.Not Available	5.0	Carbon black	Not Classified	Not Applicable	Not Applicable
Red					
1.84632-65-5 2.401-540-3 3.Not Available 4.Not Available	6.0	Pigment Red 254	Not Classified	Not Applicable	Not Applicable
Blue					
1.147-14-8 2.205-685-1 3.Not Available 4.Not Available	3.0	C.I. Pigment Blue 15 [e]	Not Classified	Not Applicable	Not Applicable
1.6358-30-1 2.228-767-9 3.Not Available 4.Not Available	1.5	Pigment Violet 23	Not Classified	Not Applicable	Not Applicable
Green					
1.1328-53-6 2. 215-524-7 3.Not Available 4.Not Available	4.0	C.I. Pigment Geen 7 [e]	Not Classified	Not Applicable	Not Applicable
Legend: [e] Substance identified as having endocrine disrupting properties					

SECTION 4 First aid measures

4.1 Description of first aid measures

General advice	Seek medical attention if necessary. Show this Safety Data Sheet (SDS) to the physician present.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically	Periodic medical surveillance should be carried out on persons in occupations exposed to the manufacture or bulk handling of the product and this should include hepatic function tests and urinalysis examination. [ILO Encyclopaedia]
For acute or short term repeatedexposures to ethanol	
1	Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).

2	Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
3	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
4	Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
5	Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.
6	Fructose administration is contra-indicated due to side effects.

For acute or short term repeated exposures to isopropanol

1	Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.
2	Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
3	There are no antidotes. Management is supportive. Treat hypotension with fluids followed by vasopressors.
4	Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes.
5	Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

SECTION 5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	CO_2,powder or water spray.Fight larger fires with water spray or alcohol resistant foam.
Unsuitable extinguishing media	Water with full jet.

5.2 Special hazards arising from the substrate or mixture

May form irritant vapor in air under fire.

5.3 Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus(MSHA/NIOSH approved or equivalent)and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.
4	**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which maybe toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.
4	Avoid contact with skin and eyes.

6.2 Environmental precautions

1	Do not allow to enter sewers/ surface or ground water.
2	Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

1	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
2	Dispose contaminated material as waste according to item 13.
3	Ensure adequate ventilation.

6.4 Reference to other sections

1	See section 7 for information on safe handling.
2	See section 8 for information on personal protection equipment.
3	See section 13 for disposal information.

SECTION 7 Handling and storage

7.1 Precautions for handling

- **Protective measure**

1	Ensure good ventilation/exhaustion at the workplace.
2	Keep receptacles tightly sealed.
3	Keep away from heat and direct sunlight.
4	Prevent formation of aerosols.
5	Avoid contact with skin and eyes.

- **Information about fire - and explosion protection**

1	Keep ignition sources away - Do not smoke.
2	Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms	➢ Keep containers tightly closed. ➢ Keep containers in a dry,cool and well-ventilated place. ➢ Keep away from heat/sparks/open flames/hot surfaces. ➢ Store away from incompatible materials and food stuff containers.
Storage incompatibility	**Isopropanol:** ➢ Forms ketones and unstable peroxides on contact with air or oxygen; the presence of ketones especially methyl ethyl ketone (MEK, 2 butanone) will accelerate the rate of peroxidation; ➢ Reacts violently with strong oxidisers, powdered aluminium (exothermic), crotonaldehyde, diethyl aluminium bromide (ignition), dioxygenyl tetrafluoroborate (ignition/ ambient temperature), chromium trioxide (ignition), potassium-tert-butoxide (ignition), nitroform (possible explosion), oleum (pressure increased in closed container), cobalt chloride, aluminium trilsopropoxide, hydrogen plus palladium dust (ignition), oxygen gas, phosgene, phosgene plus iron salts (possible explosion), sodium dichromate plus sulfuric acid (exothermic/ incandescence), triisobutyl aluminium; ➢ Reacts with phosphorus trichloride forming hydrogen chloride gas; ➢ Attacks some plastics, rubber and coatings;reacts with metallic aluminium at high temperature; ➢ May generate electrostatic charges; ➢ Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates. **Ethanol:** ➢ Are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents; ➢ Reacts, possibly violently, with alkaline metals and alkaline earth metals to produce hydrogen; ➢ React with strong acids, strong caustics, aliphatic amines, isocyanates, acetaldehyde, benzoyl peroxide, chromic acid, chromium oxide,dialkylzincs; ➢ Dichlorine oxide, ethylene oxide, hypochlorous acid, isopropyl chlorocarbonate, lithium tetrahydroaluminate, nitrogen dioxide, pentafluoroguanidine, phosphorus halides, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium; ➢ Should not be heated above 49 deg. C. when in contact with aluminium equipment; ➢ Toxic gases are formed by mixing azo and azido compounds with acids, aldehydes, amides, carbamates, cyanides, inorganic fluorides, Halogenated;organics, isocyanates, ketones, metals, nitrides, peroxides, phenols, epoxides, acyl halides, and strong oxidising or reducing agents; ➢ Flammable gases are formed by mixing azo and azido compounds with alkali metals; ➢ Explosive combination can occur with strong oxidising agents, metal salts, peroxides, and sulfides.

7.3 Specific end use(s)

In addition to use mentioned in the first partz, unforeseen other specific end uses.

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Propane-1,2-diol	Inhalation 10 mg/m³ (Local, Chronic) Inhalation 168 mg/m³ (Systemic, Chronic) Inhalation 10 mg/m³ (Local, Chronic)* Inhalation 50 mg/m³ (Systemic, Chronic)*	260 mg/L (Water (Fresh)) 183 mg/L (Water - Intermittent release) 26 mg/L (Water (Marine)) 572 mg/kg sediment dw (Sediment (Fresh Water)) 57.2 mg/kg sediment dw (Sediment (Marine)) 50 mg/kg soil dw (Soil) 20000 mg/L (STP)
Ethanol	Inhalation 380 mg/m³(Systemic, Chronic) Inhalation 1900 mg/m³ (Local, Acute) Dermal 343 mg/kg bw/day (Systemic, Chronic) Inhalation 114 mg/m³(Systemic, Chronic)* Inhalation 950 mg/m³ (Local, Acute)* Dermal 206 mg/kg bw/day (Systemic, Chronic)* Oral 87 mg/kg bw/day (Systemic, Chronic)*	0.96 mg/L (Water (Fresh)) 2.75 mg/L (Water - Intermittent release) 0.79 mg/L (Water (Marine)) 3.6 mg/kg sediment dw (Sediment (Fresh Water)) 0.63 mg/kg soil dw (Soil) 580 mg/L (STP) 380 - 720 mg/kg food(Secondary poisoning)
Polyethylene glycol	Inhalation 40.2 mg/m³ (Systemic, Chronic) Dermal 112 mg/kg bw/day (Systemic, Chronic) Inhalation 7.14 mg/m³(Systemic, Chronic)* Dermal 40 mg/kg bw/day (Systemic, Chronic)* Oral 40mg/kg bw/day (Systemic, Chronic)*	273 mg/L (Water (Fresh)) 1 mg/L (Water - Intermittent release) 27.3 mg/L (Water (Marine)) 0.01 mg/L (Marinewater - Intermittent release) 1030 mg/kg sediment dw (Sediment (Fresh Water)) 103 mg/kg sediment dw (Sediment (Marine)) 46.4 mg/kg soil dw (Soil)
Carbon black	Inhalation 1mg/m³(Systemic, Chronic) Inhalation 0.06 mg/m³ (Systemic, Chronic) *	50 mg/L (Water (Fresh))
Isopropanol	Inhalation 500 mg/m³ (Systemic, Chronic) Inhalation 1000 mg/m³ (Systemic,Acute) Dermal 888 mg/kg bw/day (Systemic, Chronic) Inhalation 89 mg/m³ (Systemic, Chronic)* Inhalation 178 mg/m³ (Systemic,Acute)* Dermal 319 mg/kg bw/day (Systemic, Chronic)* Oral 26 mg/kg bw/day (Systemic, Chronic)* Oral 51 mg/kg bw/day (Systemic, Acute)*	Not data available
Pigment Red 254	Inhalation 0.768mg/m³(Systemic, Chronic) Inhalation 0.042 mg/m³(Local, Chronic) Dermal 3.33mg/kg bw/day (Systemic, Chronic) Inhalation 0.140 mg/m³ (Systemic, Chronic) * Inhalation 0.0075mg/m³(Local, Chronic)* Dermal 1.66mg/kg bw/day (Systemic, Chronic)* Dermal 7.5 µg/cm² (Local, Chronic)* Oral 1.66mg/kg bw/day (Systemic, Chronic)*	499 - 10 000 µg/L (Water (Fresh)) 499 - 10 000 µg/L (Water - Intermittent release) 499 - 10 000 µg/L (Water (Marine)) 1 mg/L (STP) 377-688 mg/kg sediment dw (Sediment (Fresh Water)) 377-688 mg/kg sediment dw (Sediment (Marine)) 1mg/kg soil dw (Soil)
C.I. Pigment Blue 15	Inhalation 10 mg/m³(Local, Chronic)	Not data available
C.I. Pigment Green 7	Inhalation 1.25 mg/m³(Local, Chronic) Inhalation 1.25 mg/m³(Local, Chronic)*	Not data available

* Values for General Population

8.1.1 Occupational Exposure Limits (OEL)

- **Ingredient data**

Ingredient	Country	Limit value - Eight hours	Limit value - Short term
Propane-1,2-diol (particulates)	Ireland	10 mg/m³	Not data available
	Latvia	7 mg/m³	Not data available
	Poland	100 mg/m³	Not data available
	WELs(UK)	10 mg/m³	Not data available
Propane-1,2-diol (total vapour and particulates)	Ireland	150ppm 474 mg/m³	Not data available
	Norway	25ppm 79 mg/m³	Not data available
	WELs(UK)	150ppm 474 mg/m³	Not data available
Polyethylene glycol	Austria	1000 mg/m³ inhalable aerosol	4000 mg/m³ inhalable aerosol
	Denmark	1000 mg/m³	2000 mg/m³
	DFG(Germany)	250 mg/m³ [4]	500 mg/m³ [4][20]
	AGS(Germany)	200 mg/m³ [4][5][20]	400 mg/m³ [4][5][20][30]
	Switzerland	500 mg/m³	Not data available

Ethanol	Belgium	1000ppm 1907mg/m³	Not data available
	Austria	1000ppm 1900mg/m³	2000ppm 3800mg/m³
	Denmark	1000ppm 1900mg/m³	2000ppm 3800mg/m³
	Finland	1000ppm 1900mg/m³	1300ppm 2500mg/m³[H]
	MAK(Germany)	0.3R mg/m³	Not data available
	VLEP (France)	1000ppm 1900mg/m³	5000ppm 9500mg/m³
	AGS(Germany)	200ppm 380mg/m³	800ppm 1520mg/m³[H]
	DFG(Germany)	200ppm 380mg/m³	800ppm 1520mg/m³[H]
	Hungary	1900mg/m³	3800mg/m³[H]
	Ireland	Not data available	1000ppm (15 minutes reference period)
	Latvia	1000 mg/m³	Not data available
	Norway	500ppm 950mg/m³	Not data available
	Poland	1900mg/m³	Not data available
	Romania	1000ppm 1900mg/m³	5000ppm 9500mg/m³[H]
	Spain	Not data available	1000ppm 1910mg/m³
	Sweden	500ppm 1000mg/m³	1000ppm 1910mg/m³[H]
	Switzerland	500ppm 960mg/m³	1000ppm 1920mg/m³
	The Netherlands	260mg/m³(Skin)	1900mg/m³ (Skin)[H]
	WELs(UK)	1000ppm 1920mg/m³	Not data available
Isopropanol	Austria	200ppm 500mg/m³	800ppm 2000mg/m³
	Belgium	200ppm 500mg/m³	400ppm 1000mg/m³[H]
	Denmark	200ppm 490mg/m³	400ppm 980mg/m³
	Finland	200ppm 500mg/m³	250ppm 620mg/m³[H]
	VLEP (France)	Not data available	400ppm 980mg/m³
	AGS(Germany)	200ppm 500mg/m³	400ppm 1000mg/m³[H]
	DFG(Germany)	200ppm 500mg/m³	400ppm 1000mg/m³[H]
	Hungary	500mg/m³ (Skin)[H]	1000mg/m³(Skin)[H]
	Ireland	200ppm	400ppm(15 minutes reference period)
	Latvia	350mg/m³	600mg/m³[H]
	Norway	100ppm 245mg/m³	Not data available
	Poland	900mg/m³	1200mg/m³
	Romania	81ppm 200mg/m³	203ppm 500mg/m³[H]
	Spain	200ppm 500mg/m³	400ppm 1000mg/m³
	Sweden	150ppm 350mg/m³	250ppm 600mg/m³[H]
	Switzerland	200ppm 500mg/m³	400ppm 1000mg/m³
	WELs(UK)	400ppm 999mg/m³	500ppm 1250mg/m³
Carbon black	VLEP (France)	3.5mg/m³	Not data available
	WELs(UK)	3.5mg/m³	7mg/m³
	Belgium	3mg/m³	7mg/m³
	Finland	3.5mg/m³	7mg/m³ 15 minutes average value
	Hungary	3mg/m³ Inhalable fraction	Not data available
	Ireland	3mg/m³ Inhalable fraction	Not data available
	Norway	3.5mg/m³	Not data available

	Poland	4mg/m³ Inhalable fraction	Not data available
	Spain	3.5mg/m³	Not data available
	Sweden	3mg/m³	Not data available
C.I. Pigment Blue 15	Latvia	5mg/m³	Not data available

Remarks: 1.Average molecular weight 200 – 600 2. Inhalable fraction 3. Because formation of a mist is possible, exposure should be minimized for reasons of occupational safety and hygiene. 4.15 minutes average value

- Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
Propane-1,2-diol	30mg/m³	1300mg/m³	7900mg/m³
Ethanol	1800Eppm	3300E*ppm	15000*ppm
Carbon black	9mg/m³	99mg/m³	590mg/m³
Polyethylene glycol	30mg/m³	1300mg/m³	7700mg/m³
Isopropanol	400ppm	2000*ppm	12000*ppm

8.2 Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

8.3 Personal protection equipment

General requirement	
Eye protection	Tightly fitting safety goggles (approved by EN166(EU) or NIOSH(US).
Hand protection	Wear protective gloves(such as butyl rubber, passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.
Respiratory protection	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and body protection	Wear fire/flame resistant/retardant clothing and antistatic boots.
Other protection	No special equipment needed when handling small quantities.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Black/Red/Blue/Green	Viscosity	Dynamic	Not determined
Physical state	Liquid		Kinematic:	Not determined
Odour	Odourless	Vapour density (Air = 1)		Not determined
Odour threshold	Not determined	Density/Relative density		Not determined
pH (as supplied)	Not determined	Decomposition temperature		Not determined
Melting point/freezing point(°C)	Not determined	Particle Size		Not determined
Flash point(Closed cup,°C)	20-22 °C	Vapour pressure (kPa)		Not determined
Flammability	Flammable liquid	Relative vapor density		Not determined
Evaporation rate	Not determined	Partition coefficient n-octanol/ water		Not determined
Upper Explosive Limit (%)	Not determined	Auto-ignition temperature(°C)		Not determined
Lower Explosive Limit (%)	Not determined	Explosive properties		Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.

Self-igniting	Not determined	Oxidising properties	Not determined
Taste	Not determined	Surface Tension (dyn/cm or mN/m)	Not determined
Volatile Component (%vol)	Not determined	Gas group	Not determined
pH as a solution (1%)	Not determined	VOC g/L	Not determined

9.2 Other information

No further relevant information available

SECTION 10 Stability and reactivity

10.1 Stability and reactivity

Reactivity	No further relevant information available.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	No dangerous reactions known.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	See section 7.2.
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

Eye	Direct contact of the eye with ethanol (alcohol) and isopropanol may cause an immediate stinging and burning sensation, with reflex closure of the lid, and a temporary, tearing injury to the cornea together with redness of the conjunctiva. Discomfort may last 2 days but usually the injury heals without treatment. Isopropanol vapour may cause mild eye irritation at 400 parts per million. Splashes may cause severe eye irritation, possible burns to the cornea and eye damage. Eye contact may cause tearing and blurring of vision. There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.
Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Animal testing shows that the most common signs of inhalation overdose is inco-ordination and drowsiness. Aliphatic alcohols with more than 3-carbons cause headache, dizziness, drowsiness, muscle weakness and delirium, central depression, coma, seizures and behavioural changes. Secondary respiratory depression and failure, as well as low blood pressure and irregular heart rhythms, may follow. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. The odour of isopropanol may give some warning of exposure, but odour fatigue may occur. Inhalation of isopropanol may produce irritation of the nose and throat with sneezing, sore throat and runny nose.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence. Swallowing 10 millilitres of isopropanol may cause serious injury; 100 millilitres may be fatal if not properly treated. The adult single lethal dose is approximately 250 millilitres. Isopropanol is twice as poisonous as ethanol, and the effects caused are similar, except that isopropanol does not cause an initial feeling of well-being. Swallowing may cause nausea, vomiting and diarrhea; vomiting and stomach inflammation is more prominent with isopropanol than with ethanol.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents. Repeated inhalation exposure to isopropanol may produce sleepiness, inco-ordination and liver degeneration. Animal data show developmental effects only at exposure levels that produce toxic effects in adult animals. Isopropanol does not cause genetic damage.

Whiteboard ink	**TOXICITY**	**IRRITATION**
	Not data available	Not data available
Propane-1,2-diol	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: >22000 mg/kg[2] Inhalation(rat) LC50: >44.9 mg/L4h[2] Dermal ((rabbit) LD50: > 2000 mg/kg[2]	Eye: no adverse effect observed (not irritating)(Draize) Skin: no adverse effect observed (not irritating)(Draize)
Ethanol	**TOXICITY**	**IRRITATION**
	Inhalation(rat) LC50: > 82.1-92.6 mg/L6h[1] Inhalation(rat) LC50: > 115.9-133.8 mg/L4h[1] Inhalation(mouse) LC50: > 60000ppm/1h[2] Oral (mouse) LD50: > 8300 mg/kg[1]	Skin (rabbit): non-irritating(Draize) Eye (rabbit): slight irritation （50% concentration） (Draize)
Polyethylene glycol	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: > 2000 mg/kg[1] Dermal (rat) LD50: > 2000 mg/kg[2]	Skin (rabbit): non-irritating(Draize) Eye (rabbit): non-irritating (Draize)
Polyethylene glycol monooleate	**TOXICITY**	**IRRITATION**
	Intravenous(mouse) LD50: > 500 mg/kg[2]	Skin (rabbit): mild irritation(Draize) Eye (rabbit): mild irritation(Draize)
Sucrose stearate	**TOXICITY**	**IRRITATION**
	Oral(mouse)LD50: > 28,915 mg/kg [2] Oral (rat) > 22,000 mg/kg[2] Oral(rabbit) > 14,000 mg/kg[2] Dermal (rat) LD50: >2000 mg/kg[2]	Not data available
Isopropanol	**TOXICITY**	**IRRITATION**
	Oral(mouse)LD50: 5840 mg/kg[2] Inhalation(rabbit) LC50: 10000ppm 6h[2] Dermal (rat) LD50: 16.4 ml/kg[2]	Skin: no adverse effect observed (not irritating)(Draize) Eye(rabbit): Causes serious eye irritation(Draize)
Carbon black	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: >3000 mg/kg[2] Oral (rat) LD50; >8000 mg/kg[2]	Eye: no adverse effect observed (not irritating)(Draize) Skin: no adverse effect observed (not irritating)(Draize)
Pigment Red 254	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: >5000 mg/kg[1] Inhalation(rat) LC50; >2.25 mg/[2] Dermal (rat) LD50: >2000 mg/kg[2]	Eye: no adverse effect observed (not irritating)(Draize) Skin: no adverse effect observed (not irritating)(Draize)
C.I. Pigment Blue 15	**TOXICITY**	**IRRITATION**
	Dermal (rat) LD50: >5000 mg/kg[2] Oral (rat) LD50: >6400 mg/kg[1]	Eye: no adverse effect observed (not irritating)(Draize) Skin: no adverse effect observed (not irritating)(Draize)
Pigment Violet 23	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: >2000 mg/kg[1]	Not data available
C.I. Pigment Green 7	**TOXICITY**	**IRRITATION**
	Dermal (rat) LD50: >2000 mg/kg[2] Oral (rat) LD50: >5000 mg/kg[1]	Eye: no adverse effect observed (not irritating)(Draize) Skin: no adverse effect observed (not irritating)(Draize)
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.Value obtained from manufacturer's SDS.	

11.2 Carcinogenicity

Component	Cas No.	IARC
Propane-1,2-diol	57-55-6	Not Listed
Ethanol	64-17-5	1
Polyethylene glycol	25322-68-3	Not Listed
Polyethylene glycol monooleate	9004-96-0	Not Listed
Isopropanol	67-63-0	Not Listed
Sucrose stearate	25168-73-4	Not Listed
Poly(vinyl butyral)	63148-65-2	Not Listed
Carbon black	1333-86-4	2B

Pigment Red 254	84632-65-5	Not Listed
C.I. Pigment Blue 15	147-14-8	Not Listed
Pigment Violet 23	6358-30-1	Not Listed
C.I. Pigment Green 7	1328-53-6	Not Listed

11.2.1 Endocrine Disruption Properties

Many chemicals may mimic or interfere with the body s hormones, known as the endocrine system. Endocrine disruptors are chemicals that can interfere with endocrine (or hormonal) systems.

Endocrine disruptors interfere with the synthesis, secretion, transport, binding, action, or elimination of natural hormones in the body. Any system in the body controlled by hormones can be derailed by hormone disruptors. Specifically, endocrine disruptors may be associated with the development of learning disabilities, deformations of the body various cancers and sexual development problems.

Endocrine disrupting chemicals cause adverse effects in animals. But limited scientific information exists on potential health problems in humans. Because people are typically exposed to multiple endocrine disruptors at the same time, assessing public health effects is difficult.

11.3 Primary irritant effect

Carcinogenicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	**Isopropanol and Poly(vinyl butyral) :** The substance does meet the criteria for classification and labelling for this endpoint(Category 2: causes serious eye irritation) in accordance with Annex VI of Regulation (EC) No. 1272/2008.
Skin sensitization	Based on available data, the classification criteria are not met.
Respiratory sensitization	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	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

SECTION 12 Ecological information

12.1 Toxicity

Whiteboard ink	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	Not data available	Not data available	Not data available	Not data available
Propane-1,2-diol	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	NOEC	168h	Aquatic Invertebrates	13020 mg/l
	LC50	96h	Fish	40613 mg/l
	LC50	48h	Fish	18340 mg/l
	EC50	96h	Aquatic algae and cyanobacteria	19000 mg/l
	EC50	48h	Aquatic Invertebrates	18340 mg/l
Carbon black	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	> 100 mg/l
	EC50	24h	Aquatic Invertebrates	> 5600 mg/l
	EC50	72h	Aquatic algae and cyanobacteria	> 10000 mg/l
C.I. Pigment Blue 15	**Endpoint**	**Test Duration (hr)**	**Species**	**Value**
	LC50	96h	Fish	> 100 mg/l
	EC50	48h	Aquatic Invertebrates	> 500 mg/l
	NOEC	504h	Aquatic Invertebrates	1mg/l
	EC50	72h	Aquatic algae and cyanobacteria	> 100 mg/l

	Endpoint	Test Duration (hr)	Species	Value
Ethanol	LC50	96h	Fish	14.2-15.4 g/l
	NOEC	120h	Fish	250-1000 mg/l
	NOEC	240h	Aquatic invertebrates	2-9.6 mg/l
	EC50	240h	Aquatic invertebrates	1836 mg/l
	EC50	216h	Aquatic invertebrates	454 mg/l
	EC50	48h	Aquatic invertebrates	10 g/l
	EC50	168h	Aquatic plants other than algae	4.432 - 5.967 g/l
	NOEC	72h	Aquatic plants other than algae	11.5 mg/l
	EC50	72h	Aquatic algae and cyanobacteria	275 mg/l
	EC50	96h	Aquatic algae and cyanobacteria	675 - 22 000 mg/l
Polyethylene glycol	Endpoint	Test Duration (hr)	Species	Value
	LC50	96h	Fish	> 100mg/l
	NOEC	672h	Fish	13.672 g/l
	LC50	168h	Fish	1.15 g/l
	EC50	48h	Aquatic invertebrates	> 100mg/l
	NOEC	504h	Aquatic invertebrates	17.473 g/l
	EC50	96h	Aquatic algae and cyanobacteria	> 100mg/l
Isopropanol	Endpoint	Test Duration (hr)	Species	Value
	LC50	96h	Fish	9.64-10 g/l
	NOELR	672h	Fish	1 g/l
	LC50	24h	Aquatic invertebrates	10 g/l
	NOELR	504h	Aquatic invertebrates	1 g/l
	NOEC	168h	Aquatic algae and cyanobacteria	1800 mg/l
Pigment Red 254	Endpoint	Test Duration (hr)	Species	Value
	LC50	96h	Fish	> 100 mg/l
	EC50	24h	Aquatic invertebrates	> 100mg/l
	EC50	72h	Aquatic algae and cyanobacteria	> 100mg/l
C.I. Pigment Geen 7	Endpoint	Test Duration (hr)	Species	Value
	LC50	96h	Fish	100 mg/l
	EC50	48h	Aquatic invertebrates	153.6 mg/l
	NOEC	504h	Aquatic invertebrates	1mg/l
	EC50	72h	Aquatic algae and cyanobacteria	100 mg/l

12.2 Persistence and degradability

Component	Cas No.	Persistence (water/soil)
Ethanol	64-17-5	Readily biodegradable in water
Propane-1,2-diol	57-55-6	Readily biodegradable in water
Polyethylene glycol	25322-68-3	Readily biodegradable in water
Isopropanol	67-63-0	Readily biodegradable in water
Pigment Red 254	84632-65-5	Not inherently biodegradable
C.I. Pigment Blue 15	147-14-8	Not biodegradable
C.I. Pigment Green 7	1328-53-6	Not biodegradable

12.3 Bioaccumulative potential

Component	Cas No.	Bioaccumulative potential	Remarks
Ethanol	64-17-5	No potential for bioaccumulation	Log Kow=-0.35
Propane-1,2-diol	57-55-6	No potential for bioaccumulation	Log Kow=-1.07
Isopropanol	67-63-0	Potential for a low bioaccumulation	Log Kow=0.05 BCF=1.015
Polyethylene glycol	25322-68-3	Potential for a low bioaccumulation	Log Kow=-0.698 BCF=3.162
Pigment Red 254	84632-65-5	No potential for bioaccumulation	Log Kow=2.4-3
C.I. Pigment Blue 15	147-14-8	No potential for bioaccumulation	Log Kow=-1
C.I. Pigment Green 7	1328-53-6	No potential for bioaccumulation	Log Kow=-0.4

12.4 Mobility in soil

Component	Cas No.	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
Ethanol	64-17-5	Koc=1
Polyethylene glycol	25322-68-3	Koc=1.857
Isopropanol	67-63-0	Koc=3.478
Propane-1,2-diol	57-55-6	Koc=2.9
Pigment Red 254	84632-65-5	Koc=341.5

12.5 Results of PBT and vPvB assessment

PBT	Not Available
vPvB	Not Available

12.6 Endocrine Disruption Properties

The evidence linking adverse effects to endocrine disruptors is more compelling in the environment than it is in humans.

Endocrine disruptors profoundly alter reproductive physiology of ecosystems and ultimately impact entire populations. Someendocrine-disrupting chemicals are slow to break-down in the environment.

That characteristic makes them potentially hazardous over long periods of time. Some well established adverse effects of endocrine disruptors in various wildlife species include; eggshell-thinning, displayed of characteristics of the opposite sex and impaired reproductive development. Other adverse changes in wildlife species that have been suggested, but not proven include; reproductive abnormalities, immune dysfunction and skeletal deformaties.

12.7 Other adverse effects

No further relevant information available.

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. 1. Do not allow wash water from cleaning or process equipment to enter drains. 2. It may be necessary to collect all wash water for treatment before disposal. 3. Recycle wherever possible 4. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

14.1 UN-Number

ADR/RID/ADN, IMDG, IATA	UN1170 (Ethanol) UN1219 (Isopropanol)

14.2 UN proper shipping name

ADR/RID/ADN, IMDG	Ethanol (ethyl alcohol) mixture Isopropanol mixture
IATA	Ethanol mixture Isopropanol mixture

14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA	
Class	3 Flammable liquids.
Label	3

14.4 Packing group

ADR/RID/ADN, IMDG, IATA	II

14.5 Environmental hazards

Not Applicable

14.6 Special precautions for user

Warning	Flammable liquids
Hazard identification number (Kemler code)	33
EMS Number:	F-E,S-D
Stowage Category	A

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

Not Applicable

14.8 Transport/Additional information

UN "Model Regulation"	UN 1170 Ethanol (ethyl alcohol) mixture, 3, II UN1219 Isopropanol mixture, 3, II

SECTION 15 Regulatory information

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

MAK (German Maximum Workplace concentration)		
64-17-5	Ethanol	5
1333-86-4	Carbon black	3B
Directive 2012/18/EU		
Named dangerous substances -ANNEX I	None of the ingredients is listed	
Other regulations, limitations and prohibitive regulations		
SVHC CandidateList of REACH Regulation Annex XIV Authorisation	None of the ingredients is listed.	
REACH Regulation Annex XVII Restriction	Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.	
REACH Regulation Annex XIV Authorization List	None of the ingredients is listed.	

15.2 Chemical safety assessment

A Chemical Safe Assessment has not been carried out.

15.3 International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS
Propane-1,2-diol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Ethanol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed

Polyethylene glycol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Polyethyleneglycol monooleate	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Sucrose stearate	Listed	Not Listed	Listed	Listed	Listed	Listed	Listed	Listed
Poly(vinyl butyral)	Not Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Isopropanol	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Carbon black	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Pigment Red 254	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
C.I. Pigment Blue 15	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Pigment Violet 23	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Not Listed
C.I. Pigment Green 7	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 United States Toxic Substances Control Act Inventory

【DSL】 Canadian Domestic Substances List

【IECSC】 China Inventory of Existing Chemical Substances

【NZIoC】 New Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECI】 Existing and Evaluated Chemical Substances

【AICS】 Australia Inventory of Chemical Substances

SECTION 16 Other information

16.1 Information on revision

Creation Date	2022/10/24
Revision Date	2022/10/24
Reason for revision	—

16.2 Full text Risk and Hazard codes

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation(inhalation).
H336	May cause drowsiness or dizziness.

16.3 Abbreviations and acronyms

SCL: Specific Concentration limits

ATE: Acute Toxicity Estimates

Cas :Chemical Abstracts Service

PC—TWA: Permissible Concentration-Time Weighted Average

PC—STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

NOEC: No Observed Effect Concentration

NOELR: No Observed Adverse Effect Level

BCF: BioConcentration Factors

ELINCS: European List of Notified Chemical Substances

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

16.4 Further information

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, its amendment Regulation (EU) No 2020/878 and (EC) No 1272/2008.

DISCLAIMER OF LIABILITY:

This Safety Data Sheet (SDS) was prepared according to REACH Regulation The data included was derived from international authoritative data base and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.