

## 151169 Lyreco Permanent Marker B/Tip Blue

Lyreco Group (Lyreco France)

Chemwatch: 4854-13

Version No: 2.1.1.1

Safety Data Sheet (Conforms to Regulations (EC) No 453/2010)

Print Date: 20/11/2013

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S.REACH.GBR.EN

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

#### 1.1. Product Identifier

<b>Product name:</b>	151169 Lyreco Permanent Marker B/Tip Blue
<b>Chemical Name:</b>	Not Applicable
<b>Synonyms:</b>	151205 PK4 Lyreco Perm Marker B/Tip Asstd Col
<b>Proper shipping name:</b>	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (boiling point not more than 35 °C); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C more than 110 kPa, boiling point of more than 35 °C); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C not more than 110 kPa); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)
<b>Chemical formula:</b>	Not Applicable
<b>Other means of identification:</b>	Not Available
<b>CAS number:</b>	Not Applicable
<b>EC number:</b>	Not Applicable
<b>Index number:</b>	Not Applicable
<b>REACH registration number:</b>	Not Applicable

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

<b>Relevant identified uses:</b>	Permanent Marker., NOTE: Information on this SDS refers to ink used in pens and markers, however, it applies to these inks in bulk.
<b>Uses advised against:</b>	Not Applicable

#### 1.3. Details of the supplier of the safety data sheet

<b>Registered company name:</b>	Lyreco Group (Lyreco France)
<b>Address:</b>	Rue du 19 Mars 1962 Marly 59770 France
<b>Telephone:</b>	+33 3 27 23 64 00 (9a.m-5p.m. CET.)
<b>Fax:</b>	Not Available
<b>Website:</b>	Not Available
<b>Email:</b>	Not Available

#### 1.4. Emergency telephone number






<b>Association / Organisation:</b>	Not Available
<b>Emergency telephone numbers:</b>	+33 3 27 23 64 00 (9a.m-5p.m. CET.)
<b>Other emergency telephone numbers:</b>	+33 3 27 23 64 00 (9a.m-5p.m. CET.)

### SECTION 2 Hazards identification

#### 2.1. Classification of the substance or mixture

Considered a dangerous mixture according to Directive 1999/45/EC, Reg.

#### ChemWatch Hazard Ratings

Flammability	3		0 = Minimum 1 = Low 2 = Moderate 3 = High 4 = Extreme
Toxicity	2		
Body Contact	3		
Reactivity	1		
Chronic	2		

#### DSD classification:

In case of mixtures, classification has been prepared by following DPD (Directive 1999/45/EC) and CLP Regulation (EC) No 1272/2008 regulations

#### DPD classification<sup>[1]</sup>:

R11	Highly flammable.
R41	Risk of serious damage to eyes.
R67	Vapours may cause drowsiness and dizziness.
R68(3)	Possible risk of irreversible effects.

**Legend:** 1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

#### Classification according to regulation (EC) No 1272/2008 [CLP]<sup>[1]</sup>:

STOT - SE (Narcosis) Category 3, Germ Cell Mutagen Category 2, Flammable Liquid Category 2, Serious Eye Damage Category 1

**Legend:** 1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

#### 2.2. Label elements

##### CLP label elements



**Signal word:** DANGER

**Hazard statement(s):**

H225	Highly flammable liquid and vapour
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects

**Supplementary statement(s):**

Not Applicable

**Precautionary statement(s): Prevention**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe 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+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor/physician/first aider
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P370+P378	In case of fire: Use... to extinguish.

**Precautionary statement(s): Storage**

P403+P233	Store in a well-ventilated place.
P403+P235	Store in a well-ventilated place.
P405	Store locked up.

**Precautionary statement(s): Disposal**

(null)	(null)
P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

**DSD / DPD label elements**



Relevant risk statements are found in section 2.1

**Indication(s) of danger:** F, Xn

**Safety advice:**

S02	Keep out of reach of children.
S09	Keep container in a well ventilated place.
S13	Keep away from food, drink and animal feeding stuffs.
S16	Keep away from sources of ignition.
S23	Do not breathe gas/fumes/vapour/spray.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S29	Do not empty into drains.
S33	Take precautionary measures against static discharges.
S36	Wear suitable protective clothing.
S37	Wear suitable gloves.
S39	Wear eye/face protection.
S40	To clean the floor and all objects contaminated by this material, use water and detergent.
S41	In case of fire and/or explosion, DO NOT BREATHE FUMES.
S43	In case of fire use...
S46	If swallowed, seek medical advice immediately and show this container or label.
S51	Use only in well ventilated areas.
S56	Dispose of this material and its container at hazardous or special waste collection point.

S64 If swallowed, rinse mouth with water (only if the person is conscious).

### 2.3. Other hazards

Inhalation, skin contact and/or ingestion may produce health damage\*.

May produce discomfort of the respiratory system and skin\*.

Limited evidence of a carcinogenic effect\*.

Cumulative effects may result following exposure\*.

Repeated exposure potentially causes skin dryness and cracking\*.

### C.I. Solvent Blue 4

Listed in the European Chemicals Agency (ECHA) Candidate List of Substances of Very High Concern for Authorisation

## SECTION 3 Composition / information on ingredients

### 3.1. Substances

See 'Composition on ingredients' in Section 3.2

### 3.2. Mixtures

1. CAS No 2. EC No 3. Index No 4. REACH No	%[weight]	Name	Classification according to directive 67/548/EEC [DSD]	Classification according to regulation (EC) No 1272/2008 [CLP]
1. 71-23-8 2. 200-746-9 3. 603-003-00-0 4. 01-2119486761-29-XXXX	>50	<a href="#">n-propanol</a>	R11, R41, R67 <sup>[2]</sup>	Flam. , Eye Dam. , STOT SE 3; H225, H318, H336 <sup>[3]</sup>
1. 298-07-7 2. 206-056-4 3. Not Available 4. Not Available	<2.5	<a href="#">di(2-ethylhexyl) acid phosphate</a>	R68(3), R63(3), R34, R21, R53, R41 <sup>[1]</sup>	Germ Cell Mutagen Category 2, Reproductive Toxicity Category 2, Chronic Aquatic Hazard Category 4, Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Category 1B, Metal Corrosion Category 1, Serious Eye Damage Category 1; H341, H361, H413, H312, H314, H290, H318 <sup>[1]</sup>
1. 6786-83-0 2. 229-851-8 3. Not Available 4. 01-2119950688-22-XXXX	<2.5	<a href="#">C.I. Solvent Blue 4</a>	Not Applicable	Not Applicable

**Legend:** 1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

## SECTION 4 First aid measures

### 4.1. Description of first aid measures

#### General:

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.
- **If swallowed do NOT induce vomiting.**
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

To treat poisoning by the higher aliphatic alcohols (up to C7):

- Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.
- Oxygen and artificial respiration as needed.
- Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.
- To protect the liver, maintain carbohydrate intake by intravenous infusions of glucose.
- Haemodialysis if coma is deep and persistent. [GOSSELIN, SMITH HODGE: Clinical Toxicology of Commercial Products, Ed 5]

#### ----- BASIC TREATMENT -----

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- Monitor and treat, where necessary, for shock.
- Monitor and treat, where necessary, for pulmonary oedema.
- Anticipate and treat, where necessary, for seizures.
- **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Give activated charcoal.

#### ----- ADVANCED TREATMENT -----

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- If the patient is hypoglycaemic (decreased or loss of consciousness, tachycardia, pallor, dilated pupils, diaphoresis and/or dextrose strip or glucometer readings below 50 mg), give 50% dextrose.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

#### ----- EMERGENCY DEPARTMENT -----

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and

magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.

- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- Acidosis may respond to hyperventilation and bicarbonate therapy.
- Haemodialysis might be considered in patients with severe intoxication.
- Consult a toxicologist as necessary. BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For C8 alcohols and above. Symptomatic and supportive therapy is advised in managing patients. If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

#### Eye Contact:

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### Skin Contact:

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

#### Inhalation:

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

#### Ingestion:

- **If swallowed do NOT induce vomiting.**
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

## 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

To treat poisoning by the higher aliphatic alcohols (up to C7):

- Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.
- Oxygen and artificial respiration as needed.
- Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.
- To protect the liver, maintain carbohydrate intake by intravenous infusions of glucose.
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- Anticipate and treat, where necessary, for seizures.
- **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Give activated charcoal.

#### ADVANCED TREATMENT

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- If the patient is hypoglycaemic (decreased or loss of consciousness, tachycardia, pallor, dilated pupils, diaphoresis and/or dextrose strip or glucometer readings below 50 mg), give 50% dextrose.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

#### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
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- Acidosis may respond to hyperventilation and bicarbonate therapy.
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- Consult a toxicologist as necessary. BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For C8 alcohols and above.

Symptomatic and supportive therapy is advised in managing patients.

## SECTION 5 Firefighting measures

### 5.1. Extinguishing media

- Alcohol stable foam.

## 5.2. Special hazards arising from the substrate or mixture

### Fire Incompatibility:

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

## 5.3. Advice for firefighters

### Fire Fighting:

- Alert Fire Brigade and tell them location and nature of hazard.

### Fire/Explosion Hazard:

- Liquid and vapour are flammable.

## SECTION 6 Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

See section 8

### 6.2. Environmental precautions

See section 12

### 6.3. Methods and material for containment and cleaning up

#### Minor Spills:

- Remove all ignition sources.

#### Major Spills:

- Clear area of personnel and move upwind.

### 6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

#### Safe handling

- **DO NOT**

#### Fire and explosion protection

See section 5

#### Other information

- Store in original containers in approved flammable liquid storage area.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Suitable container:

- Packing as supplied by manufacturer.

#### Storage incompatibility:

Alcohols

#### Package Material Incompatibilities:

### 7.3. Specific end use(s)

See section 1.2

## SECTION 8 Exposure controls / personal protection

### 8.1. Control parameters

#### Derived No Effect Level (DNEL)

Exposure Pattern	Workers	General Population
Long term - dermal, systemic effects	Not Available	Not Available
Long term - inhalation, systemic effects	Not Available	Not Available
Long term - oral, systemic effects	Not Available	Not Available
Long term - dermal, local effects	Not Available	Not Available
Long term - inhalation, local effects	Not Available	Not Available
Short term - dermal, systemic effects	Not Available	Not Available
Short term - inhalation, systemic effects	Not Available	Not Available
Short term - oral, systemic effects	Not Available	Not Available
Short term - dermal, local effects	Not Available	Not Available
Short term - inhalation, local effects	Not Available	Not Available

#### Predicted No Effect Level (PNEC)

Compartment	Value
Fresh Water	Not Applicable
Marine Water	Not Applicable
Aqua	Not Applicable
Fresh water sediment	Not Applicable
Marine water sediment	Not Applicable
Soil	Not Applicable
STP	Not Applicable
ORAL	Not Applicable

#### Occupational Exposure Limits (OEL)

INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits (WELs)	n-propanol	Propan-1-ol	500 (mgm3) / 200 (ppm)	625 (mgm3) / 250 (ppm)	Not Available	Sk
Emergency Limits						
Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3		
n-propanol	200(ppm)	250(ppm)	250(ppm)	800(ppm)		
di(2-ethylhexyl) acid phosphate	0.02(ppm)	0.06(ppm)	0.4(ppm)	2(ppm)		
Ingredient	Original IDLH		Revised IDLH			
n-propanol	4,000(ppm)		800(ppm)			

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.

### 8.2.2. Personal protection



#### Eye and face protection:

- Safety glasses with side shields.

#### Skin protection:

See Hand protection below

#### Hand protection:

- Wear chemical protective gloves, e.g. PVC.

#### Body protection:

See Other protection below

#### Other protection:

- Overalls.

#### Thermal hazards:

#### Recommended material(s):

##### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: 151169 Lyreco Permanent Marker B/Tip Blue

Material	CPI
NEOPRENE	A
NEOPRENE/NATURAL	A
NITRILE	A
NITRILE+PVC	A
TEFLON	A
VITON	B

\* CPI - Chemwatch Performance Index

#### Respiratory protection:

Type AB-P Filter of sufficient capacity.

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	Air-line*	AB-2 P2	AB-PAPR-2 P2 ^
up to 20 x ES	-	AB-3 P2	-
20+ x ES	-	Air-line**	-

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

### 8.2.3. Environmental exposure controls

See section 12

## SECTION 9 Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Blue flammable liquid with a characteristic odour; does not mix with water.

Physical state	Liquid	Relative density (Water = 1)	0.84
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	360
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	4
Initial boiling point and boiling range (°C)	96	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	21	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	13.5	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	2.1	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	1.9 @ 20C	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	Not Available		

### 9.2. Other information

Not Available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity:

See section 7.2

### 10.2. Chemical stability:

- Presence of incompatible materials.

### 10.3. Possibility of hazardous reactions:

See section 7.2

### 10.4. Conditions to avoid:

See section 7.2

### 10.5. Incompatible materials:

See section 7.2

### 10.6. Hazardous decomposition products:

See section 5.3

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

#### Inhaled:

Inhalation of vapours may cause drowsiness and dizziness.

#### Ingestion:

Effects on the nervous system characterise over-exposure to higher aliphatic alcohols.

#### Skin Contact:

Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

#### Eye:

When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.

#### Chronic:

Strong evidence exists that the substance may cause irreversible but non-lethal mutagenic effects following a single exposure.

TOXICITY	IRRITATION
<b>151169 Lyreco Permanent Marker B/Tip Blue</b>	
Not Available	Not Available
<b>n-propanol</b>	
Dermal (rabbit) LD50: 5040 mg/kg	Eye (rabbit): 20 mg/24h moderate
Oral (rat) LD50: 1870 mg/kg	Eye (rabbit): 4 mg open SEVERE
	Skin (rabbit): 20 mg/24h moderate
	Skin (rabbit): 500 mg open mild
Not Available	Not Available
<b>di(2-ethylhexyl) acid phosphate</b>	
Dermal (rabbit) LD50: 1250 mg/kg	Eye (rabbit): 0.25 mg/24h-SEVERE
Intraperitoneal (rabbit) LD50: 50 mg/kg	Eye (rabbit): 5 mg - moderate
Oral (rat) LD50: 4940 mg/kg	Skin (rabbit): 5 mg/24h - SEVERE
	Skin (rabbit):500 mg(open)-mod
Not Available	Not Available
<b>C.I. Solvent Blue 4</b>	
Not Available	Not Available

\* Value obtained from manufacturer's msds

### N-PROPANOL

The material may produce severe irritation to the eye causing pronounced inflammation.

### 151169 Lyreco Permanent Marker B/Tip Blue, DI(2-ETHYLHEXYL) ACID PHOSPHATE, C.I. SOLVENT BLUE 4

No significant acute toxicological data identified in literature search.

<b>Acute Toxicity:</b>	Not Applicable	<b>Carcinogenicity:</b>	Not Applicable
<b>Skin Irritation/Corrosion:</b>	Not Applicable	<b>Reproductivity:</b>	Not Applicable
<b>Serious Eye Damage/Irritation:</b>	Serious Eye Damage Category 1	<b>STOT - Single Exposure:</b>	STOT - SE (Narcosis) Category 3
<b>Respiratory or Skin sensitisation:</b>	Not Applicable	<b>STOT - Repeated Exposure:</b>	Not Applicable
<b>Mutagenicity:</b>	Germ Cell Mutagen Category 2	<b>Aspiration Hazard:</b>	Not Applicable

### CMR STATUS

## SECTION 12 Ecological information

### 12.1. Toxicity

**DO NOT**

### 12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

### 12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

### 12.4. Mobility in soil

Ingredient	Mobility
Not Available	Not Available



## 12.5. Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT and vPvB Criteria fulfilled?	Not Available	Not Available	Not Available

## 12.6. Other adverse effects

No data available

## SECTION 13 Disposal considerations

### 13.1. Waste treatment methods

#### Product / Packaging disposal:

- Recycle wherever possible or consult manufacturer for recycling options.

#### Waste treatment options:

#### Sewage disposal options:

No relevant data

## SECTION 14 Transport information

### Labels Required:



### Marine Pollutant: NO

HAZCHEM: •3YE; •3Y

### Land transport (ADR)

14.1. UN number	1263	14.4. Packing group	III										
14.2. UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (boiling point not more than 35 °C); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C more than 110 kPa, boiling point of more than 35 °C); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C not more than 110 kPa); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)	14.5. Environmental hazard	No relevant data										
14.3. Transport hazard class(es)	Class: 3 Subrisk:	14.6. Special precautions for user	<table border="1"> <tbody> <tr> <td>Hazard identification (Kemler)</td> <td>33; 30</td> </tr> <tr> <td>Classification code</td> <td>F1</td> </tr> <tr> <td>Hazard Label</td> <td>3</td> </tr> <tr> <td>Special provisions</td> <td>163 640F 650; 163 640H 650; 163 640E 650; 163 640G 650</td> </tr> <tr> <td>limited quantity</td> <td>5 L</td> </tr> </tbody> </table>	Hazard identification (Kemler)	33; 30	Classification code	F1	Hazard Label	3	Special provisions	163 640F 650; 163 640H 650; 163 640E 650; 163 640G 650	limited quantity	5 L
Hazard identification (Kemler)	33; 30												
Classification code	F1												
Hazard Label	3												
Special provisions	163 640F 650; 163 640H 650; 163 640E 650; 163 640G 650												
limited quantity	5 L												
<b>Air transport (ICAO-IATA / DGR)</b>													
14.1. UN number	1263	14.4. Packing group	III										
14.2. UN proper shipping name	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material (including paint thinning or reducing compounds)	14.5. Environmental hazard	No relevant data										



14.3. Transport hazard class(es)	ICAO/IATA Class: 3	14.6. Special precautions for user	Special provisions: A3A72
	ICAO / IATA Subrisk:		Cargo Only Packing Instructions: 366
	ERG Code: 3L		Cargo Only Maximum Qty / Pack: 220 L
			Passenger and Cargo Packing Instructions: 355
			Passenger and Cargo Maximum Qty / Pack: 60 L
			Passenger and Cargo Limited Quantity Packing Instructions: Y344
			Passenger and Cargo Maximum Qty / Pack: 10 L

#### Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1263	14.4. Packing group	III
14.2. UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	14.5. Environmental hazard	No relevant data
14.3. Transport hazard class(es)	IMDG Class: 3 IMDG Subrisk:	14.6. Special precautions for user	EMS Number: F-E,S-E Special provisions: 163 223 955 Limited Quantities: 5 L

#### Inland waterways transport (ADN)

14.1. UN number	1263	14.4. Packing group	III
14.2. UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C more than 110 kPa , boiling point of more than 35° C).; PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C not more than 110 kPa).; PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound) (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (boiling point not more than 35° C).	14.5. Environmental hazard	No relevant data
14.3. Transport hazard class(es)	3:	14.6. Special precautions for user	Classification code: C9; F1 Limited quantity: 5 L Equipment required: PP, EP; PP, EX, A Fire cones number: 0

14.3. Transport hazard class(es)	3:	14.6. Special precautions for user	Classification code: C9; F1 Limited quantity: 5 L Equipment required: PP, EP; PP, EX, A Fire cones number: 0
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#### Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Source	Ingredient	Pollution Category	Residual Concentration - Outside Special Area (% w/w)	Residual Concentration
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances	n-propanol	Not Available	Not Available	Not Available

## SECTION 15 Regulatory information

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

#### n-propanol(71-23-8) is found on the following regulatory lists

"IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "FisherTransport Information", "Sigma-AldrichTransport Information", "IOFI Global Reference List of Chemically Defined Substances", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals", "IMO IBC Code Chapter 17: Summary of minimum requirements", "UK Workplace Exposure Limits (WELs)", "Europe ECHA Registered Substances - Classification and Labelling - DSD-DPD", "European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Dangerous Substances - updated by ATP: 31", "Europe European Commission Database of flavouring substances", "EU list of flavouring substances which can be used in food -Regulation EU 872/2012", "Europe Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food - Annex I: Substances", "European Chemical Agency (ECHA) Classification & Labelling Inventory - Notified classification and labelling according to CLP criteria", "European Union (EU) Inventory of Ingredients used in Cosmetic Products", "European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI", "Europe Substances Listed in EU Directives on Plastics in Contact with Food", "European Chemical Agency (ECHA) Classification & Labelling Inventory - Chemwatch Harmonised classification", "Europe European Chemicals Agency (ECHA) REACH Registration Numbers", "Europe European Chemicals Agency (ECHA) List of substances identified

for registration in 2010", "Europe European Chemicals Agency (ECHA) List of Registered Phase-in Substances", "Europe European Chemicals Agency (ECHA) List of Registered Substances", "Europe ECHA Registered Substances - Classification and Labelling - GHS", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "International Maritime Dangerous Goods Requirements (IMDG Code)", "UK Dangerous Goods Emergency Action Code List 2013", "ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways", "EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "European Union (EU) Directive 2012/18/EU of 4 July 2012 on the control of major-accident hazards involving dangerous substances", "UK The Environmental Protection (Prescribed Processes and Substances) Regulations 1991 - Release into Land Prescribed Substances", "European Union (EU) Directive 2008/1/EC concerning integrated pollution prevention and control, Annex III", "OSPAR National List of Candidates for Substitution – Norway"

#### di(2-ethylhexyl) acid phosphate(298-07-7) is found on the following regulatory lists

"GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "FisherTransport Information", "Sigma-AldrichTransport Information", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals", "IMO IBC Code Chapter 17: Summary of minimum requirements", "European Chemical Agency (ECHA) Classification & Labelling Inventory - Notified classification and labelling according to CLP criteria", "European Chemical Agency (ECHA) Classification & Labelling Inventory - Chemwatch Harmonised classification", "Europe ECHA Substances identified by industry to be registered by 31 May 2013", "Europe European Chemicals Agency (ECHA) List of Registered Substances", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "International Maritime Dangerous Goods Requirements (IMDG Code)", "UK Dangerous Goods Emergency Action Code List 2013", "ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways", "UK The Environmental Protection (Prescribed Processes and Substances) Regulations 1991 - Release into Air Prescribed Substances"

#### C.I. Solvent Blue 4(6786-83-0) is found on the following regulatory lists

"International Chemical Secretariat (ChemSec) SIN List (\*Substitute It Now!)", "European Chemical Agency (ECHA) Classification & Labelling Inventory - Notified classification and labelling according to CLP criteria", "Europe ECHA Annex XV dossiers submitted - Registry of submitted SVHC proposal intentions", "European Chemical Agency (ECHA) Classification & Labelling Inventory - Chemwatch Harmonised classification", "Europe European Chemicals Agency (ECHA) Candidate List of Substances of Very High Concern for Authorisation", "EU REACH Regulation (EC) No 1907/2006 - Proposals to identify Substances of Very High Concern: Annex XV reports for commenting by Interested Parties", "Europe European Chemicals Agency (ECHA) REACH Registration Numbers", "Europe European Chemicals Agency (ECHA) List of substances identified for registration in 2010", "Europe ECHA Substances identified by industry to be registered by 31 May 2013", "Europe European Chemicals Agency (ECHA) List of Registered Substances"

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : 67/548/EEC, 1999/45/EC, 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Regulation (EU) No 453/2010, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and their amendments as well as the following British legislation: - The Control of Substances Hazardous to Health Regulations (COSHH) 2002 - COSHH Essentials - The Management of Health and Safety at Work Regulations 1999

## 15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

### ECHA SUMMARY

Ingredient	CAS number	Index No	ECHA Dossier
n-propanol	71-23-8	603-003-00-0	01-2119486761-29-XXXX
Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
2	Flam. Liq. 2, Eye Dam. 1, STOT SE 3, Acute Tox. 4, Flam. Liq. 3, Not Classified	GHS02, GHS05, Dgr, GHS08	H225, H318, H336, H302, H335
1	Flam. Liq. 2, Eye Dam. 1, STOT SE 3	GHS02, GHS05, Dgr	H225, H318, H336
Ingredient	CAS number	Index No	ECHA Dossier
di(2-ethylhexyl) acid phosphate	298-07-7	Not Available	Not Available
Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 4, Skin Corr. 1B	GHS05, Dgr	H332, H314
2	Acute Tox. 4, Skin Corr. 1B, Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3, Not Classified, STOT SE 3, Eye Irrit. 2, Skin Corr. 1A, Met. Corr. 1, Skin Corr. 1C	GHS05, Dgr, Wng	H332, H314, H302, H312, H318, H412, H335, H290
Ingredient	CAS number	Index No	ECHA Dossier
C.I. Solvent Blue 4	6786-83-0	Not Available	01-2119950688-22-XXXX
Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 4	GHS07, Wng	H302, H332
2	Acute Tox. 4, Not Classified, Muta. 2, Carc. 1B, Aquatic Chronic 1, Flam. Liq. 2, Skin Sens. 1, Aquatic Acute 1, Acute Tox. 3, Carc. 2, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Carc. 1A	Wng, GHS08, Dgr, GHS09, GHS02, GHS06	H332, H341, H350, H410, H225, H317, H301, H315, H319, H335

## SECTION 16 Other information

### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

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