

# SAFETY DATA SHEETS

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0

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## 1. Identification

### 1.1 GHS Product identifier

Product name Marker Ink

### 1.2 Other means of identification

Product number INP777-light violet

Other names Ethanol

### 1.3 Recommended use of the chemical and restrictions on use

Identified uses Preparation for writing instruments.Solvent

Uses advised against no data available

### 1.4 Supplier's details

Company Officeworks Ltd

Address 236-262 East Boundary Road,Bentleigh East VIC 3165, Australia

Telephone 1300 633 423

ABN 36 004 763 526

### 1.5 Emergency phone number

Emergency phone number POISONS INFORMATION CENTRE 13 11 26

Service hours

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## 2. Hazard identification

### 2.1 Classification of the substance or mixture

Flammable liquids, Category 2

Skin sensitization, Category 1

Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1

### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Danger

<b>Hazard statement(s)</b>	<p>H225 Highly flammable liquid and vapour</p> <p>H317 May cause an allergic skin reaction</p> <p>H400 Very toxic to aquatic life</p>
<b>Precautionary statement(s)</b>	
<b>Prevention</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof [electrical/ventilating/lighting/...] equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p>
<b>Response</b>	<p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].</p> <p>P370+P378 In case of fire: Use ... to extinguish.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water/...</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P321 Specific treatment (see ... on this label).</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p>
<b>Storage</b>	P403+P235 Store in a well-ventilated place. Keep cool.
<b>Disposal</b>	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

## 2.3 Other hazards which do not result in classification

no data available

## 3. Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Ethanol	Ethanol	64-17-5	200-578-6	54.94%
1-methoxypropan-2-ol	Propylene glycol monomethyl ether	107-98-2	203-539-1	35%
Resin acids and Rosin acids	rosin resin	73138-82-6	277-299-1	10%
9-[2-(ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride	Basic Red 1	989-38-8	213-584-9	0.05%
[4-[4-(diethylamino)- $\alpha$ -[4-(ethylamino)-1-naphthyl]benzylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium chloride	Basic blue 7	2390-60-5	219-232-0	0.01%

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## 4. First-aid measures

### 4.1 Description of necessary first-aid measures

#### General advice

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

#### If inhaled

Fresh air, rest.

#### Following skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap.

#### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

#### Following ingestion

Rinse mouth. Refer for medical attention .

### 4.2 Most important symptoms/effects, acute and delayed

Excerpt from ERG Guide 127 [Flammable Liquids (Water-Miscible)]: Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control may cause pollution. (ERG, 2016)

VAPOR: Irritating to eyes, nose and throat. LIQUID: Not harmful. (USCG, 1999)

SYMPTOMS: Symptoms of exposure to this compound may include irritation. Ingestion may result in mucous membrane irritation. Eye contact may cause immediate pain and conjunctival hyperemia, but no serious injury. ACUTE/CHRONIC HAZARDS: This compound may cause local irritation. It may also cause mucous membrane irritation. When heated to decomposition it emits acrid smoke and fumes.

#### **4.3 Indication of immediate medical attention and special treatment needed, if necessary**

Emergency and supportive measures: 1. Acute intoxication. Treatment is mainly supportive. a. Protect the airway to prevent aspiration and intubate and assist ventilation if needed. b. Give glucose and thiamine, and treat coma and seizures if they occur. Glucagon is not effective for alcohol-induced hypoglycemia. c. Correct hypothermia with gradual rewarming. d. Most patients will recover within 4-6 hours. Observe children until their blood alcohol level is below 50 mg/dL and there is no evidence of hypoglycemia. 2. Alcoholic ketoacidosis. Treat with volume replacement, thiamine, and supplemental glucose. Most patients recover rapidly. 3. Alcohol withdrawal. Treat with benzodiazepines.

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### **5. Fire-fighting measures**

#### **5.1 Extinguishing media**

**Suitable extinguishing media**

If material on fire or involved in fire: Do not extinguish fire unless flow can be stopped. Use water in flooding quantities as fog. Solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water. Apply water from as far a distance as possible. Use "alcohol" foam, dry chemical or carbon dioxide.

#### **5.2 Specific hazards arising from the chemical**

Excerpt from ERG Guide 127 [Flammable Liquids (Water-Miscible)]: HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Those substances designated with a (P) may polymerize explosively when heated or involved in a fire. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. (ERG, 2016)

FLAMMABLE. Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. (USCG, 1999)

This chemical is probably combustible.

#### **5.3 Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

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### **6. Accidental release measures**

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

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

## 6.2 Environmental precautions

Ventilation. Remove all ignition sources. Collect leaking and spilled liquid in sealable containers as far as possible. Wash away remainder with plenty of water.

## 6.3 Methods and materials for containment and cleaning up

Land spill: Apply appropriate foam to diminish vapor and fire hazard.

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## 7. Handling and storage

### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

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

Fireproof. Separated from strong oxidants. Keep tightly closed, cool and away from flame.

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## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

Component	Ethanol			
CAS No.	64-17-5			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Australia	1000	1880		
Austria	1000	1900	2000	3800
Belgium	1000	1907		
Canada - Ontario			1000	
Canada - Québec	1000	1880		
Denmark	1000	1900	2000	3800
Finland	1000	1900	1300 (1)	2500 (1)
France	1000	1900	5000	9500
Germany (AGS)	500	960	1000 (1)	1920 (1)
Germany (DFG)	500	960	1000 (1)	1920 (1)
Hungary		1900		7600
Ireland			1000 (1)	
Latvia		1000		
New Zealand	1000	1880		

<b>Component</b>	Ethanol			
<b>CAS No.</b>	64-17-5			
<b>Poland</b>		1900		
<b>Singapore</b>	1000	1880		
<b>South Korea</b>	1000	1900		
<b>Spain</b>			1000	1910
<b>Sweden</b>	500	1000	1000 (1)	1900 (1)
<b>Switzerland</b>	500	960	1000	1920
<b>The Netherlands</b>		260		1900
<b>USA - NIOSH</b>	1000	1900		
<b>USA - OSHA</b>	1000	1900		
<b>United Kingdom</b>	1000	1920		
	<b>Remarks</b>			
<b>Finland</b>	(1) 15 minutes average value			
<b>Germany (AGS)</b>	(1) 15 minutes average value			
<b>Germany (DFG)</b>	(1) 15 minutes average value			
<b>Ireland</b>	(1) 15 minutes reference period			
<b>Sweden</b>	(1) 15 minutes average value			

<b>Component</b>	Propylene glycol monomethyl ether			
<b>CAS No.</b>	107-98-2			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>
<b>Australia</b>	100	369	150	553
<b>Austria</b>	50	187	50	187
<b>Belgium</b>	100	375	150	568
<b>Canada - Ontario</b>	100		150	
<b>Canada - Québec</b>	100	369	150	553
<b>Denmark</b>	50	185	100	370
<b>European Union</b>	100	375	150	563
<b>Finland</b>	100	370	150 (1)	560 (1)
<b>France</b>	50	188	100	375
<b>Germany (AGS)</b>	100	370	200 (1)	740 (1)

<b>Component</b>	Propylene glycol monomethyl ether			
<b>CAS No.</b>	107-98-2			
<b>Germany (DFG)</b>	100	370	200	740
<b>Hungary</b>		375		568
<b>Ireland</b>	100	375	150 (1)	568 (1)
<b>Israel</b>	100	369		
<b>Italy</b>	100	375	150	568
<b>Latvia</b>	100	375	150 (1)	568 (1)
<b>New Zealand</b>	100	369	150	553
<b>South Korea</b>	100	360	150	540
<b>Spain</b>	100	375	150	568
<b>Sweden</b>	50	190	150 (1)	568 (1)
<b>Switzerland</b>	100	360	200	720
<b>The Netherlands</b>		375		563
<b>Turkey</b>	100	375	150 (1)	568 (1)
<b>USA - NIOSH</b>	100	360	150 (1)	540 (1)
<b>United Kingdom</b>	100	375	150	560
	<b>Remarks</b>			
<b>European Union</b>	Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] ~ (for references see bibliography)			
<b>Finland</b>	(1) 15 minutes average value			
<b>France</b>	Bold type: Restrictive statutory limit values			
<b>Germany (AGS)</b>	(1) 15 minutes average value			
<b>Germany (DFG)</b>	STV 15 minutes average value			
<b>Ireland</b>	(1) 15 minutes reference period			
<b>Italy</b>	skin			
<b>Latvia</b>	(1) 15 minutes average value			
<b>Spain</b>	skin			
<b>Sweden</b>	(1) 15 minutes average value			
<b>Turkey</b>	(1) 15 minutes average value			

<b>Component</b>	Propylene glycol monomethyl ether
<b>CAS No.</b>	107-98-2
<b>USA - NIOSH</b>	(1) 15 minutes average value

## 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

## 8.3 Individual protection measures, such as personal protective equipment (PPE)

### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

### Skin protection

Wear fire/flammable resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

### Thermal hazards

no data available

## 9. Physical and chemical properties

<b>Physical state</b>	Liquid.
<b>Colour</b>	-
<b>Odour</b>	pure CAS 64-17-5: Mild, rather pleasant; like wine or whiskey; pure CAS 107-98-2: Weak pleasant odor
<b>Melting point/ freezing point</b>	pure CAS 64-17-5: -114 °C. Atm. press.: 1 atm.; pure CAS 107-98-2: -96 °C. Atm. press.: 101 325 Pa.; pure CAS 2390-60-5: 87°C(lit.)
<b>Boiling point or initial boiling point and boiling range</b>	pure CAS 64-17-5: 78.29°C. Atm. press.: 1 013.25 hPa.; pure CAS 107-98-2: 120.17 °C. Atm. press.: 101 325 Pa.; pure CAS 2390-60-5: 170°C/20 mmHg(lit.)
<b>Flammability</b>	pure CAS 64-17-5: Class IB Flammable Liquid: Fl.P. below 22.78°C and BP at or above 37.78°C.; pure CAS 107-98-2: Class IC Flammable Liquid: Fl.P. at or above 22.78°C and below 37.78°C.
<b>Lower and upper explosion limit / flammability limit</b>	pure CAS 64-17-5: Lower flammable limit: 3.3% by volume; Upper flammable limit: 19% by volume; pure CAS 107-98-2: Lower and upper flammability limits (% vol/vol) at 150°C in air are 1.48 and 13.74, respectively.
<b>Flash point</b>	pure CAS 64-17-5: 13 °C. Atm. press.: 1 atm.; pure CAS 107-98-2: 31.1 °C. Atm. press.: 101.3 hPa.; pure CAS 2390-60-5: 83°C(lit.)
<b>Auto-ignition temperature</b>	pure CAS 64-17-5: 368.8 °C. Remarks: 368.8 +/- 7.4°C.; pure CAS 107-98-2: 287 °C. Atm. press.: 101.3 hPa.



<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	pure CAS 64-17-5: dynamic viscosity (in mPa s) = 1.17. Temperature:20°C. Remarks:Value attributed to Kirk Othmer.;pure CAS 107-98-2: dynamic viscosity (in mPa s) = 1.7. Temperature:25.0°C.
<b>Solubility</b>	pure CAS 64-17-5: Miscible with water;pure CAS 107-98-2: greater than or equal to 100 mg/mL at 18.89°C
<b>Partition coefficient n-octanol/water</b>	pure CAS 64-17-5: log Pow = -0.35. Temperature:24 °C.;pure CAS 107-98-2: log Pow = < 1. Temperature:20 °C.
<b>Vapour pressure</b>	pure CAS 64-17-5: 57.26 hPa. Temperature:19.6 °C.;pure CAS 107-98-2: 11.7 mm Hg. Temperature:25 °C.;8.5 mm Hg. Temperature:20 °C.
<b>Density and/or relative density</b>	pure CAS 64-17-5: 786.4 kg/m <sup>3</sup> . Temperature:25 °C.;pure CAS 107-98-2: 0.92 g/cm <sup>3</sup> . Temperature:25 °C.
<b>Relative vapour density</b>	pure CAS 64-17-5: 1.59 (vs air);pure CAS 107-98-2: 3.12 (vs air)
<b>Particle characteristics</b>	no data available

## 10. Stability and reactivity

### 10.1 Reactivity

3300 ppm [Based on 10% of the lower explosive limit for safety considerations even though the relevant toxicological data indicated that irreversible health effects or impairment of escape existed only at higher concentrations.]

Reacts slowly with calcium hypochlorite, silver oxide and ammonia. This generates fire and explosion hazard. Reacts violently with strong oxidants such as nitric acid, silver nitrate, mercuric nitrate and magnesium perchlorate. This generates fire and explosion hazard.

Highly flammable. Water soluble.

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

Flammable liquid when exposed to heat or flame ... .The vapour mixes well with air, explosive mixtures are easily formed.Acetyl chloride reacts violently with ethanol or water, [Rose, (1961)]. Acetyl bromide reacts violently with alcohols or water, [Merck 11 th ed., 1989]. Mixtures of alcohols with concentrated sulfuric acid and strong hydrogen peroxide can cause explosions. Example: An explosion will occur if dimethylbenzylcarbinol is added to 90% hydrogen peroxide then acidified with concentrated sulfuric acid. Mixtures of ethyl alcohol with concentrated hydrogen peroxide form powerful explosives. Mixtures of hydrogen peroxide and 1-phenyl-2-methyl propyl alcohol tend to explode if acidified with 70% sulfuric acid, [Chem. Eng. News 45(43):73(1967); J. Org. Chem. 28:1893(1963)]. Alkyl hypochlorites are violently explosive. They are readily obtained by reacting hypochlorous acid and alcohols either in aqueous solution or mixed aqueous-carbon tetrachloride solutions. Chlorine plus alcohols would similarly yield alkyl hypochlorites. They decompose in the cold and explode on exposure to sunlight or heat. Tertiary hypochlorites are less unstable than secondary or primary hypochlorites, [NFPA 491 M, 1991]. Base-catalysed reactions of isocyanates with alcohols should be carried out in inert solvents. Such reactions in the absence of solvents often occur with explosive violence, [Wischmeyer(1969)].

### 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

Many explosions have been experienced during the gravimetric determination of either perchlorates or potassium as potassium perchlorate by a standard method involving ethanol extraction. During subsequent heating, formation and explosion of ethyl perchlorate is very probable.

## 10.6 Hazardous decomposition products

no data available

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# 11. Toxicological information

### Acute toxicity

- Oral: pure CAS 64-17-5: LD50 - rat (female) - 15 010 mg/kg bw.; pure CAS 107-98-2: LD50 - rat (female) - 4 277 mg/kg bw.
- Inhalation: pure CAS 64-17-5: LC50 - mouse (male) - > 60 000 ppm.; pure CAS 107-98-2: LC0 - rat (male/female) - > 7 000 ppm.
- Dermal: pure CAS 107-98-2: LD50 - rat (male/female) - > 2 000 mg/kg bw.

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

A3; Confirmed animal carcinogen with unknown relevance to humans.

### Reproductive toxicity

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### Aspiration hazard

no data available

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# 12. Ecological information

## 12.1 Toxicity

- Toxicity to fish: pure CAS 64-17-5: LC50 - Pimephales promelas - 14.2 g/L - 96

- h.;pure CAS 107-98-2: LC50 - *Leuciscus idus* - > 4 600 - < 10 000 mg/L - 96 h.
- Toxicity to daphnia and other aquatic invertebrates: pure CAS 64-17-5: LC50 - *Ceriodaphnia dubia* - 5 012 mg/L - 48 h.;pure CAS 107-98-2: LC0 - *Daphnia magna* - < 1 412 mg/L - 48 h.
- Toxicity to algae: pure CAS 64-17-5: EC10 - *Chlorella vulgaris* - 86 mg/L - 4 d.;pure CAS 107-98-2: EC50 - *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*) - > 1 000 mg/L - 7 d.
- Toxicity to microorganisms: pure CAS 64-17-5: EC10 - *Chlorella vulgaris* - 86 mg/L - 4 d.;pure CAS 107-98-2: EC50 - *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*) - > 1 000 mg/L - 7 d.

## 12.2 Persistence and degradability

AEROBIC: Ethanol was shown to biodegrade under aerobic conditions in various screening tests using different types of inocula and incubation periods(1-7). 5 day theoretical BOD values range from 37% - 86%(1,4). Biodegradation of 3, 7, and 10 mg/L ethanol with filtered sewage seed in fresh water resulted in a 74% theoretical BOD in 5 days and 84% in 20 days; in salt water 45% of the theoretical BOD was reached in 5 days and 75% was reached in 20 days(4). Formaldehyde and acetic acid are products of biodegradation by a soil inoculum(6). Ethanol present at 100 mg/L, achieved 89% of its theoretical BOD using an activated sludge inoculum at 30 mg/L in the Japanese MITI test(7). Ethanol was rapidly degraded in aerobic microcosms prepared from low organic (0.2% organic carbon) sandy aquifer material obtained from Jurere Beach, Brazil(8). Microcosms were prepared with 20 grams of aquifer material and 50 mL of groundwater (pH 5.2). At a starting concentration of 100 mg/L, ethanol had half-lives of approximately 3 days in samples prepared with 20 mg/L of either benzene, toluene or o-xylene under aerobic conditions(8).

## 12.3 Bioaccumulative potential

An estimated BCF of 3 was calculated for ethanol(SRC), using a log Kow of -0.31(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

## 12.4 Mobility in soil

A log Koc of 0.44 has been reported for ethanol(2), corresponding to a Koc of 2.75(SRC). According to a classification scheme(2), this estimated Koc value suggests that ethanol is expected to have very high mobility in soil. Ethanol leaching was measured using a shallow sand and gravel test aquifer in Merrick Co, central Platte Valley, Nebraska which was subjected to a pulse containing 220 mg/L ethanol and 12 mg/L bromide and monitored for 2.5 months. Transport was not retarded. An average first-order decay constant was estimated of be 0.32/day, corresponding to a half-life of 2.2 days(3). A sorption coefficient on a snow surface was reported as log K = -3.04 (cu m snow surface/sq m air) at -6.8°C(4).

## 12.5 Other adverse effects

no data available

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## 13. Disposal considerations

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## 14. Transport information

### 14.1 UN Number

ADR/RID: Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

### 14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

### 14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

### 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

### 14.5 Environmental hazards

ADR/RID: yes

IMDG: yes

IATA: yes

### 14.6 Special precautions for user

no data available

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

no data available

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## 15. Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Ethanol	Ethanol	64-17-5	200-578-6
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.

<b>Vietnam National Chemical Inventory</b>	Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>	Listed.

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
1-methoxypropan-2-ol	Propylene glycol monomethyl ether	107-98-2	203-539-1
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Resin acids and Rosin acids	rosin resin	73138-82-6	277-299-1
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
none	Basic Red 1	989-38-3	none
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.

<b>EC Inventory</b>	Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>	Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>	Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>	Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>	Not Listed.
<b>Vietnam National Chemical Inventory</b>	Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>	Not Listed.

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
[4-[4-(diethylamino)- $\alpha$ -[4-(ethylamino)-1-naphthyl]benzylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium chloride	Basic blue 7	2390-60-5	219-232-0
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.
<b>Vietnam National Chemical Inventory</b>			Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Listed.

## 16. Other information

### Information on revision

**Creation Date** Mar. 28, 2018

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### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit

- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

## References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

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