



## SAFETY DATA SHEET

### Matching Stains

#### Identification of the Substance / Preparation and Company

##### Product Details

Trade Name : Matching Stains  
Product No :

##### Supplier Details

: LIQUID COLOURS (PTY) LTD  
P O BOX 2685  
Edenvale  
1610  
South Africa  
Tel: +27 11 372-4600  
Fax: +27 11 609-8666

#### Composition / Information On Ingredients

**Chemical Characterisation** : Nitrocellulose (cellulose nitrate) content 6%  $\pm$ 0.5  
Plasticizer dibutyl phthalate (DBP) 0.4%  
Pigments (organic / inorganic)

#### Hazards Identification

**Hazardous contents** : Nitrocellulose  
CAS-No: 9004-70-0  
Index No: 603-037-01-5  
Hazard Symbol: F  
R-phrases: 11  
S-phrases: 16-33-37/39  
  
Dibutyl Phthalate  
CAS-No: 84-74-2  
Hazard Symbol: Xn, N  
R-phrases: 50/53-62-63  
S-phrases: 36/37-61

MIBK  
Content 5% weight

Lacquer Thinners  
Content 85% weight

### **Hazardous Identification**

- : Plasticized Nitrocellulose is flammable and according to transport regulation a substance of class 4.1.  
Nitrocellulose can be ignited by flame, heat, shock, impact, friction, sparks or static electricity.  
In case of fire, formation of nitrous gasses possible  
Possible risk of impaired fertility  
Possible risk of harm to the unborn child

## **First Aid Measures**

- General Information** : Remove contaminated clothing immediately and safely dispose.
- Skin Contact** : After contact rinse with water thoroughly. Call a physician if irritation persists. Change contaminated clothing. Wash clothing before reuse.
- Eye Contact** : Remove contact lenses if worn. Rinse thoroughly with plenty of water, also under the eyelids. A doctor (or an eye specialist) should be consulted immediately.
- Inhalation of vapours** : In the event of a fire, toxic fumes or fire-related gases may form (see section fire – fighting measures). In this case all persons who may have inhaled such toxic fumes must be removed from the danger area and taken to fresh air. If breathing problems are encountered, administer oxygen, keep at rest and make measure to prevent heat loss. If breathing stops or if there is the slightest indication of this, administer artificial respiration. Call for fastest possible medical help. After inhaling nitrous gases, poisoning symptoms may not occur till many hours later, therefore; remain under medical supervision for at least 48 hours.
- Ingestion** : Do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Seek medical advice immediately.

## **Accidental Release Measures**

- Accidental release measures** : Avoid sources of ignition. Do not smoke.  
Ensure adequate ventilation.  
Avoid contact with skin and eyes.  
Avoid inhaling vapours.  
Use suitable protective equipment / clothing (see exposure controls and personal protection).  
Tools made of plastic material must not be used because of their tendency to produce static electricity.  
Spilled NC must be swept up carefully and kept in tightly closed watertight containers (see Disposal considerations).  
For information concerning large spillages of NC contact manufacturer.

## Fire - Fighting Measures

- Extinguishing media** : Use water spray, foam, dry chemical. Keep containers and surroundings cool with water spray. Disperse accumulating vapour with water spray.
- Protective equipment** : Wear full protective clothing and self-contained breathing apparatus.
- Other** : Beware of darting flames!  
Drum lids can be blown off.
- Burning Nitrocellulose may produce toxic fumes. The fumes may contain nitrous gases. Persons, who may have inhaled nitrous gases should lie down and keep still. Call a doctor immediately.
- Fire fighters must work from the windward side. They should be equipped with self-contained breathing apparatus and a fully enclosed chemically resistant suit to protect against potentially toxic and irritating fumes.
- After the fire is extinguished, material may be unstable and could ignite by itself. Therefore ensure that residual material is thoroughly wetted with water. (see Disposal considerations)

## Exposure Controls / Personal Protection

- Respiratory protection** : Ensure adequate ventilation.
- Hand protection** : Non flammable, antistatic protective gloves.
- Eye protection** : Protective goggles or full face shield.
- Body protection** : Non flammable, antistatic protective clothing, antistatic protective shoes, conductive flooring.

## Physical And Chemical Properties

- Density** : 0.80 – 0.95
- Viscosity** : 10 – 12 sec Din 4
- Flash point** : 10°C
- Solubility in water** : NC is not soluble in water
- PH Value** : Neutral
- Vapour pressure of the plasticizer** : <0.13 mber at 20°C
- Deflagration temperature** : > = 170°C

### *Appearance*

- Form** : Liquid
- Colour** : Clear / Colours
- Odour** : Solvent odour

## Handling And Storage

- Handling** : Keep quantity of product in the processing area to the minimum necessary for production.  
Avoid contact with strong alkaline and acidic materials, amines or oxidizing agents.  
Ensure adequate ventilation.  
Keep away from flame, heat, shock, impact, friction, sparks or static electricity.  
No smoking near nitrocellulose. Smoking must be prohibited and conspicuous signs posted in all areas where nitrocellulose is present.  
Keep package tightly closed when not in use.  
Move drums under controlled conditions (e.g. drum trolleys).  
Do not drop, slide or bang the drums. When emptying the drum, do not strike, pound or hammer on the drum.  
Tools used with nitrocellulose must be of nonferrous materials such as aluminum, copper, brass or wood.
- Storage** : Store indoors in a cool, dry and well ventilated place in original containers.  
Keep away from heat (e.g. steam pipes, radiators etc.) flame or any source of ignition and direct sunlight. No smoking near nitrocellulose. Smoking must be prohibited and conspicuous signs posted in all areas where nitrocellulose is present.  
Nitrocellulose must not be stored together with incompatible materials for instance strong alkaline and acid materials, amines or oxidizing agents.  
Practice "First in / First out" (FIFO) inventory control, using the date printed on the container label. We recommend not to store nitrocellulose for longer than a year.

## Stability And Reactivity

- Stability** : Stable if properly handled and stored
- Conditions to avoid** : Avoid exposure to heat, shock and friction. Rate of deterioration increases with temperature and time
- Materials to avoid** : Nitrocellulose decomposes when in contact with strong alkaline and acidic materials, amines or oxidizing agents.
- Hazardous decomposition products** : CO, CO<sub>2</sub>, Nitrogen oxides and other potentially toxic fumes are possible decomposition products.

## Toxicological Information

Nitrocellulose itself is not toxic. The following values can be given:

### *Nitrocellulose:*

- Acute toxicity** : LD<sub>50</sub> oral, rat (Wister) 2000mg/kg No symptoms of poisoning (DECO Guideline for testing of chemicals, No. 401)
- Irritation of the skin** : Rabbit: non – irritant (DECO Guideline for testing of chemicals, No. 404)
- Irritation of the eyes** : Rabbit: non – irritant (DECO Guideline for testing of chemicals, No. 405)

### **Plasticizer (DBP):**

<b>Acute toxicity</b>	: LD <sub>50</sub> oral, rat: > 8000mg/kg LD <sub>50</sub> dermal, rabbit: > 20000mg/kg
<b>Irritation of the skin</b>	: Rabbit: non – irritant
<b>Irritation of the eyes</b>	: Rabbit: non – irritant
<b>Additional information</b>	: In case of oral ingestion, toxic side effects are possible. Animal test indicate possible reproductive effects.

## **Disposal Considerations**

<b>Method of disposal</b>	: Destruction as waste NC – Lacquer and to incinerate them then.  Alternatively destroy by burning small quantities outside at a safe place in an open fire under competent control. For larger quantities contact manufacturer.  Waste disposal should be in accordance with existing state and local environmental regulations.
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## **Ecological Information**

Ecological characteristics measured of nitrocellulose plasticized with DBP are:

<b>Acute fish toxicity</b>	: LD <sub>50</sub> : >7500 mg/l
<b>Test species</b>	: Brachydanio rario
<b>Duration of test</b>	: 96 h (DECO guideline for testing of chemicals, No. 203)
<b>Acute bacterial toxicity</b>	: EC <sub>50</sub> : >10000 mg/l (DECO guideline for testing of chemicals, No. 209)
<b>Degradability</b>	
<b>Biological degradation</b>	: approx 60% after 28 days (DECO guideline for testing of chemicals, No. 301 B)
<b>COD value</b>	: 800 mg/g DIN 38409 – part 41 BOD <sub>5</sub> : not measured in product
<b>Other</b>	: Water pollution class (WGK = Classification in accordance with the German Water Resources Act) Nitrocellulose: WGK D – not generally hazardous to water. DBP: WGK 2 – hazardous to water

## Transport Information:

**GGVSee/IMDG Code** : 4.1  
**UN No** : 2557  
**MFAG** : 610  
**EMS** : 4.1 – 0.1  
**GGVE/GGVS Class** : 4.1 No. 24b  
**RID/ADR Class** : 4.1 No. 24b

**Declaration for land shipment** : UN 2557 Nitrocellulose, mixture with plasticizer.

**Declaration for sea shipment** : UN 2557 Nitrocellulose, mixture with plasticizer.

**Declaration for shipment by air** : UN 2557 Nitrocellulose, mixture with plasticizer.

## Regulatory Information

Labelling in accordance with eh EEC directives:

**Hazard symbols** : F, highly flammable  
Xn, harmful

**R phrases** : R11 - Highly flammable.  
R62 - Possible risk of impaired fertility.  
R63 - Possible risk of harm to the unborn child.

**S phrases** : S16 - Keep away from sources of ignition – No smoking.  
S33 - Take precautionary measures against static discharges.  
S36/37/39 – Wear suitable protective clothing, gloves and eye / face protection.

## Other Information

**Disclaimer** : The data and advice given apply when the product is sold for the stated application or applications. The product is not sold as suitable for any other applications. Use of the product for other applications other than those stated in this sheet may give rise to risk not mentioned in this sheet. You should not use the product other than that for the stated application or applications without seeking advise from Liquid Colours.

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