



# SAFETY DATA SHEET

## NC LACQUERS (VARIOUS COLOURS)

### Identification of the Substance / Preparation and Company

#### Product Details

Trade Name : NC Lacquers (Various Colours)  
 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

Email: info@liquidcolours.co.za  
 website: www.liquidcolours.co.za

### Composition / Information On Ingredients

**Chemical Characterisation** : Nitrocellulose (cellulose nitrate) content: <32.8 weight %.  
 Plasticizer dibutyl phthalate (DBP): >7.2 weight%  
 Pigments (organic / inorganic)

#### Hazardous Ingredients

	<u>CAS-No.</u>	<u>Index Number</u>	<u>Hazard Symbol</u>
Nitrocellulose	9004-70-0	603-037-01-5	F
Dibutyl Phthalate	84-74-2		Xn, N
	<u>R-phrases</u>	<u>S-phrases</u>	
Nitrocellulose	11	16-33-37/39	
Dibutyl Phthalate	50/53-62-63	36/37-61	
Ethyl Acetate	Iso Propyl Alcohol	UN No: 1173	
Hazardous Substance 2270	Hazardous No. 2SE	UN No. 1170	
EINECS 205-500-4	Content 5% - 10 weight %		
MIBK	Content 5% weight	UN NO: 1245	Hazardous 3YE
LACQUER THINNERS:	Content 5% weight	77/20 - 77/29	Hazardous 3YE

## Hazards Identification

**Emergency Overview** : Harmful if swallowed.  
Can cause damage to eyes.

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.

**Contact with skin** : In case of contact with skin wash off immediately with soap and water and should adverse reaction occur seek medical advice.

**Contact with eyes** : In case of contact with eyes rinse thoroughly with plenty of lukewarm water with eyelids held open and seek medical advice. Remove contact lenses if worn.

**Inhalation** : In the event of fire toxic fumes or fire-related gases may form (see section 5.) 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 measures 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

**Methods of Cleaning up / taking up** : Pick up with absorbent material (e.g. sand, universal binder, sawdust). Treat as "hazardous disposal".

Avoid sources of ignition. Do not smoke.

Ensure adequate ventilation.

Avoid contact with skin and eyes!

Avoid inhaling vapours.

Use suitable protective equipment / clothing.

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.

For information concerning large spillages of NC contact manufacturer.

## Fire - Fighting Measures

**Suitable Extinguishing Media** : Water Spray Jet  
Carbon Dioxide  
Dry Powder  
Foam

Keep containers and surroundings cool with water spray. Disperse accumulating vapour with water spray.

Protective Equipment for Fire Fighting: Wear full protective clothing and self-contained breathing apparatus.

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.

## Exposure Controls / Personal Protection

### *Personal Protective Equipment*

**General Protective Measures** : Avoid contact with eyes and skin

**Hygiene Measures** : Keep away from foodstuffs and beverages.  
Wash hands after use  
Clean skin thoroughly after work.

**Hand protection** : Non flammable, antistatic protective gloves

**Eye protection** : Protective goggles or full face shield.

**Respiratory protection** : Ensure adequate ventilation.

**Body protection** : Non flammable, antistatic protective clothing, antistatic protective shoes, conductive flooring.

## Physical And Chemical Properties

### *Appearance*

**Form** : Liquid  
**Colour** : Clear / Colours  
**Odour** : Characteristic Odour

### *Data Relevant To Safety*

**Bulk Density** : 0.95 – 1.3 grams per cubic centimetre at ± 25°C

**Solubility In Water** : NC is not soluble in water

**PH Value** : Neutral.

**Viscosity** : 16 – 18 sec Ford No4

**Flash Point** : 10°C Closed Cup

**Deflagration temperature** : > = 170°C

**Vapour pressure of The plasticizer** : > 0.13, mber at 20°C

## 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** : Storage 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 is not being 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.  
Storage stability: storage period 12 - 24 months

## 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

**Acute oral toxicity** : (LD<sub>50</sub>) 2000 milligrams per kilogram

- Species** : Rat
- Irritant effect on eyes** : Irritant
- Risk of serious damage to eyes** : Mild

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

**Nitrocellulose Acute toxicity** : LD<sub>50</sub> oral, rat (Wister): . 2000 mg/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)** : LD<sub>50</sub> oral, rat: > 8000 mg/kg  
LD<sub>50</sub> dermal, rabbit: > 20000 mg/kg  
Irritation of the skin/rabbit: non - irritant  
Irritation of the eyes/rabbit: non – irritant

**Additional information** : In case of oral ingestion, toxic side – effects are possible. Animal test indicate possible reproductive effects.

## Disposal Considerations

- Product** : In accordance with current regulations; may be taken to waste disposal site or incineration plant, after consultation with site operator and / or with the responsible authority.
- Name of waste** : Solvent-water mixture without halogenated organic solvents.
- Uncleaned packaging** : Packaging which cannot be cleaned should be disposed of as product waste.

Waste disposal should be in accordance with existing state and local environmental regulations.

## Ecological Information

Ecological characteristics measured of nitrocellulose plasticized with DBP are:

- Acute fish toxicity** : LD<sub>50</sub>: > 7500 MG/1  
**Test species** : Brachydanio rario                      Duration of test: 96 h  
(DECO Guideline for Testing of Chemicals, No. 203)
- Acute bacterial toxicity** : EC<sub>50</sub>: > 10000 mg/1  
(DECO Guideline for Testing of Chemicals, No. 209)
- Degradability:**  
**Biological degradations** : approx. 60% after 28 days  
(DECO Guideline for Testing of Chemicals, No. 301 B)
- COD value** : 800 mg/g, DIN 38409 - part 41  
BOD not measured in product
- 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 - 01
- PG: II** : MPO: P
- GGVE / GGVS: Class** : 4:1 No. 24b RID/ADR: Class 4.1 No. 24b
- Warning sign** : Hazard no. ---- Substance no. -----
- ADNR** : Class -- No. -- Cat -- ICAD/IATA - DGR: 4.1 2557 II

**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

Labeling in accordance with eh EEC directives:

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

**R-phrases.** : R 11: Highly flammable  
R 62: Possible risk of impaired fertility.  
R 63: Possible risk of harm to the unborn child.

**S – phrases** : S 16: Keep away from sources of ignition - No smoking.  
S 33: Take precautionary measures against static discharges.  
S 36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

## Other Information

**Terms of use** : This summarises at the date of issue our best knowledge of health, environmental hazard and safety information related to the product, how to safely handle, use, store and transport the product. Since Liquid Colours cannot anticipate or control the conditions on which the product may be handled, used, stored or transported, every user must prior to usage review the MSDS in relation to intended use, storage and transport of the product in the workplace and elsewhere. Such information should be communicated to all relevant parties. If further information is required please contact Liquid Colours.

Liquid Colours shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given. Liquid Colours sole and exclusive warranty is that it's products comply with Liquid colours published chemical and physical specifications in effect at the time of sale. Liquid Colours liability for claim suits is in all cases limited to the purchase price of the particular quantity of product upon which the claim is based. Under no circumstances shall Liquid Colours be liable for loss of profits or any other indirect and consequential loss or damage.



## NC LACQUERS (VARIOUS COLOURS) SPECIFICATION

- Product Benefits** : Top Quality High Gloss Lacquer for all surfaces.  
Excellent durability and suitable for Exterior and Interior use.  
Quick drying.  
Available in White/Black and full range of Base Colours for Tinting any Colour.
- Uses** : For repairing and refinishing all types of original car finishes, for spraying furniture, shop fittings, wrought iron, steel, wood, etc. and wherever, a quick drying HIGH GLOSS CELLULOSE LACQUER FINISH is required.

### General Data:

- Type** : Alkydised Nitrocellulose
- Drying Time at 25°C** : Dust free 10 minutes  
Thorough dry: Overnight
- Recoating Time** : 10 minutes
- General Range** : Black and white, plus basic colours
- Application** : By Aerosol Spray.
- Thinner** : Use Aerosol Thinners in the approximate ratio of 1 part of Thinner to 1 part Aerosol Lacquer by volume.
- Equipment Clean up** : Wash all equipment thoroughly with GRADE A THINNER immediately after use.

### Process Details:

- Surface Preparations** : *Existing Painted Surfaces*  
Before sanding wash the surface with DEGREASE to remove wax and polish residues. Flush with water and allow to dry. Wet sand areas to be painted with 400 grit waterproof abrasive paper until all gloss is removed. Wipe clean and blow dry.
- : *Bare Metal*  
Remove rust and ensure the surface is completely free of dirt and grease by thorough washing with GRADE A THINNER. Allow to dry.

: *PRIMING*

Thin PRIMER SURFACER to spray viscosity of 18 - 20 secs / Ford No. 4 with Aerosol Thinner. Thinner ratio will be approximately 1 to 1.

Apply by spray one double coat PRIMER SURFACER and allow to dry a minimum of one hour. When dry, and if required, fill minor indentations with SPOT PUTTY, applied by Celluloid or other flexible blade.

Deeper indentations may require a second application. Allow to dry for 30 minutes or longer and wet sand the whole surface again using 400 grit Waterproof Abrasive Paper. Wipe clean and blow dry.

Seal puttied areas with another double coat of LIQUID COLOURS PRIMER SURFACER and re-sand these areas when dry. Wipe clean and blow dry.

: *Wood (including composition Board)*

Raw wood should be sanded smooth (not necessary when painting Composition Board).

Blow clean to remove all sanding dust and dirt.

Apply at least on double coat PRIMER SURFACER. On very soft absorbent wood, a second double coat is recommended. Dry sanding using special Stearate Dry Lubricated Abrasive Paper is suggested. Wipe off all sanding dust before finishing. If wet sanding required, use Mineral Turpentine as the lubricating medium, not water. Wipe off all sanding residues completely.

**Finishing**

: If the Lacquer is to be exposed externally, e.g.: motor cars, spray at least two double coats, allowing a flash-off period of about 10 minutes, or until touch dry, between coats. Should sanding between coats be required, allow to dry overnight before wet sanding with 600 grit waterproof abrasive paper and re-spray with another double coat. AEROSOL LACQUER dries with a high gloss. Polishing is unnecessary except in certain circumstances.

**Polishing**

: The appearance of the film can be improved by polishing, particularly if dirt and dust has been embedded in the film during application. However, the lacquer should be allowed to harden overnight before this is carried out. Minor specks of dust can usually be removed by vigorous rubbing with CAR POLISH. If this proves insufficient, Standard Rubbing Com-pound may have to be used. Finally, re-polish the compound surface with CAR POLISH using a soft cloth.

**Maintenance of Finish**

: Regular use of CAR POLISH and a protective coating of CAR WAX POLISH will be keep the finish smart and new looking for many years.

**Precautions**

: Highly inflammable - keep away from naked lights.

**Flash Point**

: 10°C