



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME : READY-MIXED TINTED SHELLAC  
SUPPLY : CARCO CHEMICAL CO., LTD.  
79/1-2 Moo4 Thepphrarat Banpho Chachengsao 24140  
TELEPHON : +6638-595-508 – 9  
FAX : +6638-525-351

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS	EINECS	Synbol (s)	R-phase (s)
Methanol	67-56-1	200-659-6	F,T	R11,R23/25
Pigment				
Lac				

3. HAZARDS IDENTIFICATION

HAZARDS MESSAGE

PHYSICAL : Highly flammable liquid and vapor

HEALTH : Toxic if swallowed

Toxic if in contact with skin

Toxic cases were inhalation.

Cause damage to the central nervous system, the organs of vision.

ENVIRONMENTAL : not classified

CAUTION MESSAGE

PREVENTIVE MEASURES : Keep away from ignition sources such as heat, sparks, open flame - No smoking. Keep container tightly closed. The ground wire connected to containers and equipment. Use electrical equipment, explosion proof, lighting, ventilation. Use only does not cause sparks. Take measures to prevent electrostatic discharge. Wear protective gloves and wear eye / face protection. Avoid breathing dust / fume / gas / mist / vapors / aerosols. Use only outdoors or in areas with good



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ventilation. Wash hands thoroughly after handling this product. Avoid release to the environment.

MITIGATION MEASURES

SKIN/HAIR CONTACT : Eliminate / remove clothing that has been contaminated immediately. Wash skin with water in case of fire. Use extinguishing media appropriate to the fire.

INHALATION : Move to fresh air and keep at rest in a position comfortable for breathing. If it feels wrong call a POISON CENTER or doctor.

INGESTION : If it feels wrong call a POISON CENTER or doctor. Do not induce vomit.

THE SAFE STORAGE : Store in a well-ventilated place. Keep container tightly closed.

HANDLED WITH THE PRODUCT : Dispose of contents / container appropriate regulatory.

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4. FIRST AID MEASURE

GENERAL INFORMATION : Brought out fresh air. If the patient does not recover quickly be taken to the nearest medical center for further treatment.

SKIN CONTECT : Remove contaminated clothing is removed. Use lots of water, wash the exposed skin with chemicals. Follow by washing with soap and water if available. If irritation continues, consult a doctor.

EYE CONTECT : Remove contact lenses. Wash your eyes with plenty of water for at least 15 minutes. If irritation continues, consult a doctor.

GASTROINTESTINAL : Ingestion symptoms may appear after 18-24 hours. Do not induce vomiting be taken to the nearest medical center for further treatment.

ADVICE TO PHYSICIAN : Symptoms may appear after 40-72 hours. Symptoms usually appear on the central nervous system, eyes, gastrointestinal such as drowsiness, dizziness, headache, blurred vision, sensitivity to light, from death. Symptoms may occur after 18-24 hours. Measurement system, the severity of toxicity. The serum bicarbonate yielded accurate than serum methanol, ethanol (Ethanol). Can reduce the toxicity of methanol is due to the same reaction in the body and is used to treat poisoning by methanol.



## 5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel

**SPECIFIC HAZARDS** : Fire caused by methanol may be difficult to see. Burning may produce carbon monoxide carbon dioxide and other toxins, such as formaldehyde formalization. Vapours can accumulate in confined spaces poison. Flammability harm, sealed container severely and immediately released in large quantities. When exposed to fire or excessive heat for a sufficient period of time. The vapor is heavier than air and may travel far from sources of ignition.

### EXTINGGULSHING MEDIA

: A little fires - dry chemical powder carbon dioxide Water spray or water curtain. Large Fire - Water spray or fog alcohol resistant foam before Columbus (3% or 6% foam).

### UNSUITABLE USED TO EXTINGUISH FIRE

: Synthetic foams or protein foams may be used but are less effective. Efficient water cooling, but may not effectively extinguish fire.

### PROTECTIVE EQUIPMENT FOR FIREFGHTERS

: Fire caused by methanol may be difficult to see in daylight. Should be upwind and limited access, concentration of 2 5 % methanol is flammable. Wear protective clothing and respirators.

**ADDITIONAL ADVICE** : Vapors may travel long distances from the source of the burn, and may reverse.

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## 6. ACCIDENTAL RELEASE MEASURES

Regulatory compliance with all international and local.

**GENERAL MEASURES** : Fire caused by methanol may be difficult to see. Leaks can be dangerous fires and explosions. Eliminate all ignition sources. Stop leak and use absorbent material. Fluorocarbon, alcohol-resistant foam may be used to reduce vapors and flammable. Methanol should be recycled. Restrict access to area until completion



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of clean up. Ensure that the cleaning performed by trained personnel only. Wear adequate personal protection and removal of ignition and heat. To government agencies as required by law.

**PERSONAL PROTECTION** : Wear protective clothing and a respirator that is resistant to chemicals at the right.

**ENVIRONMENTAL PRECAUTIONS**

: Biodegrades easily in water. Methanol in fresh water or sea water can have a serious impact on aquatic life. Studies on methanol toxicity of bacteria in wastewater sludge. Found to have little effect on the sub 0.1%. While 0.5% will affect degradation, methanol decomposition to carbon dioxide and water.

**PREVENTIVE MEASURES** : If leak can cause fire / explosion immediately. Eliminate sources of ignition. Prevent leakage or adsorbents to retain the spilled product. Do not walk through the spilled product.

**PRODUCT SPILLS** : A little spills - use absorbent material is not flammable. Recycled or diluted with water to reduce the risk of fire. Prevent leaks into a confined space / drains or water courses. Do people without protective equipment into an area that is leaking. Leak much - if necessary Spill containment alcohol-resistant foam may be used to reduce the leakage of vapor and fire hazard. Collected for recycling or re-use. Should use the pump to prevent an explosion.

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## 7. HANDLING AND STORAGE

**GENERAL PRECAUTIONS** : To put it in with the railings, a well-ventilated Away from sunlight, ignition sources and other sources of heat. Storage Temperature : Environment normally, grounding devices.

**HANDLING** : Stored in enclosed areas, away from ignition sources and grounding devices. Tanks must be grounded and vapor control systems. Storage tanks must have an NFPA standard or API mixture of methanol with air storage tank or transport flammable should take appropriate precautions to reduce the risk of fire. Should eliminate ignition sources or inert gases such as nitrogen, all equipment must be grounded. Avoid storage with incompatible materials, Methanol, anhydrous, non-



corrosive metal temperature, except Nickel / monel / steel and iron, high silicon.  
Do not use materials storage coating, copper / copper alloy / zinc / galvanized steel or aluminum. These materials may be eroded slowly by methanol. These materials may be eroded slowly by methanol. Plastic can be used for short term storage. Not recommended for long term storage. It may cause deterioration of plastic and may be contaminated.

Corrosion rates for various materials

<0.508 mm: Year / cast iron, monel, lead, nickel.

<0.051 mm steel : Year / high silicon.

Caustic : Poly ethylene

A little corrosion: Neoprene, phenolic resin, poly esters, butyl rubber, natural rubber.

Corrosion resistance: Polyvinyl chloride.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

In the absence of occupational exposure standards for this product. It is recommended that the following are adopted.

Material	Source	Type	ppm	mg/m <sup>3</sup>	Notation
Methanol	ACGIH	TWA	200		
	ACGIH	STEL	250		

Engineering controls : In a confined should maintain the dark comedy of substance floating in the air to remain at a reasonable level with engineering controls.

Material	Source	Hazards designation
Methanol	ACGIH	Not classified as a carcinogen in humans.



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Respiratory protection	: NIOSH / OSHA recommendations for the concentration of methanol in the air. Up to 2000 ppm: Use a respirator mask. Up to 5000 ppm ventilation: A continuous air flow system. Up to 6000 ppm ventilation: Air protection and air flow system continuously or full face mask respirator Not mask ventilation air filters. Respirator selection must be done by a qualified person and is based on a risk assessment of the work.
Protection Equipment	: Butyl rubber, nitrile should check with the manufacturer. Wear pants or coat that is resistant to chemicals made of nitrile rubber, butyl rubber.
Eye and Face Protection	: Safety glasses with face shield and chemical resistant. Contact lenses should not be worn.
Shoes and other	: Wear chemical protective boots. Eye wash and shower equipment should be located near the work area. Note: The use of personal protective equipment can't be considered a long term solution calls and touch controls.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Colourless Liquid.
Odour	: Characteristic alcohol odour
Odour threshold	: Detection 4.2 -5960 ppm. (geometric mean 160ppm) Recognition 53 -8940 ppm. (geometric mean 690ppm)
pH	: Not Applicable
Boiling point	: 64.7 °C
Melting / freezing point	: Typical -97.8 °C
Flash point	: Typical 11 °C (Closed cup)
Explosion / Flammability limits in air	: 6 – 36.5 %
Auto-ignition temperature	: 464 °C
Vapour pressure	: 12.8 kPa at 20 °C / 68 °F



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Density	: Typical 791 kg/m <sup>3</sup> at 20 °C (ASTM D-1298)
Water solubility	: Completely miscible.
n-octanol/water partition	: 0.82
coefficient (log Pow)	
Decomposition temperature	: Note: Stable under normal conditions of use.
Evaporation rate	: 4.1 (ASTM D 3539, nBuAc=1)
Vapour density (air=1)	: 1.105 at 15 °C

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#### 10. STABILITY AND REACTIVITY

STABILITY : Stable under normal conditions of use.

CONDITIONS TO AVOID : Avoid heat, sparks, open flames and other ignition sources.

MATERIALS TO AVOID : Oxidizing agents, mineral acids, organic acids can cause severe reactions and may explode. Cause corrosion of aluminum, magnesium, lead Plattsburgh cardinal may react with aluminum, magnesium gases hit high djerba, plastics, rubber, coatings and corrosion.

MATERIALS TO AVOID HAZARDOUS DECOMPOSITION PRODUCT

: formaldehyde carbon dioxide carbon monoxide

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#### 11. TOXICOLOGICAL INFORMATION

BASIC FOR ASSIGNMENT : Information given is based on product testing and / or similar products and / or components.

ACUTE ORAL TOXICITY : Low toxicity: LD<sub>50</sub>> 6,200 mg / kg, rat.

ACUTE SKIN TOXICITY : Low toxicity: LD<sub>50</sub> 15,800 mg / kg, rabbit.

ACUTE INHALATION TOXICITY

: Low toxicity LC<sub>50</sub> (8-hour) 22,500 pp.

IRRITANT TO THE SKIN : Moderate irritation after 24 hours of exposure (animal test rabbits) were found in the tests on 4 hours so indistinguishable.

IRRITANT TO EYE : Showed slight to moderate irritation (rabbit animal testing).



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RESPIRATORY : No Information

TOXINS THAT CAUSE ALLERGIES

: No Information

POISONING CAUSED BY SUFFOCATION

: No Information

TOXIC TO GENETIC CHANGES

: No evidence that there was a genetic change.

TOXIC CARCINOGEN : Not expected to cause cancer.

TOXINS THAT CAUSE EMBRYO ABNORMALITIES OR AFFECT REPRODUCTION

: May cause damage fertility or the unborn child.

TARGET ORGAN TOXICITY

: Cause CNS depression may lose vision systems, Irritating to respiratory system.

TOXIC TO ORGANS UPON EXPOSURE CONTINUES

: Cause CNS depression may lose vision systems.

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## 12. ECOLOGICAL INFORMATION

ACUTE TOXICITY

FISH : No Information

AQUATIC INVERTEBRATES

: LC50 (24 hr) 900.3 mg/L Crustacea (Brine chrimp)

ALGAE : No Information

ACUTE TOXICITY : Not classified due to the low acute toxicity and is poorly soluble (Solubility  $1.00 \times 10^{-6}$  mg / L).

PERSISTENCE/DEGRADABILITY OF THE SUBSTANCE

: Easily degradable in water and soil.

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## 13. DISPOSAL CONSIDERATIONS

MATERIAL DISPOSAL : Should be brought back to recycle. The resulting waste is responsible for determining the toxicity and physical properties of substances occurring. To





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determine the proper waste classification and disposal methods in accordance with the appropriate regulations. Do not dispose into the environment. The drain or through rivers and canals waste product should not contaminate the soil or water.

CONTAINNER DISPOSAL : Chemicals taken out of the container. When taking chemicals out after draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard Do not puncture, cut or weld tanks are not cleaned. Send to drum recovered or metal reclaimed made.

LOCAL LEGISLATION : Should be disposed of according to local regulations and law enforcement, country or Area. Local regulations may be more stringent than regional or national regulations and must adhered.

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#### 14. TRANSPORT INFORMATION

Proper shipping name : READY-MIXED TINTED SHELLAC  
Class/Division : 3  
Packing group : III

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#### 15. REGULATORY INFORMATION

Information about regulations is not to occupy all the chaos. Other regulations may apply used this material.

##### Chemical Inventory Status

AICS : Listed.  
DSL : Listed.  
INV (CN) : Listed.  
ENCS (JP) : Listed.  
TSCA : Listed.  
EINECS : Listed. 200-659-6  
KECI (KR) : Listed.  
PICCS (PH) : Listed.



16. OTHER INFORMATION

MSDS DISTRIBUTION : The information in this document should be made available to all who may handle the product.

DISCLAIMER : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environment requirements only. It should not therefore be construed as guaranteeing any specific property of the product.