

Material Safety Data Sheet

1. Product and Company Identification

Product Name: CD50 Liquid Art
Trade Name: CD50 Liquid Art
Revision Date: 17/10/2013
Company Name: Chemisys Ltd
Address: P. O. Box 40480
 Glenfield
 Auckland
 New Zealand
 Phone 09 4768603 Fax 09 4768605
 Mobile 021989229

Hazardous according to the criteria of HSNO and ERMA
Classified as a Combustible Liquid C1, AS 1940-2004
Surface Coatings and Colorants (Combustible) Group Standard 2006.
HSNO Approval Number HSR002657.

2. Composition/Information on Ingredients

Ingredients considered hazardous according to the criteria of Safe Work Australia:

Chemical Name	CAS #	Proportion	EU Class
Naphtha (petroleum), hydrotreated heavy	[64742-48-9]	10 - 30%	Xn; R65, R66
Heavy aromatic solvent naphtha (petroleum)	[64742-94-5]	<10%	Xn; R65 Xi; R36, 38
Copper-8-Hydroxyquinoline	[10380-28-6]	<10%	

Ingredients determined not to be hazardous to 100%

Note: Based on supplier MSDS the DMSO extract by IP 346 is less than 3%, the PAH extract is less than 1%, and the Benzene content is less than 0.1%.

HSNO Classification of Mixture 6.1E, 6.3A, 6.4A, 9.1C, 9.4C, 3.1D

3. Hazards Identification

Emergency overview

Combustible Liquid

Harmful: Low viscosity material may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking

Irritating to eyes and skin.

Potential short term health effects

Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Eyes

Causes irritation.

Skin

Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.

Inhalation

May cause respiratory tract irritation

Ingestion

May cause stomach distress, nausea or vomiting. Aspiration of material into lungs can cause chemical pneumonitis.

Target organs

Blood. Eyes. Kidney. Liver. Respiratory system. Skin.

Chronic effects

Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms

May include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

4. First Aid Measures

First aid procedures**Eye contact**

Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.

Skin contact

Immediately flush with water. Wash with soap and water. Obtain medical attention if irritation persists. Remove and wash contaminated clothing before re-use.

Inhalation

If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

Ingestion

Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician

This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

General advice

Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children

5. Fire-Fighting Measures

Flash Point

80 degrees Celsius (ASTM D93)

Extinguisher Media

Dry chemical. Carbon dioxide. Foam. Water spray.

Unusual Fire and Explosion Hazards

None known

Special Protective Equipment

Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus.

Combustion Products

Toxic fumes may be evolved on burning or exposure to heat, that may include and are not limited to oxides of carbon.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Do not discharge into lakes, streams, ponds or public waters.

Steps to be taken if material is released or spilled

Wear appropriate protective clothing. Eliminate all ignition sources. Restrict access to contaminated area. Stop spill at source if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike to prevent spreading. Collect free liquid into a recovery vessel. Absorb remainder with sand or clay or other non-reactive material and place in a properly labelled waste receptacle. Follow all government and local body regulations for disposal. Do not contaminate water while cleaning equipment or disposing of wastes. Prohibit contamination of streams, lakes and other bodies of water.

Container Disposal:

DO NOT reuse container. Dispose of safely.

7. Handling and Storage

Handling:

Avoid contact with skin, eyes and all other personal contact. Handle in accordance with good industrial hygiene and safety practises. Wash hands thoroughly after contact. Wear protective clothing when risk of exposure occurs. Avoid inhalation of vapour or mist. Only use in a well-ventilated area. Do not smoke. Extinguish any flames.

Storage:

Store in a cool, dry place out of reach of children. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from oxidising agents, and incompatible materials. Incompatible with unlined metal containers. Keep away from heat, open flames or other sources of ignition.

Other Precautions:

Do not pressurise, cut, weld, solder, drill, grind or expose containers to heat, flames, sparks or other potential sources of ignition.

Do not attempt to refill or clean containers since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

8. Exposure Controls/Personal Protection

Exposure Controls: In absence of standards it is recommended that the time weighted average concentration TLV/TWA for this product be determined at 5 mg/m³ for an oil mist.

This defines the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit TLV/STEL for this product should be determined at 10mg/m³ for an oil mist, which is the maximum allowable exposure concentration at any time.

Biological Limit: No biological limit allocated

Ventilation Requirements:

Good industrial hygiene practise dictates that indoor work areas should be isolated and provided with adequate local exhaust ventilation, if risk of overexposure occurs. Ventilate via mechanical methods (general or local exhaust) to maintain exposure below 5mg/m³ as per exposure control limits.

Eye Protection:

Eye contact must be avoided. If accidental eye contact is possible then wear safety goggles or a face visor with side shields. Reference should be made to AS/NZS 1336/1337

Skin Protection:

Skin contact must be avoided and good personal hygiene practises observed. Protective clothing including impervious chemical nitrile gloves must be worn. Care must be taken while removing gloves and other skin protective equipment to avoid skin contact. Reference should be made to AS/NZS 2161 and AS/NZS 3765/2210

Respiratory Protection:

DO NOT breathe vapours. Never exceed exposure limits. If mist is generated during application process, an approved mist respirator with organic vapour filters must be used if ventilation requirements cannot be maintained. Reference should be made to AS/NZS 1715 and AS/NZS 1716 Use and Maintenance of Respiratory Protective Devices for individual circumstances.

Personal Hygiene:

Minimize breathing vapour or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before re-use. Remove contaminated shoes and thoroughly clean and dry before re-use. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water. DO NOT Smoke eat or drink while using or handling this product.

9. Physical and Chemical Properties

Appearance:	Dark green/amber liquid.
Odour:	Slight petroleum distillate odour.
PH Range:	2.8 – 3.8
Specific Gravity:	0.89 gm/litre @ 20 degrees Celsius
Solubility in Water:	Negligible
Flash Point:	80 degrees Celsius (ASTM D93)
Viscosity:	17 - 32 CSt @ 40 degrees Celsius

10. Stability and Reactivity

Stability:	Products of this type are stable under recommended storage conditions and are unlikely to react in a hazardous manner under normal conditions.
-------------------	--

Incompatibility:	Strong oxidising agents. Acids. Extreme heat
Hazardous Decomposition Products:	May include and are not limited to oxides of carbon.
Hazardous Polymerisation:	Will not occur
Conditions to avoid:	Heat, open flames, static discharge, sparks and other ignition sources. Unlined metal containers. Do not mix with other chemicals.

11. Toxicological Data

Supplier Raw Materials Data:

Based on supplier MSDS the DMSO extract by IP 346 is less than 3%, the PAH extract is less than 1%, and the Benzene content is less than 0.1%.

Component analysis - LC50

Heavy aromatic solvent naphtha (petroleum)
Naphtha (petroleum), hydrotreated heavy

LC50

590 mg/l/4h rat
Not available

Component analysis Oral LD50

Heavy aromatic solvent naphtha (petroleum)
Naphtha (petroleum), hydrotreated heavy
Copper-8-Hydroxyquinoline

LD50

7050 mg/kg rat
5000 mg/kg rat
19930 mg/kg rat

Effects of acute exposure

Eye:	Causes irritation.
Skin:	Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.
Inhalation:	May cause respiratory tract irritation.
Ingestion:	May cause stomach distress, nausea or vomiting. Aspiration of material into lungs can cause chemical pneumonitis.
Sensitization:	Not available

12. Ecological Information

Ecotoxicity	Not available
Bioaccumulation / accumulation	Not available
Mobility in environmental media	Spillages may penetrate the soil however the product has negligible solubility in water so is unlikely to pose a significant long term risk to the environment.
Environmental effects	Not available
Aquatic toxicity	This product is harmful to the aquatic environment. Do not contaminate waterways.
Partition coefficient	Not available
Chemical fate information	Not available

Other adverse effects

Not available

13. Disposal Considerations

Dispose of via an authorised person/licensed waste disposal contractor in accordance with local regulations.

Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.

Dispose of product and container responsibly and carefully.

Do not dispose of near waterways, down drains or into soil.

14. Transport Information

Classified as a Combustible Liquid C1, AS 1940-2004
Not classified as hazardous for transport

15. Regulatory Information

Australian Classifications:

Classified as a Combustible Liquid C1, AS 1940-2004
Poisons Schedule 5

Labelling:

R65 Harmful: Low viscosity material may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking

R36/38 Irritating to eyes and skin.

S2 Keep out of the reach of children

S23 Do not breathe vapour

S24/25 Avoid contact with skin and eyes

S28 Wash hands and skin thoroughly after handling

S36/37 Wear suitable protective clothing and gloves

S61 Avoid release to the environment

S62 If swallowed, do not induce vomiting: seek medical advice immediately and show container or label

NZ Labelling:

The label must provide the following general information about the substance:

- (a) the product name; and
- (b) enough information to enable the New Zealand importer, supplier or manufacturer to be contacted, either in person or by telephone; and
- (c) a 24 hour emergency telephone number
- (d) directions for use, including, where relevant, dilution rates and dose rates.
- (e) the general precautionary statements-

Read label before use

Keep out of reach of children

Keep away from flames and hot surfaces

In case of fire: Use foam, carbon dioxide, dry chemical

Avoid contact with eyes and skin
Do not breathe vapour
Wear gloves and suitable protective clothing and eye protection
Wash hands and skin thoroughly after handling
Avoid release to the environment

(f) the following response statements-

If medical advice is needed, have product container or label at hand.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs get medical advice/attention. Take off contaminated clothing and wash before reuse. If skin irritation persists, get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice/attention.

(g) The label must provide the following hazard information about the substance:
 the signal word '**warning**';



the GHS pictogram warning explanation mark



the GHS pictogram aspiration hazard

the hazard statement '**combustible liquid**'
 the hazard statement '**may be harmful if swallowed and enters airways**'; and
 the hazard statement '**causes skin and serious eye irritation**'
 the hazard statement '**harmful to aquatic life and terrestrial invertebrates with long lasting effects**'

(h) Disposal Statement-- '**Dispose of via an authorised person/licensed waste disposal contractor in accordance with local regulations. Incineration may be carried out under controlled conditions provided that local regulations for emissions are met. Dispose of product and container responsibly and carefully. Do not dispose of near waterways, down drains or into soil.**'

(i) The following composition information--

Chemical Name	CAS #	Proportion
Naphtha, Hydrotreated Heavy	[64742-48-9]	10 - 30%
Heavy aromatic solvent naphtha (petroleum)	[64742-94-5]	<10%
Copper-8-Hydroxyquinoline	[10380-28-6]	<10%
Ingredients determined not to be hazardous		to 100%

(j) the following transport information:

Not classified as hazardous for transport
Classified as a Combustible Liquid C1, AS 1940-2004

16. Other Information

References:

Supplier MSDS

<http://hsis.ascc.gov.au/>

RTECS

Compiled by:

Chemisys Ltd

P. O. Box 40480

Glenfield

Auckland

This data sheet and the health, safety and environmental information it contains is considered to be accurate as of the date specified. However no warranty or representation, expressed or implied is made as to the accuracy or completeness of the data and the information in this data sheet.

Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The Chemisys Group shall not be responsible for any damage of injury resulting from abnormal use of this material, from any failure to adhere to recommendations or from any hazards inherent in the nature of the material.