



Material Safety Data Sheet

ChemTools PCB Wash Aqueous De-Fluxer

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

CHEMTOOLS PCB WASH

SYNONYMS

Part Number: CT-PCBW-5L – PCB Wash

PRODUCT USE

Aqueous cleaner for defluxing and degreasing.

SUPPLIER

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Section 2 - HAZARDS IDENTIFICATION

Statement of Hazardous Nature

Hazardous Substance,. According to the criteria of NOHSC and the ADG.

Poisons Schedule

None

Risk

R41 – Risk of serious damage to the eyes

R20/21/22 – Harmful by inhalation, in contact with the skin and if swallowed.

R36/37/38 – Irritating to the eyes, respiratory system and skin.

Safety

S39 - Wear eye/face protection

S27 - Take off immediately all contaminated clothing

S26 - In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons information Centre.

S46 - If swallowed, IMMEDIATELY contact Doctor or Poisons information Centre. (show this container or label if possible)

S44 - If you feel unwell contact Doctor or Poisons Information Centre. (Show the label if possible).



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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
1-methoxy-2-propanol	107-98-2	10-30
2-aminoethanol	141-43-5	1-5
alcohol ethoxylate	68439-46-3	5-10
alkylbenzene sulphonic acid	68081-81-2	1-5

Section 4 - FIRST AID MEASURES

SWALLOWED

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

EYE

If in contact with the eyes:

- Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

If aerosols, fumes or combustion products are inhaled:

- Remove to fresh air.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.



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Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

SMALL FIRE:

-Water spray, dry chemical or CO₂

LARGE FIRE:

-Water spray or fog.

FIRE FIGHTING

-Alert Fire Brigade and tell them location and nature of hazard.

-Wear breathing apparatus plus protective gloves.

-Prevent, by any means available, spillage from entering drains or watercourse.

-If safe, switch off electrical equipment until vapour fire hazard removed.

-Use water delivered as a fine spray to control fire and cool adjacent area.

-DO NOT approach containers suspected to be hot.

-Cool fire exposed containers with water spray from a protected location.

-If safe to do so, remove containers from path of fire.

-Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD

-May emit acrid, poisonous or corrosive fumes.

-On combustion, may emit toxic fumes of carbon monoxide (CO), carbon dioxide (CO₂), other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc.

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Personal Protective Equipment

PERSONAL PROTECTION EQUIPMENT

Breathing apparatus.

Section 6 - ACCIDENTAL RELEASE MEASURES EMERGENCY PROCEDURES

MINOR SPILLS

-Clean up all spills immediately.

-Absorb in vermiculite, dry sand or earth and place into containers for disposal

-Avoid breathing vapours and contact with skin and eyes.

-Wear protective clothing, impervious gloves and safety glasses.

MAJOR SPILLS

-Clear area of personnel and move upwind.

-Alert Fire Brigade and tell them location and nature of hazard.

-Wear breathing apparatus plus protective gloves.

-Prevent, by any means available, spillage from entering drains or watercourses

-Increase ventilation.



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- Stop leak if safe to do so.
- Absorb or cover spill with sand, earth, inert materials or vermiculite.
- Collect residues and seal in labelled drums for disposal.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- DO NOT spray directly on humans, exposed food or food utensils.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

SUITABLE CONTAINER

- Check that containers are clearly labelled.

STORAGE INCOMPATIBILITY

Avoid storage with oxidisers.

STORAGE REQUIREMENTS

- Store in original containers.
- Store in a cool, dry, well ventilated area.
- Avoid storage at temperatures lower than 0°C or higher than 40°C.
- Store in an upright position.
- Protect containers against physical damage.
- Check regularly for spills and leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Peak mg/m ³
Australian Exposure Standards	1-methoxy-2-propanol	100	369	150	553		
Australian Exposure Standards	2-aminoethanol	3	7.5	6	15		

INGREDIENT DATA

1-METHOXY-2-PROPANOL:



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TLV TWA: 100 ppm [ACGIH]

TLV STEL: 150 ppm [ACGIH]

TLV TWA: 100 ppm, 369 mg/m³; STEL: 150 ppm, 553 mg/m³

ES TWA: 100 ppm, 369 mg/m³; STEL: 150 ppm, 553 mg/m³ Under review

OES TWA: 100 ppm, 375 mg/m³; STEL: 300 ppm, 1120 mg/m³ (skin)

Exposure limits with "skin" notation indicate that vapor and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapor inhalation exposure. Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.

PERSONAL PROTECTION

EYE

-Safety glasses with side shields; or as required,

-Chemical goggles.

-Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation -lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

No special equipment needed when handling small quantities.

OTHERWISE:

For potentially moderate exposures:

Wear general protective gloves, eg. light weight rubber gloves.

For potentially heavy exposures:

Wear chemical protective gloves, eg. PVC. and safety footwear.

OTHER

No special equipment needed when handling small quantities.

OTHERWISE:

-Overalls.

-Skin cleansing cream.

-Eyewash unit.

-Do not spray on hot surfaces.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

General exhaust is adequate under normal conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.



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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Clear pale blue liquid; mixes with water.

PHYSICAL PROPERTIES

Liquid

Mixes with water.

Molecular Weight: Not Applicable

Melting Range (°C): approx. 0

Solubility in water (g/L): Miscible

pH (1% solution): approx 10

Volatile Component (%vol): 100

Relative Vapour Density (air=1): >1

Lower Explosive Limit (%): Not Available

Autoignition Temp (°C): Not Available

Boiling Range (°C): approx. 100

Specific Gravity (water=1): Not Available

pH (as supplied): 11

Vapour Pressure (kPa): Not Available

Evaporation Rate: Not Available

Flash Point (°C): none

Decomposition Temp (°C): Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Elevated temperatures.
- Product is considered stable.
- Hazardous polymerisation will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Not normally a hazard due to physical form of product. Accidental ingestion of the material may be damaging to the health of the individual. Overexposure to non-ring alcohols causes nervous system symptoms. These include headache, muscle weakness and inco-ordination, giddiness, confusion, delirium and coma. Digestive symptoms may include nausea, vomiting and diarrhoea. Aspiration is much more dangerous than ingestion because lung damage can occur and the substance is absorbed into the body. Alcohols with ring structures and secondary and tertiary alcohols cause more severe symptoms, as do heavier alcohols.

EYE

There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. There may be damage to the cornea. Unless treatment is prompt and adequate there may be permanent loss of vision. Conjunctivitis can occur following repeated exposure.



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Section 15 - REGULATORY INFORMATION

Section 16 - OTHER INFORMATION

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