



PALATINE PAINTS



SAFETY DATA SHEET Carbowash Mordant Solution (T Wash)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Carbowash Mordant Solution (T Wash)
Product number P368 - P369 - P370 - P370BULK

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Etchant / cleaner.

1.3. Details of the supplier of the safety data sheet

Supplier Palatine Paints & Chemicals Limited
 55 Smallbrook Lane
 Leigh, Lancashire,
 WN7 5PZ, United Kingdom

+44(0)1942 884 122 (T)
 sales@palatinepaints.co.uk.co.uk

Contact person Technical Department -, 08.00 - 17.00 hrs Mon - Thurs, 08.00 - 13.00 hrs Fri, as above

1.4. Emergency telephone number

Emergency telephone +44 (0) 11942 884 122 (08.00 - 17.00 hrs Mon - Thurs, 08.00 - 13.00 hrs Fri)

SDS No. 20246

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226
Health hazards Skin Corr. 1B - H314 STOT SE 3 - H336
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H226 Flammable liquid and vapour.
 H314 Causes severe skin burns and eye damage.
 H336 May cause drowsiness or dizziness.

Precautionary statements	<p>P102 Keep out of reach of children.</p> <p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	PROPAN-2-OL, 1-METHOXY-2-PROPANOL, PHOSPHORIC ACID
Supplementary precautionary statements	<p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p>

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PROPAN-2-OL 15-30%		
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25-xxxx
Classification		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		
STOT SE 3 - H336		
1-METHOXY-2-PROPANOL 15-30%		
CAS number: 107-98-2	EC number: 203-539-1	REACH registration number: 01-2119457435-35-0000
Classification		Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226		R10 R67
STOT SE 3 - H336		
PHOSPHORIC ACID 5-10%		
CAS number: 7664-38-2	EC number: 231-633-2	
Classification		Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1B - H314		C;R34

Copper Carbonate 100%			<1%
CAS number: 12069-69-1	EC number: 235-113-6	REACH registration number: 01-2119513711-50-XXXX	
M factor (Acute) = 1			
Classification		Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302		Xn;R22. N;R50.	
Aquatic Acute 1 - H400			

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	DO NOT induce vomiting. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. DO NOT use solvents or thinners
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

General information	Get medical attention promptly if symptoms occur after washing.
----------------------------	---

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
-----------------------------	---

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.
-------------------------------------	---

5.2. Special hazards arising from the substance or mixture

Specific hazards	Toxic gases or vapours. FLAMMABLE. Solvent vapours may form explosive mixtures with air.
-------------------------	--

5.3. Advice for firefighters

Protective actions during firefighting	Risk of re-ignition after fire has been extinguished. Cool containers exposed to flames with water until well after the fire is out. Avoid the spillage or runoff entering drains, sewers or watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Ensure suitable respiratory protection is worn during removal of spillages in confined areas.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Do not eat, drink or smoke when using the product. The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in closed original container at temperatures between 5°C and 25°C. Keep away from heat, sparks and open flame. Keep container tightly closed. Keep containers upright. Store away from the following materials: Oxidising materials. Alkalis. Acids.

Storage class Flammable liquid storage. The storage and use of this product is subject to the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR. Up to 250 litres of liquids with a flashpoint above 32C but below 55C may be kept in a workroom provided they are kept in closed containers in a marked, fire-resisting cupboard or bin. Larger quantities must be kept in a separate, marked storeroom conforming to the structural requirements contained in the HSE guidance note Storage of Flammable Liquids in Containers.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage description Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters**Occupational exposure limits****PROPAN-2-OL**

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³

Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³

Sk

PHOSPHORIC ACID

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

1-METHOXY-2-PROPANOL (CAS: 107-98-2)**DNEL**

Workers - Inhalation; Short term local effects: 553.5 mg/m³
 Workers - Dermal; Long term systemic effects: 183 mg/kg/day
 Workers - Inhalation; Long term systemic effects: 369 mg/m³
 Consumer - Dermal; Long term systemic effects: 78 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 43.9 mg/m³
 Consumer - Oral; Long term systemic effects: 33 mg/kg/day

PNEC

- Fresh water; 10 mg/l
 - marine water; 1 mg/l
 - Intermittent release; 100 mg/l
 - STP; 100 mg/l
 - Sediment (Freshwater); 52.3 mg/kg
 - Sediment (Marinewater); 5.2 mg/kg
 - Soil; 4.59 mg/kg

PROPAN-2-OL (CAS: 67-63-0)**DNEL**

Consumer - Inhalation; Long term systemic effects: 89 mg/m³
 Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 500 mg/m³
 Industry - Dermal; Long term systemic effects: 888 mg/kg/day
 Consumer - Oral; Long term systemic effects: 26 mg/kg/day

PNEC

- Soil; 28 mg/kg
 - Sediment; 552 mg/kg
 - Fresh water; 140.9 mg/l
 - STP; 2251 mg/l
 - marine water; 140.9 mg/l
 - ; Intermittent release 140.9 mg/l

8.2. Exposure controls**Protective equipment**

Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection	Wear chemical splash goggles.
Hand protection	To protect hands from chemicals, gloves should comply with European Standards EN388 and 374. As a general principle, exposure should be managed by means other than the provision of protective gloves. Manufacturer's performance data suggest that the optimum glove for use should be: Polyethylene. Thickness: > 0.062 mm Permeation breakthrough time according to EN374 - class: (1-6) e.g. minimum 480 mins. Caution: The performance of gloves under actual working conditions can be significantly affected by many factors and the information provided according to EN374 may not accord with what is achieved in practice. We recommend that expert professional advice is sought that takes into account of the work processes and working environment applicable for each task where gloves are to be worn.
Other skin and body protection	Wear appropriate clothing to prevent reasonably probable skin contact.
Hygiene measures	No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.
Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid. Solution.
Colour	Blue.
Odour	Alcoholic.
pH	pH (concentrated solution): 2 - 3
Melting point	No data available.
Initial boiling point and range	No data available.
Flash point	31°C Closed cup.
Evaporation rate	No data available.
Upper/lower flammability or explosive limits	No data available.
Vapour pressure	No data available.
Vapour density	heavier than air
Relative density	1.01 - 1.02 @ @ 20°C
Solubility(ies)	Soluble in water.
Partition coefficient	No data available.
Auto-ignition temperature	No data available.
Viscosity	Non Viscous
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Volatile organic compound	No data available.
----------------------------------	--------------------

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Acids. Oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong alkalis. Strong acids. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation Vapour from this product may be hazardous by inhalation. Vapour may irritate respiratory system/lungs.

Ingestion Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Skin contact Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema. Prolonged or repeated exposure may cause severe irritation.

Eye contact May cause temporary eye irritation. Vapour or spray may cause temporary (reversible) eye damage.

Acute and chronic health hazards Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Nausea, vomiting. Headache. Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema.

Route of exposure Inhalation Skin absorption. Ingestion. Skin and/or eye contact.

Medical considerations Skin disorders and allergies. Avoid vomiting and stomach flushing because of the risk of aspiration.

Toxicological information on ingredients.**PROPAN-2-OL****Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg)	5,840.0
Species	Rat
ATE oral (mg/kg)	5,840.0
<u>Skin corrosion/irritation</u>	
Extreme pH	Not irritating.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Carcinogenicity</u>	
Carcinogenicity	No evidence of carcinogenicity in animal studies
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies
<u>Ingestion</u>	
Ingestion	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
<u>Eye contact</u>	
Eye contact	Severe irritation, burning and tearing.

1-METHOXY-2-PROPANOL

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	4,016.0
Species	Rat
ATE oral (mg/kg)	4,016.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	2,100.0
Species	Rat
ATE dermal (mg/kg)	2,100.0
<u>Skin corrosion/irritation</u>	
Animal data	Non Corrosive to skin.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vivo	Data lacking.
<u>Carcinogenicity</u>	
Carcinogenicity	No evidence of carcinogenicity in animal studies
<u>Reproductive toxicity</u>	

Reproductive toxicity - development Data lacking.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not determined.

Copper Carbonate 100%

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,434.0

Species Rat

ATE oral (mg/kg) 1,434.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,010.0

Species Rabbit

ATE dermal (mg/kg) 2,010.0

SECTION 12: Ecological information

Ecotoxicity There are no data on the ecotoxicity of this product. The product is not expected to be hazardous to the environment. The product contains a substance which may cause long term adverse effects in the environment.

12.1. Toxicity

Ecological information on ingredients.

PROPAN-2-OL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 9714 (24 hrs) mg/l, Daphnia magna

Acute toxicity - aquatic plants , > 72 hours: 100 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms EC₅₀, >: 100 mg/l,

1-METHOXY-2-PROPANOL

Acute aquatic toxicity

Acute toxicity - fish Based on available data the classification criteria are not met.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 23300 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, : >1000 mg/l, Algae

Acute toxicity - microorganisms IC₅₀, 3 hours: >1000 mg/l, Activated sludge

Copper Carbonate 100%

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.025 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is not expected to be biodegradable.

Ecological information on ingredients.

PROPAN-2-OL

Biodegradation - 53 Degradation (%): 5 days
The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product contains potentially bioaccumulating substances.

Partition coefficient No data available.

Ecological information on ingredients.

PROPAN-2-OL

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.

PROPAN-2-OL

Mobility The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

PROPAN-2-OL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Avoid the spillage or runoff entering drains, sewers or watercourses.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Waste class	When this coating, in its liquid state, as supplied, becomes a waste, it is categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). Part-used containers, not drained and/or rigorously scraped out and containing dried residues of the supplied coating, are categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). If mixed with other wastes, the above waste code may not be applicable. Used containers, drained and/or rigorously scraped out and containing dry residues of the supplied coating, are categorised as non-hazardous waste, with code 15 01 02 (plastic packaging) or 15 01 04 (metal packaging).

SECTION 14: Transport information

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG.

14.1. UN number

UN No. (ADR/RID) 1263

UN No. (IMDG) 1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID) PAINT RELATED MATERIAL

Proper shipping name (IMDG) PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR/RID class 3 (8)

IMDG class 3 (8)

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-E

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. GHS: Globally Harmonized System. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. SVHC: Substances of Very High Concern. vPvB: Very Persistent and Very Bioaccumulative. cATpE: Converted Acute Toxicity Point Estimate. EC ₅₀ : 50% of maximal Effective Concentration. NOAEL: No Observed Adverse Effect Level.
---	--

Classification abbreviations and acronyms	<p>Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic) Asp. Tox. = Aspiration hazard Carc. = Carcinogenicity Eye Dam. = Serious eye damage Eye Irrit. = Eye irritation Flam. Liq. = Flammable liquid Met. Corr. = Corrosive to metals Repr. = Reproductive toxicity Resp. Sens. = Respiratory sensitisation Skin Corr. = Skin corrosion Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation STOT RE = Specific target organ toxicity-repeated exposure STOT SE = Specific target organ toxicity-single exposure</p>
Revision comments	<p>Issued in new format for Reach compliance in accordance with EC 1272/2008 Issued in accordance with Annex II to REACH, as amended by Commission Regulation (EU) No. 2015/830 Revision to sections 2, 8, 11 & 12 for reclassification of solvents.</p>
Issued by	Technical Dept. (P.E.)
Revision date	31/01/2023
Revision	2.0
Supersedes date	22/04/2015
SDS number	20246
SDS status	Approved.
Hazard statements in full	<p>H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life.</p>
Signature	Initials: JH

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.