



TECHNICAL DATA SHEET

PRODUCT: **Cascamite**

DESCRIPTION

Powdered urea/formaldehyde resin glue that satisfies the requirements of BSEN 204 durability class D3 and BS EN 302-1 A3 type 11 adhesive if mixed in the proportions specified.

AREAS OF USE

General Joinery, Cabinet Work, Shop Fitting, Veneering, Boat building, all external Joinery.

ADVANTAGES

Simple mix with water
Gap Filling
High Water Resistance
Interior or Exterior Use
Easy to Mix
Non-Staining
Mould Resistant
Stronger Bond Than The Wood Itself

MIXING

By Weight.

Use 2 parts of Cascamite powder to 1 part of cold water.

By Volume

Use 3.5 parts of Cascamite powder to 1 part of cold water.

NOTE: Mixing by weight is recommended for accurate and consistent glue mixes.

1. Put half the water in a container avoid copper, brass and ferrous metals.
2. Add Cascamite powder to water, stirring rapidly until the powder dissolves.
3. Add the remainder of the water, stirring until smooth. Any small lumps will quickly dissolve.

It is advisable to allow the mixture to stand after mixing to allow entrapped air to escape, bubbles or foam in a glue line can cause a weak bond. Cascamite is now ready for use. The mixture will remain usable for approx. 3 hours at 15°C

At higher temperatures the usable life is reduced and in hot weather it is advisable to mix only sufficient glue for immediate use (standing the mixing vessel in cold water will help prevent shortening of the usable life).

APPLICATION

Joints should be smooth and well fitted. Apply the glue using a stiff brush to one surface only. Assemble and clamp (pin or screw) the joint whilst glue is wet. Keep the joint under pressure until set (approx. 6 hours at 15°C) A damp cloth can be used to remove excess wet adhesive.

NOTE: - At temperatures below 10°C (50°F), a period of up to 2 or 3 days may be required before the glue sets. During cold weather, it is therefore essential that joints under pressure be kept in a warm place.

Gel Time Guide:

20° C	30°C	70°C	100° C
1-2 Hr	30 Min	1.5 Min	33 Sec

Coverage should be 100 to 250 grams/sq. metre

NOTE: - If bonded wood is to be turned on a lathe it is recommended that the bonded wood is seasoned for a minimum of one week before turning.

BONDING TIPS

1 Ideally the moisture content of the substrates should be $9\% \pm 2\%$ with no more than 3% difference between the two surfaces to be bonded, otherwise stresses are built into the joint, which may result in wood or joint fracture.

If the wood is too damp, the dilution effect will weaken the adhesive performance.

2. Although the workshop conditions may be above 10°C, wood brought in from unheated storage conditions may well be below this temperature and should be allowed to warm to above 10°C before attempting to bond it.

3. Some species of oak can be particularly dense resulting in difficulties in the adhesive penetrating the surface. In such instances, the surface should be removed by sanding to open the pores of the timber and double spreading may prove necessary to ensure both surfaces have sufficiently "wetted" out.

4. Some timbers, and particularly maple can be over prepared by planeing the timber; this leaves a "glassy" surface, which is detrimental to the bonding process.

5. Oily timbers, such as teak, present problems with the "oils" inhibiting a satisfactory bond.

Degreasing is normally required; this can be achieved by wiping the surface with washing up liquid.

Sanding can also remove surface grease, but if the adhesive is not applied shortly afterwards there are likely to be problems of case hardening where the oils have surfaced again.

STORAGE

Store Cascamite in a cool dry place with the container tightly closed. Heat and moisture will cause the glue powder to become solid or insoluble. Claims for loss due to neglect of this warning cannot be accepted.

CLEANING OF CONTAINERS AND TOOLS

Wash down equipment with clean cold water before the glue sets. After the glue has set it becomes hard and difficult to remove. In particular, glue should not be allowed to harden on brushes or rollers.

WARNING: The fully cured adhesive can only be removed by mechanical means (sawing, sanding etc).

HEALTH & SAFETY

Protect skin from contact with both unmixed powder and mixed adhesive. Mix in well ventilated area. Full data sheet available on request.

Non-hazardous. Ensure good ventilation. Keep out of reach of children. Contact with eyes-wash immediately with warm water. Remove excess from tools and mixing vessels before washing in warm soapy water. Do not empty containers into drains or watercourses.

The information supplied herein is accurate to the best of our knowledge. Since conditions and methods are beyond our control, no warranty is expressed or implied. You are advised to access the suitability of the product on a test area before application

Further information may be obtained from:

POLYVINE LIMITED
Severn Distribution Park
Sharpness,
Berkeley, Gloucestershire.
GL13 9UQ
United Kingdom

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International +44 845 017 1671
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info@polyvine.co.uk

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MATERIAL SAFETY DATA SHEET -----

Cascamite

1. PRODUCT & COMPANY IDENTIFICATION

Polyvine Ltd
Burma Road
Severn Distribution Park
Sharpness, Berkeley, Glos GL13 9UQ
Telephone 0845 017 1671
Fax 0845 017 1670

2. COMPOSITION AND INFORMATION ON INGREDIENTS

2.1: Chemical characterisation: Urea Formaldehyde Resin

2.2: Ingredients contains:

CAS/Registry No	Material Description	% Content
50-00-0	FORMALDEHYDE	<0.1
	UREA-FORMALDEHYDE POLYMER	90-96
	INORGANIC SALT	1-4

3. POTENTIAL HAZARDS

3.1: Main hazards

Not regarded as a health hazard under current Legislation>

4. FIRST AID MEASURES

4.1: Eye contact: Immediately flush with water for at least 15 minutes. Eyelids should be held apart during irrigation to ensure water contacts the entire surface of eyes and lids. Seek immediate medical attention.

4.2: Skin contact : Wash affected area with soap and water for 15 minutes. Remove contaminated clothing. In cases of prolonged irritation, seek medical advise.

4.3: Inhalation : If inhalation causes adverse effects, remove to fresh air. If problem persists, seek medical advise

4.4: Ingestion : If swallowed, give large volumes of milk. Do not induce vomiting. Obtain medical attention.

5. FIRE FIGHTING MEASURES

5.1: Extinguishing media :

Vaporizing liquid type, powder, foam or CO₂, Water spray fog or mist. Very low risk of fire.

5.2: Hazardous Decomposition Products

High temperatures generate carbon dioxide (CO₂), carbon monoxide (CO)

6 ACCIDENTAL RELEASE MEASURES

6: Major spills : Shovel into suitable dry containers and re-use if possible.
Flush the area with water. Ensure residue does not gain access to watercourses.

7 HANDLING & STORAGE

7.1 Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

Use in well ventilated areas and avoid breathing of dust. Use an approved respirator if air is contaminated above acceptable levels.

When blended with water, the concentration of free formaldehyde of the reconstituted resin will increase to a value of 1 to 2 percent (w/w).

The reconstituted product must therefore be considered to be Harmful for Supply, with the following risk phrases ' Possible risk of irreversible effect and May cause sensitisation by skin contact.

Safety phrases as used in Section 15 should also be used.

Care must be taken when opening containers due to a small build up of formaldehyde gas.

7.2 Store away from food and other ingredients.

Store in cool, dry conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure controls.

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimise employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programmes are adequate.

If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and airflow patterns should be provided to keep air contaminant concentrations below acceptable levels. Refer to section 2 Composition/Information on Ingredients which details specific exposure limits where applicable.

8.2. Personal Protection : Wear synthetic protective clothing (aprons and boots) if contact is likely.

Where air contamination can exceed acceptable criteria, use approved respiratory protection equipment. Respirators should be chosen based upon the form and concentration of the air contaminants. Use goggles and face shield if contact is likely. Wear gloves as required to prevent skin contact.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Form : Powder, dust.

9.2 Colour : White

Further information:

10. STABILITY & REACTIVITY

10.1 Avoid contact with acids

10.2 Hazardous Decomposition: High temperatures generate carbon dioxide (CO₂), carbon monoxide (CO).

10.3 Materials to be avoided: Acids.

11. INFORMATION ON TOXICITY

Toxic Dose1- LD50 > 5000mg/kg (oralrat)

Toxic Conc – LC50 No available data

This chemical has good warning properties. **Irritant of eyes and mucous membranes.**

Acute and Chronic Health Hazards – Mild dermatitis and allergic skin rash

In the EEC formaldehyde is classified as a Category 3 Carcinogen. This means that formaldehyde is not known to be carcinogenic to man (Category 1), or regarded to be carcinogenic to man (Category 2). Although at high concentrations, formaldehyde has been shown to cause cancer in rats, there is no convincing evidence that the substance induces cancer in man. For this reason formaldehyde has been placed in the lowest category 3.

Formaldehyde is classified as a Category 3 carcinogen (EEC)

12. INFORMATION ON ECOLOGICAL EFFECTS

Ecological effects information : Urea-Formaldehyde polymer is slowly but not readily biodegradable. TOC removal 28 days 61%. BOD28;0.62 mg/mg substance. Nitrification 28 days; 0.45 mg NO₃-N/mg substance. Formaldehyde; No bioconcentration. Biodegradation; BOD5/COD; 0.68 (Readily biodegradable)

Other information : Do not discharge product into drains and sewers.
Urea formaldehyde polymer – very low fish toxicity, no inhibition of activated sludge at 140 mg/l suspended solids.

13. DISPOSAL

Disposal : Dispose according to local regulations.

14. TRANSPORT

No transport warning sign required.

15. REGULATIONS

15.1 Label Information: Not classified

15.2 Risk Phrases – Not classified.

15.3 Safety phrases S22 Do not breathe dust
S24 Avoid contact with skin
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S44 If you feel unwell, seek medical advice(show label if possible)

16. OTHER INFORMATION

The information provided in this Safety Data Sheet is based on data provided by sources considered to be reliable. This data is intended to enable safety assessment to be made and should not be construed as guaranteeing specific properties. Users are recommended to consult technical information sheets for advice on specific applications.

Further information may be obtained from:

<p>POLYVINE LIMITED Severn Distribution Park Sharpness, Berkeley, Gloucestershire. GL13 9UQ United Kingdom</p>

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