

## What is Browning Treatment?

BROWNING TREATMENT is a powerful liquid treatment for removing jute stain cellulosic browning caused by overwetting or flooding of carpets and upholstery.

### Key Benefits

- ✓ Removes cellulosic browning
- ✓ For treatment of watermarks
- ✓ Neutralises alkaline residues

### How Does It Work?

When a cellulosic fibre such as jute, cotton or linen is wet with water and allowed to dry very slowly, a brown discolouration often appears at the point where the evaporation of the moisture takes place. This brown colour is known as cellulosic browning. It results from the degradation of cellulose and is a similar discolouration to the yellowing that occurs as a newspaper yellows with age. Most carpets contain one or more cellulosic fibres. For example, in tufted carpets jute is used as the primary or secondary backing. Some rugs are made entirely of cotton. Consequently, when these carpets or rugs are cleaned by shampooing or by hot water extraction they may develop browning when they dry because the moisture may carry brown cellulosic matter up onto the fibres.

### When does browning occur?

Browning can only occur if three factors are present:

1. A cellulosic fibre
2. Moisture
3. Slow drying

If the water used to clean the carpet comes into contact with cellulosic fibres (e.g. In the jute backing) then a small portion of cellulosic material may dissolve and be carried up the tufts by a wicking process as the carpet dries. As the last of the water evaporates, the tips of the tufts may become badly discoloured with brown stains. The slower the drying, the more browning that will occur. This is because the moisture evaporates from the tips of the tufts and the brown discolouration is carried right to the top of the carpet. Over-wetting a carpet increases the risk of browning. On the other hand, if the carpet is dried quickly, then the tips of the tufts dry out first and browning is prevented from rising or wicking out.

## How do you recognise browning?

Spread the pile apart and observe the location of the brown colour. If it is browning, it will be located on the highest part of the carpet: the tips of the tufts on a cut-pile carpet or on the sides of the fibres if the pile has been flattened by traffic (still the highest part of the carpet). Browning may appear as random circles of yellow-brown patches evenly distributed over the carpet. Soil will tend to hide browning. Browning has a tendency to darken in colour with time as it oxidises and develops.

## Can browning be removed?

Browning can be removed fairly easily from the man-made fibres (nylon and acrylic), from cotton and rayon with a little more work and from wool with some difficulty. Prevention is the best cure; try to avoid over-wetting the carpet or wetting the backing and try to ensure fast drying by allowing good air circulation, preferably with warm, dry air. Use the correct dilution of extraction detergent as excess alkalinity produces a darker brown stain. However, if browning develops, it may be removed by using BROWNING TREATMENT. This product is an acid-sour that is used to reverse the alkalinity of cleaning solutions.

## For Use On...

BROWNING TREATMENT is suitable for removing cellulosic browning stains and watermarks from all types of carpet and upholstery. BROWNING TREATMENT also acts as acid-sour that can be used to reverse the alkalinity of cleaning solutions.

## Technical Data

### Composition

BROWNING TREATMENT contains mild acids that can release cellulosic browning stains from the fibres, together with wetting agents to help it spread into the fibres.

### Properties



COLOUR – Transparent, colourless liquid  
ODOUR – Strong, sulphur dioxide-type odour  
pH = 4.0 ± 0.5  
FOAM – Low foaming

## Environmental Care

BROWNING TREATMENT conforms with all statutory environmental requirements. It is based on safe ingredients selected to perform efficiently so there is no waste or damage. BROWNING TREATMENT is non-flammable, phosphate-free and biodegradable. Containers are recycled wherever possible.

Agar Cleaning Systems maintains Safety Data Sheets (SDS) on all its products. These sheets contain information that you may need to protect your employees and customers against health or safety hazards associated with our product. Agar Cleaning Systems recommends that you obtain a copy of the respective SDS sheet prior to using this product. The information in the Product Data Sheet is based on data we believe to be reliable. It is offered in good faith, but without guarantee, as conditions and methods of use of our product are beyond our control.

## Quality

The design, manufacture and supply of all Agar chemical products is controlled by the Agar Quality Management System which is registered and externally audited by SAI Global as complying with the requirements of AS/NZS ISO 9001 "Quality Management Systems – Requirements".

First Certified: 30 April 1996 SAI Certificate No.: QEC7358

## Application

Browning could in theory, be removed by washing the carpet with water, but the problem is that browning is just as likely to reappear on the tips of the fibres when they dry again. Now, it is a scientifically known fact that the degraded cellulose which causes browning is less soluble in acid solutions than it is in alkaline solutions. So, acid solutions help to prevent browning from reappearing. Consequently, a carpet with browning should be lightly sprayed with neat BROWNING TREATMENT (a mild acid) and then after 5-10 minutes of contact the excess moisture should be wiped off or vacuumed up. BROWNING TREATMENT may also be applied through a rotary brush machine or with a cloth or sponge mop. It is important at this stage NOT to rinse or over-wet the carpet and to make sure the carpet is dried as quickly as possible after treatment. A good idea with rugs that have been treated is to dry them face down on a clean surface. This ensures that the evaporating moisture will leave from the back of the rug, leaving the face fibres free of browning. BROWNING TREATMENT may be applied repeatedly on persistent browning marks, but care should be taken not to over-wet the carpet. Allow the carpet to dry between applications. BROWNING TREATMENT may also be used on upholstery in the same way, but it should be extracted with clean water.

## The Last Resort

If browning stains have become bonded to the fibres and cannot be removed, a safety bleach may be tried but only as a last resort as this type of treatment may affect the dyes in the carpet.

## Disposal Information

### 1. Used solutions -

Used Solutions of BROWNING TREATMENT should be poured into a drain or trough that leads to the sewer system or a septic tank. These systems have a method for treating and breaking down the waste. Used solutions of detergent should not be poured into stormwater drains or down driveways as these drains are designed for rainwater and ultimately lead to the local river system.

### 2. Unused product

It is best to keep the product and use it up! If this is not possible, try to give it to someone who can use it. (Make sure the product is in its original, labelled container).

If there is no alternative but disposal, it is safe to pour modest quantities of this product down the drain (to sewer) with running water. Leave the cold tap running for a few moments afterwards as this dilutes the product and reduces the concentration in the wastewater.

Remember, do not mix different cleaning products together during disposal!

### 3. Empty packaging

#### Bottles and drums

Our 5L and 20L bottles and drums are made from HDPE (polyethylene) or PET which can be recycled. You can dispose of these containers via the kerbside collection program or other recycling system. BROWNING TREATMENT containers will be cleaned and reused if returned to Agar Cleaning Systems Pty Ltd, significantly reducing plastic usage and waste.

#### Cardboard cartons

Used boxes should be flattened and recycled in OCC (old, corrugated cardboard) or mixed wastepaper recycling programs.

Available in: 5L