

# RAYSTON INSULATION ADHESIVE

RAYSTON  
products



## DESCRIPTION

**Rayston Insulation Adhesive** is a solvent free, high performance foaming moisture-cured single component polyurethane adhesive. It has been developed for bonding a wide range of insulation boards, to a wide variety of decks and vapour control layers.



## PROPERTIES

- Solvent free, non-flammable, and low odour
- Simple applications straight from the drum, in beads/ ribbons.
- Fast curing at low temperatures in a range from 5°C to 30°C
- Average cover rate. Normal roof exposures, approximately 40-60 sqm per 6.5 kg (100-150 grams per sqm). Roof perimeters and critical areas, approximately 30-40 sqm per 6.5 kg (100-210 grams per sqm).
- Chemical and water resistant.

## TECHNICAL DATA

### INFORMATION ON THE FINAL PRODUCT

|                         |                                               |
|-------------------------|-----------------------------------------------|
| Colour                  | Brown                                         |
| Packaging               | 6.5 kg (net weight) in a 6-litre metallic tin |
| Viscosity               | 7500-8000 mPa.s                               |
| Density                 | 1.11 g/cm <sup>3</sup>                        |
| Cure time               | 30 min (20°C)                                 |
| Application temperature | From +5°C to +30°C                            |
| Shelf life              | Unopened stored at 5 to 25°C, 9 months        |
| Solids content          | 100%                                          |

## SUPPORT REQUIREMENTS

1. Surfaces must be clean, dry, and free from contamination.
2. Apply directly onto the substrate in liquid beads 10-20mm wide.
3. The adhesive should be applied in strips following the direction of the board length, ensuring continuous and equally spaced adhesive beads within each board width.
4. Immediately place the insulation board directly onto the adhesive.
5. Apply pressure to the insulation board to ensure full contact with adhesive.
6. Allow to cure (30 minutes at 20°C) before waterproofing the insulation boards.

## CURING TIME

All information is provided as a guideline only. Open time and cure time are both dependent on a range of variables: temperature, substrate being bonded, method of application, weight of adhesive applied and relative humidity.

## APPLICATION GUIDELINES

**Rayston Insulation Adhesive** is extremely versatile. It can bond to a wide range of insulation materials including XPS, EPS, PIR, PUR, foil faced (see additional notes), tissue faced, and mineral wool. In addition, these materials can be bonded to a wide variety of substrates including concrete, OSB, plywood, existing asphalt. Bituminous systems and more.

For bonding apply 10-12mm wide beads of adhesive at 250mm centres. When bonding in more critical areas and roof perimeters where wind uplift may be stronger-apply adhesive at 175 mm centres.

When bonding to unfaced stone wool insulation and rockwool insulation increased coverage of adhesive will be required.

Once the adhesive has been applied the insulation board must be pressed into place within 10- 20 mins at 20°C. Please check that the adhesive has fully transferred to the insulation board by carefully lifting a corner to ensure the beads. Ribbons have been squeezed flat.

## BONDING OF TWO METAL FOIL FACED SURFACES

One component insulation adhesive must not be used to bond two metal foil faced boards together because the adhesive is moisture cured and a foil/ foil interface will not have enough moisture to cure the adhesive. However, in very small areas (less than 30 sqm) a light water mist can be applied to ensure enough moisture is available for the curing process to happen. Pump action or hand operated garden spray equipment can be used to create a water mist.

Bonding one foil face insulation to a porous non foil faced insulation is approved (full product compatibility is available from Krypton Chemicals UK technical dept and the contractor should do a small "on site "test).

## STORAGE AND HANDLING

**Rayston Insulation Adhesive** is a moisture-sensitive adhesive, which will eventually gel if left in open contact with air. Krypton Chemical takes every care to ensure that our product is supplied fit for purpose by protecting the adhesive with a layer of nitrogen inside the tin prior to despatch. This ensures a storage life of twelve months, provided that the container is left unopened in a dry condition at a temperature of +5 to +30°C. The layer of nitrogen will disappear, and the adhesive will have a limited life once the container is opened. It is also important to note that carbon dioxide will be given off if water enters the adhesive container, which can cause pressurisation.

## HEALTH AND SAFETY

Information regarding handling, storage and disposal of this product can be found on the latest version of the product Safety Data Sheet, which should be consulted before use.

## OTHER INFORMATION

The information contained in this DATA SHEET, as well as our advice, both written as verbal or provided through testing, are based on our experience, and they do not constitute any product guarantee for the installer, who must consider them as simple information.

We recommend to study deeply all information provided before proceeding to the use or application of any of our products, and strongly advise to conduct tests "on-site" to determine their convenience for a specific project.

Our recommendations do not exempt of the obligation of installers to deeply study the right application method for these systems before use, as well as to conduct as many preliminary tests as possible should any doubt arise. The application, use and processing of our products are beyond our control, and therefore under the exclusive responsibility of the installer. In consequence, the installer will be the only responsible of any damage derived from the partial or total in-observation of our indications, and in general, of the inappropriate use or application of these materials.

**This data sheet supersedes previous versions.**



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Page: 1/1