

# NODAL 100 PLUS

## Vegetable Oil and Water based Form Release Agent

### Description

**Nodal 100 Plus** is an environmentally friendly emulsified release agent that produces an excellent surface finish on concrete structures and precast components.

**Nodal 100 Plus** is designed so that it can be used on steel, timber, concrete and plastic moulds. This product is very popular with precast plants and can handle heated mould temperatures up to 80°C. It is an easy-to-apply and ready-to-use emulsion that is solvent-free, low odour, readily biodegradable and non-flammable. **Nodal 100 Plus** creates a uniformly bright concrete surface, conforming to the fair-faced concrete standard.

### Indicative Characteristics

Bases	Vegetable oil derivatives emulsified in water
Form/Colour	Pale yellow
Density	~0.94 kg/L at 25°C
Flash point	> 100°C

The information contained in this data sheet is given to the best of our knowledge and the results from extensive testing remain as objective as possible. However, it cannot, in any case, be considered as a warranty involving our liability in case of misuse or any different use of our products from the "Application" paragraph of this technical data sheet. Some application tests should be carried out before using the product to ensure that the methods of use and conditions of application of the product are satisfactory.

### Uses

- ✓ Prestressed, precast, and pipe plants
- ✓ RCC structures

**Nodal 100 Plus** is well suited for shutter faces made from wood, steel, fibreglass, aluminium and paper. **Nodal 100 Plus** reacts chemically with cement to impart excellent release properties to treated surfaces. Concrete cast against surfaces coated with **Nodal 100 Plus** exhibit a smooth, hard, uniform finish. **Nodal 100 Plus** has no negative effect on the properties of concrete, nor will it impair the adhesion of subsequent surface treatments when applied at the recommended coverage rates.

### Advantages

- ✓ Suitable for steel, timber, concrete and plastic moulds
- ✓ Can be used on high temp moulds
- ✓ Produces very clean bright panels
- ✓ Enables clean and easy removal from the mould
- ✓ Very easy to apply – spray once and no need to wipe
- ✓ Very good adhesion to both horizontal and vertical moulds
- ✓ Saves labour as less manhours required compared to oil-based release agents
- ✓ Low odour so does not overpower applicators
- ✓ Does not cause skin irritation like some oil-based products
- ✓ Has potable water certification so can be used in manufacture of water tanks
- ✓ Non-hazardous to health and the environment

### Method of Use

#### Substrate quality / Pre-Treatment

All moulds, new or used, must be cleaned of surface deposits of rust, concrete, oil, or other materials. Inadequate cleaning may lead to surface blemishes due to the adhering material.

If only limited use of the formwork is envisaged, new timber moulds may be coated directly with **Nodal 100 Plus**.

If forms are to be regularly re-used, then the surface should initially be coated with a suitable polyurethane sealer. This provides increased protection to the timber surface, improves ease of cleaning, and prevents the buildup of large residual levels of release agent in the timber of the form which may lead, over time, to increased surface dusting or retardation.

### Application Instructions

The moulds should be dry and clean. Any residues of rust and concrete must be removed. **Nodal 100 Plus** is applied in thin layers, covering the complete surface (a second application may be necessary in case of highly absorbent formwork). We recommend the use of a special spray gun with an operating pressure of 3 bar to 6 bar and a flat spraying nozzle.

Application by a brush, roller or cloth is also possible. Accumulations of **Nodal 100 Plus** should be avoided. Any excess should be wiped off using a cloth or sponge. Before concreting preliminary test are recommended to optimise the procedure for each project.

### Coverage Rate

Steel, Aluminium or Plastic formwork 40 m<sup>2</sup> to 60 m<sup>2</sup>/L and Timber form 30 m<sup>2</sup>/L. The consumption is dependent on the surface texture and porosity of the formwork. Actual dosage to be finalised based on site trials.

The best results will be obtained with the thinnest practical coating. Overapplication should be avoided. Excessive application on flat surfaces or which leads to pooling of release agent in the corners of forms is uneconomic and can lead to surface dusting or, in worst cases, surface retardation.

### After Stripping or Demoulding

After use, the formwork or mould should be brushed or wiped clean of any excess dust prior to re-application of **Nodal 100 Plus** for the next use of the mould. The use of **Nodal 100 Plus** minimises the amount of time and effort required for this process.

### Shelf life

If stored in unopened containers at normal ambient temperatures, a shelf-life of approximately 12 months.

### Packaging

Available in 20 L buckets and 200 L HDPE barrels.

### Safety Precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin, and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable items.

### Safety

Before use, refer to the Material Safety Data Sheet (MSDS). The MSDS is available on [www.ccichemicals.in](http://www.ccichemicals.in) or contact us at [info@ccichemicals.in](mailto:info@ccichemicals.in).

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