

**PROTECTIVE FILM
NOVACEL 4294**

I DEFINITION

Self-adhesive film for temporary surface protection

II CHARACTERISTICS

II.1 Backing

Film type : UV treated polyolefins

Colour : clear transparent

Type of adhesive : acrylic

II.2 Functional characteristics

Characteristics	Method	Metric Units	US Units
Average thickness	AFERA 5006	80 µm	3,2 mils
Adhesion to stainless steel	AFERA 4001	80 cN/cm	7,3 oz/in

II.3 Informative characteristics

Characteristics	Method	Metric Units	US Units
<u>Breaking strength</u> : - machine direction - Transverse direction	AFERA 5004	> 1,6 daN/cm	> 9,1 lbs/ in
		> 1,3 daN/cm	> 7,4 lbs/in
<u>Elongation at break</u> : - machine direction - Transverse direction	AFERA 5004	> 300 %	> 300 %
		> 500 %	> 500 %
Unwind force	AFERA 4008	< 20 cN/cm	< 1,8 oz/in

* AFERA : Association of European Self-Adhesive Tape Manufacturers.

N.B: The informative characteristics are only indicative and will not engage NOVACEL's responsibility

III PRINCIPAL USES

NOVACEL protective film is used for the protection of surface finishes from dirt, scratches and tool marks during:

- Handling
- Transport and storage
- Forming
- Assembly...

The NOVACEL protective film exhibits the special "EASY PEEL" characteristics for the rapid removal of film from high gloss surfaces. The removal force is inversely proportional to the speed of removal.

The protective film is used to protect the surface finishes:

- smooth
- glossy
- semi-glossy
- matt
- semi-matt
- With a gloss level above 20 (GARDNER gloss-meter, angle 60 degrees)

It can be used to protect the following materials :

- pre-coated metal with polyester
- pre-coated metal with plastisol
- pre-coated metal with PVF2
- Metal PVC laminate

Note:

It is not advisable to use the NOVACEL protective film on stainless steel and on glossy plastic sheets.

If the protective film is used on an other surface or on protected surfaces using heating process, consult NOVACEL.

IV PRINTABILITY

The protective film can be printed in one or two colours and the minimum quantity per order is 50.000SMQ (+/- 10 %, as normal practice for printed products).

It becomes a communication support you can use for corporate identity support, displaying company or product logo or label, advertising, instruction and specifications, methods of use of the protected surface

V PRESENTATION

	Length's roll	Exterior diameter	Interior diameter of core	Maximum Widths
Metric Units	1000 ml	334 mm	76 mm	2600 mm
US Units	3281 feet	13 in.	3 in.	102 in.

VI LAMINATION

The protective film must be applied to a clean and dry surface with the aid of a laminating machine. The film must be applied without bubbles and without excessive tension.

Elongation of the film during lamination should be less than 1%.

VII STORAGE AND APPLICATION

- The protective film must be stored in its original packaging, in clean, dry conditions.
- The film should be applied within a 6 month period from the delivery date.
- The film should be removed within 1 year from the date of lamination.



- Outdoor exposure : 1 year
- Stay clear from stagnant water.
- The following precautions should be taken when the printed NOVACEL protective film is exposed to sunlight :

The printed surface of the film can have a greater screening effect than the unprinted surface, which could result in colour or gloss variations.

NOVACEL requests that the client tests to film, before using the product, to endure that during exposure to sunlight, the protected surface is not subject to such variations.

VIII REACH – RECYCLING

- At present, as regards to REACH regulation, NOVACEL can attest that none of the substances included in the list published by the European Chemicals Agency enters in the composition of its films. On the other hand, NOVACEL cannot, for obvious confidentiality reasons, communicate the exhaustive composition of its films.
- The waste executive directive n° 2008/98/CE requires that each state of UE takes measures to increase the energy recovery, re-use and recycling of waste. NOVACEL can attest that our protective films can be recycled. The energy recovery and dumping are possible in accordance with local or national legislation in force, in authorised waste treatment center.

IX GENERAL GUARANTEE CONDITIONS

NOVACEL self-adhesive, protective films are designed for temporary surface protection of surfaces against dirt, scratches and tool marks ; they are not designed for protection against corrosion, humidity or chemicals. Their applications are very diverse and the conditions of use can vary from one enterprise to another, and for this reason NOVACEL always ask the Client to test the product and carry a full trial, prior to its use.

The evaluation trial must take into account the type of material on which the product is used, the surface finish, the temperature and processing constraints, and the time and conditions for interior or exterior use.

The principal utilisations mentioned in part III are only indicative and will not engage NOVACEL's responsibility if utilisation test is not done under normal use forecast by the customer.

NOVACEL cannot be responsible for the misuse of the product, nor for the consequences of their usage for non-recommended applications.

The product guarantee is generally limited to the replacement of the defective product and does not cover consequential claims.

This is a computerised form and is signed electronically