



waxes adhesives coatings



Conventional Paradip™ cheese coating waxes are formulated from food grade, hydrocarbon waxes refined from mineral oil. After many years of product and application development, Paramelt is now able to formulate natural, organic waxes with similar characteristics, using ingredients derived from sustainable vegetable oils.

Paradip Nowax™ vegetable-based cheese waxes.

The use of wax coatings to encapsulate cheese remains a strong concept providing both functional and marketing benefits:

Protection

- Inhibits mould growth
- Prevent loss of weight/moisture
- Reduce damage during transport
- O Stop (aerobic) ripening of the cheese

Promotion

- Strong brand identity
- O Distinctive & attractive shelf appeal
- Extended shelf life



The Paradip Nowax[™] range of cheese waxes consists of products for both industrial coating lines as well as manual dipping and are available in a variety of colors, produced in our unique in-house color lab.

The vegetable-derived, natural waxes are themselves classified as food ingredients and are both renewable and compostable. In addition, the physical properties of these waxes offer additional possibilities to control the permeability of the cheese coating layer - in particular, the breathable nature of these products makes them especially suitable for coating gas-forming cheeses.

Product	Congealing point (°C) ASTM 938	Viscosity @ 100°C (mPa.s) ASTM 3236	Penetration @ 25°C (dmm) ASTM D 1321	Type of pigment/ colorant
Paradip Nowax Natural 6107	43 - 48	6 - 10	40 - 50	-
Paradip Nowax Yellow 5990	43 - 48	6 - 10	40 - 50	E160A
Paradip Natural 6333 (hybrid)	67 - 73	5 - 10	65 - 75	-

The products presented in this brochure are a selection from our comprehensive range

Gas forming cheese

The typical holes in cheeses like the Swiss Emmentaler and the Dutch Maasdammer, are created during the ripening process through the evolution of CO₂ gas, released during the conversion of lactic acid to propionic acid. This can lead to blister formation under a conventional wax coating as this gas cannot permeate through the applied layer. Paradip Nowax coatings have a higher gas permeability than their mineral based counterparts allowing the evolved gas to escape, whilst maintaining a sufficient moisture barrier to prevent drying out of the cheese.

Endless possibilities

As market leader for cheese coatings Paramelt offers the widest range of products for this sector with almost a hundred different Paradip™ cheese waxes. This enables Paramelt to meet the full range of market demands from small mini cheese snack portions all the way up to large, fully matured hard cheese wheels.

Our ability to deliver such a broad range of products whilst maintaining colors to tight tolerances and stability levels is unique in the industry. This is only possible because of our unique in-house pigment formulation facility, which is specifically dedicated to support the cheese wax range. This expertise in dye and pigment concentrates has now allowed Paramelt to introduce a range of colored vegetable-based cheese waxes to the market.

Application aspects

Paradip coatings are applied by immersing the cheese into molten wax at temperatures typically in the range 80-120°C. The Nowax vegetable-based grades show a distinctly different crystallisation and congealing to mineral waxes and therefore require re-optimisation of the application process conditions compared with running mineral-based products. Typically vegetable waxes can be run at significantly lower temperatures however the congealing and hardening behaviour of the Nowax products is substantially slower than mineral waxes, which can lead to production limitations.

In some cases therefore, to achieve the desired application weight, surface finish or throughput, it is necessary to further formulate the natural waxes to deliver the required characteristics, resulting in the so-called Hybrid grades. These Hybrid products enhance the performance of Nowax coatings in high-speed industrial lines whilst maintaining the vegetable content of the wax above 85%.

Food safe manufacturing

Our range of Paradip cheese waxes requires a controlled manufacturing environment in order to meet the necessary regulatory & hygiene standards. As a result of these demanding requirements, we have invested heavily in our operating facilities and procedures, using comprehensive standards of HACCP and GMP to achieve FSSC 22000 accreditation for our ISO 9001 certified production operation equivalent to AIB and BRC standards.





the cheese wax industry
from the very beginning
since the founder of
Paramelt Mr Dirk de Wit
developed the concept of
cheese wax coatings in
the early 1900's. Paramelt is
acknowledged today as the
global market leader in
both mineral and vegetable
wax-based cheese coatings,
thanks to this long-term
investment and focused
approach.

Paramelt has been active in



We are **Paramelt**

Founded in 1898, Paramelt has over 120 years of experience and today is a global producer of wax blends, adhesives and specialty dispersions. Operating from production sites in The Netherlands, United Kingdom, the USA and China we work together in a team of about 500 employees around the world. In most of our core applications Paramelt is the acknowledged

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Paramelt Europe

Costerstraat 18 1704 RJ Heerhugowaard The Netherlands t +31 72 57 50 600

Paramelt USA

2817 McCracken Street, Muskegon, MI 49441 United States of America t +1 231 759 7304

Paramelt Asia

109 Sutong Road, Suzhou Industrial Park Suzhou, Jiangsu 215021, China t +86 512 6761 6618

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