

Technical Datasheet

TerraWet[®] Gloss Coating G 9/378 FoodSafe

Product description

Water based gloss coating with fast drying, high wet block resistance and with a very wide range of applications, e. g. as ToySafe coating for the production of food packagings with play value or toy packagings.

Properties during coating process

Runability Drying Crackling tolerance Foaming tolerance Two-sided coating

Properties in dry condition

Gloss Scuff resistance Wet block resistance

- Heat resistance: Up to 120°C
- Slip angle: 18° 22°

Performance during further processing

Counter glueing Hot foil stamping UV varnishing Foil lamination

Material characteristics

- Delivery viscosity: 40 sec., 45 sec. and 60 sec. (20°C, DIN 4 mm cup)
- Solids: 34 39%

Special properties

low odour

Field of application Application



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- · Sheet-fed offset, coating unit (chamber doctor blade or two-rollers)
- · Drying: IR and hot air
- wet-in-wet

Substrates

- · coated paper
- · coated board
- rearside PE-coated board
- · cast-coated substrates

Printing products

- folding box, food
- folding box toys
- folding box, sweets
- displays
- labels
- outer packaging
- · detergent packaging
- · commercial prints, two-sided
- multipacks

Food legislation assessment

- The coating is characterised by low migration (global migration < 60 mg/kg (EU cube model)).
- The coating has been tested for food contact by an accredited testing laboratory and has been certified for the direct contact to dry and fatty foodstuffs at room temperature and below. A corresponding certification is available on demand from our department for product safety.
- The coating correspond to the Swiss Ordinance (SR 817.023.21 - ordinance of the Swiss Confederation on materials & articles in contact with food).
- A final evaluation according to food law requirements is only possible on basis of a migration analysis that has been conducted on the completed product. The analysis if the packaging is suitable for the designated filling good including the possible interdependencies between both is incumbent on the responsibility of the one who brings the packaging into circulation.
- Please pay attention that a direct contact of a printed area to food stuff isn't permissible even



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if the printing ink is overcoated. A water based coating isn't equivalent to a PE coating.

- · For the coating of packagings for fast food applications the coating is released exclusively from a technical point of view. We don't have further information (analysis) to evaluations according to food low requirements. Therefore we would like to point out specially that according to the articles 1 and 3 of the European Framework Regulation 1935/2004/EG it is incumbent on the responsibility of the one who brings in the packaging into circulation to ensure the food regulatory conformity of the complete packaging and the marketability of the finished product. Appropriate measures (migration studies) as part of the user (the person who grings the packaging into circulation) are necessary, to enable a final food regulatory evaluation of the suitability of the packagings for the intended filling good including the possible interdepedencies between both.
- Regulatory classification (toys) Regarding to the migration behaviour the coating is analysed and certified by an external (accredited) laboratory for the application on toys and toy packaging. A necessary certificate is obtainable from our department for product safety.

Based on the carried out examinations the coating complies to the following regulations: EU Toy Safety Directive 2009/48/EG, DIN EN 71.3 and 71.9, ISO 8124-1, -2, -3, EG No. 1907/2006, EG No. 1272/2008.

Notwithstanding that the definite examination of suitability and final assessment of the final product is incumbent on the responsibility of the one who brings the packaging into circulation.

Processing recommendations

- Recommended coating application: 3,5 5 g/m²/ wet
- Stir before use!
 - Mechanical stirring is recommended.
- We recommend to check the viscosity and to adjust it with water if necessary.
- Please use printing inks suitable for coating



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- Resistance against alkali, alcohol and solvents should be given according to DIN ISO 2836, formerly DIN 16524, in order to exclude a change of colour.
- There must be a suitability for waterbased coating if anti-set-off powder is used (do not use mineral powder).
- Recommended pile temperature: not > 35°C
- In order to guarantee a fast and complete drying, we recommend a sufficient airing of the sheets.
- · We recommend to omit adhesive straps.
- There must be a sufficient hardening of the overall system substrate-printing ink-coating before further processing which shoud be checked in the process.
- For the further processing of the sheets under mechanical load and/or the influence of humidity, a sufficient high basic consistency of the substrate is required.
- Using non-absorbent substrates and / or slowly absorbent printing inks, we recommend to plan for the corresponding drying times.
- The full profile of characteristics of the coating film is available after complete drying.
- The coating is suitable for wrapping in foils XS and MS (no acrylic coated foil).

Cleaning

• Please clean machines and tools immediately with water. Dried coating residues can be removed with TerraWet Clean Cleaning Agent G 12/180.

Storage

- · Protect from frost, heat and sun exposure
- · Shelf-life 18 months
- Applies to closed original containers at 5°C up to 30°C
- · Avoid mixing with other coatings or washing water.
- After opening use as soon as possible
- Storage may cause a change in viscosity.
 We recommend to check the viscosity and adjust if necessary - with water.



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Safety instructions

- Clean immediately with water if the coating comes into contact with skin or eyes.
- Please consider also the information given in the safety data sheet.

Environmental recommendation

- Do not allow coatings to get into water or canalisation.
- Product residues must be disposed professionally according to effective regulations.
- Please consider also the information given in the safety data sheet.

Please be advised

- All information provided on this product (in this sheet or elsewhere) are made to the best of our knowledge.
- All information are technical quality descriptions, advisory and due to the wide range of materials, production conditions, operations and processes do not release from own tests and examinations in customer-specific circumstances.
 Information about slip angle and heat resistance are based on internal examinations and the mentioned values can differ from the practice. A correspondent quality agreement can be made if a specification is requested.
- We reserve the right to change product characteristics because of technical progress, amendment of applicable law and mandatory production-related needs.
- If an application is intended to be made under different conditions than those specified in this sheet, we only assume liability after having examined the respective different conditions.
- This data sheet does not claim to be complete.



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