Technical Datasheet

TerraGloss® UV Gloss Varnish G 8/603 VK

Product Description
UV based gloss varnish for cosmetical packagings.

Properties during coating process
Reactivity
Runability

Properties in the cured condition
Gloss
Surface smoothness

Performance during further processing
• Hot foil stamping: yes
• Glueability: yes

Material characteristics
• Delivery viscosity: 60 sec. (20°C, DIN 4 mm cup)
• Solids: > 98 %
• Specific weight: 1,05 – 1,10 g/ml

Packaging unit
• 1000 kg container black
• 200 kg steel barrel
• 25 kg steel can

Special properties
• low yellowing
• low structure
• suitability of foils must be checked

Field of application
Application
• Offline
  sheet fed offset, coating unit/damping unit (chambered doctor blade system)
• Inline
  sheet fed offset, coating unit (chambered doctor blade system) on UV printing inks
• curing:
  120 - 200 W/cm wave length approx. 240 - 380 nm

The curing of the UV varnish depends on efficiency of lamps, age of lamps and production speed.

Substrates
• coated board
• coated paper
• rearside PE coated board

Printing products
• folding box, non food
• labels
• commercial prints, covers
• displays
• folding box, cosmetics

Food legislation classification
• The direct or indirect contact to foodstuff is not admitted.
  The varnish can be used as directed and complete curing for the outside of foodstuff packagings if the filling good is protected against migration by a functional barrier (according to 1935/2004/EC).

Processing recommendations
• Stir up well before use!
  Mechanical stirring is recommended.
• Recommended film weight:
  3 - 6 g/m²/wet
• The printing inks should be suitable for coating.
  The resistance against alkali, alcohol and solvents should be given in accordance to DIN ISO 2836, former DIN 16524, to exclude any colour change.
• Please use suitable screen rollers.
• Please test stamping ability and glueing must be tested in practice.
• A strong absorption on absorbent surfaces can cause an insufficient curing of the UV varnish, sensory problems, mechanical influence as well as rub resistance problems and poor slip properties.
• In case of an offline coating we recommend for the primer a drying time of minimum 24 hours, in case of metallic printing inks minimum 48 hours.
• Do not pollute the varnish with washing water or other varnishes.
• The increase of the slip angle can't be excluded in
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case of temperature and humidity. Storage tests are necessary.
• The property profile of the coating film is given in case of a complete curing.
The curing depends on the efficiency of lamps, life of UV lamps, machinery speed, general conditions of the UV unit (reflectors, etc.), temperature and the distance from the UV unit to the substrate.
We recommend to clean regularly the reflectors and - if necessary - to change the lamps in case of a drop in lamp efficiency.
• The total structure of substrate/printing ink/varnish must be cured sufficiently before processing and should be checked during the process.

Cleaning
• Please clean machine and tools immediately with alcohol. Dried film clean up with TERRAGLOSS CLEAN Cleaning Agent G 13/160.
• Tubes should be free of water, varnish and cleaning agent, otherwise the UV varnish can thicken.

Storage
• Shelf-life from date of dispatch 6 months
• Applies to closed original containers at 5°C up to 30°C.
• The increase of viscosity is possible if the coating is stored wrong or for a longer time!
• Place under the exclusion of light.
• Keep from freezing, heat and solar radiation.
• Do not pollute the varnish with washing water, cleaning agent or other varnishes/adhesives.

Safety instructions
• If the varnish comes into contact with eyes please remove contact lenses and keep the eyelids open.
Clean with plenty of water (10 - 15 min).
• Clean and rinse immediately with water and soap if the varnish comes into contact with the skin.
Do not use solvents or dilutions.
Contaminated clothing should be removed immediately.
• Please pay attention to the information given in the material safety data sheet.

Environmental recommendation
• Please pay attention to the information given in the material safety data sheet.
• Do not give the varnish into lakes and rivers or the sewage system.
• Remainders must be disposed professionally in compliance with valid instructions.

Please be advised
• All information provided on this product (in this sheet or elsewhere) are made to the best of our knowledge.
• This data sheet does not claim to be complete.
• 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.
• 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.
• We reserve the right to change product characteristics because of technical progress, amendment of applicable law and mandatory production-related needs.