KRONOS®

KRONOS 2066

The ink grade

KRONOS 2066 is a rutile pigment produced by the sulphate process. It is surface treated with alumina and further carries an optimised amount of organic polyol.

This, our latest pigment development, combines the paramount properties most required by producers of gravure and flexographic ink.

Key attributes

- Maximum opacity
- Excellent gloss
- Readily dispersed
- Rapid wetting
- Low ink viscosity
- Low abrasiveness
- Excellent brightness with a neutral tone, which is often preferred when printing on aluminium or metallised substrates

Applications

KRONOS 2066 is highly recommended for

- all commonly used mono- and bi-solvent inks
- various waterborne inks
- UV-curing printing inks

KRONOS 2066 has a relatively low level of organic surface treatment. Therefore, it is fully in compliance as a colorant with the relevant FDA Regulations for indirect food contact, e.g. FDA 21 CFR 178.3297 for indirect food additives.

Apart from high-gloss surface printing, KRONOS 2066 is also most suitable for use in reverse and lamination printing. The use of KRONOS 2066 is, however, not only restricted to printing inks. It performs extremely well in can coatings, where high opacity, whiteness and dispersibility are key properties.

KRONOS 2066 is also particularly suitable for high-gloss, industrial and decorative coatings for interior use. In these applications, it displays superior tinting strength and a warm tone.

Outstanding performance

Opacity It is the optimum mean particle size distribution that leads to maximum opacity. The lower BET surface area of the pigment allows the production of mill bases with lower overall ink viscosity.

Gloss and dispersibility By using very intensive grinding steps in production, the coarser pigment particle fractions are eliminated, imparting the inks very high gloss. In addition, the improved production process guarantees excellent pigment dispersibility, requiring only either high-speed dissolver or simple rotor-stator dispersion technology.

Performance properties (typical values)

	Standard ink grade	KRONOS 2066
Brightness L*	94.7	94.7
Tone b*	0.04	0.10
CR [%]	60.73	61.71
60° gloss	86	87
Cup viscosity [s/4 mm] mill base	51	49

Investigations in a standard nitrocellulose-based gravure ink

Particle size distribution

	Standard ink grade	KRONOS 2066
Median [µm]	0.30	0.34
Fraction < 0.2 µm [%]	8.7	5.7
Fraction > 0.6 µm [%]	1.6	0.9

Positive feedback from printing ink producers confirms the very high opacity results of KRONOS 2066 in solvent-based NC-PU, PVC, PU and waterborne systems based on EVA emulsions.

Registrations and Standards

EINECS No.: 236-675-5 titanium dioxide

CAS No.: 13463-67-7

Colour Index: 77891 Pigment White 6

International Standard: DIN EN ISO 591-2001

REACH: 01-2119489379-17-xxxx

The International Standard divides titanium dioxide pigments into two types, which are then classified in groups:

Type A, anatase / Groups A 1, A 2

Type R, rutile / Groups R 1, R 2, R 3

ASTM D476 Type I anatase. Type II to VII rutile.

Product safety regulations

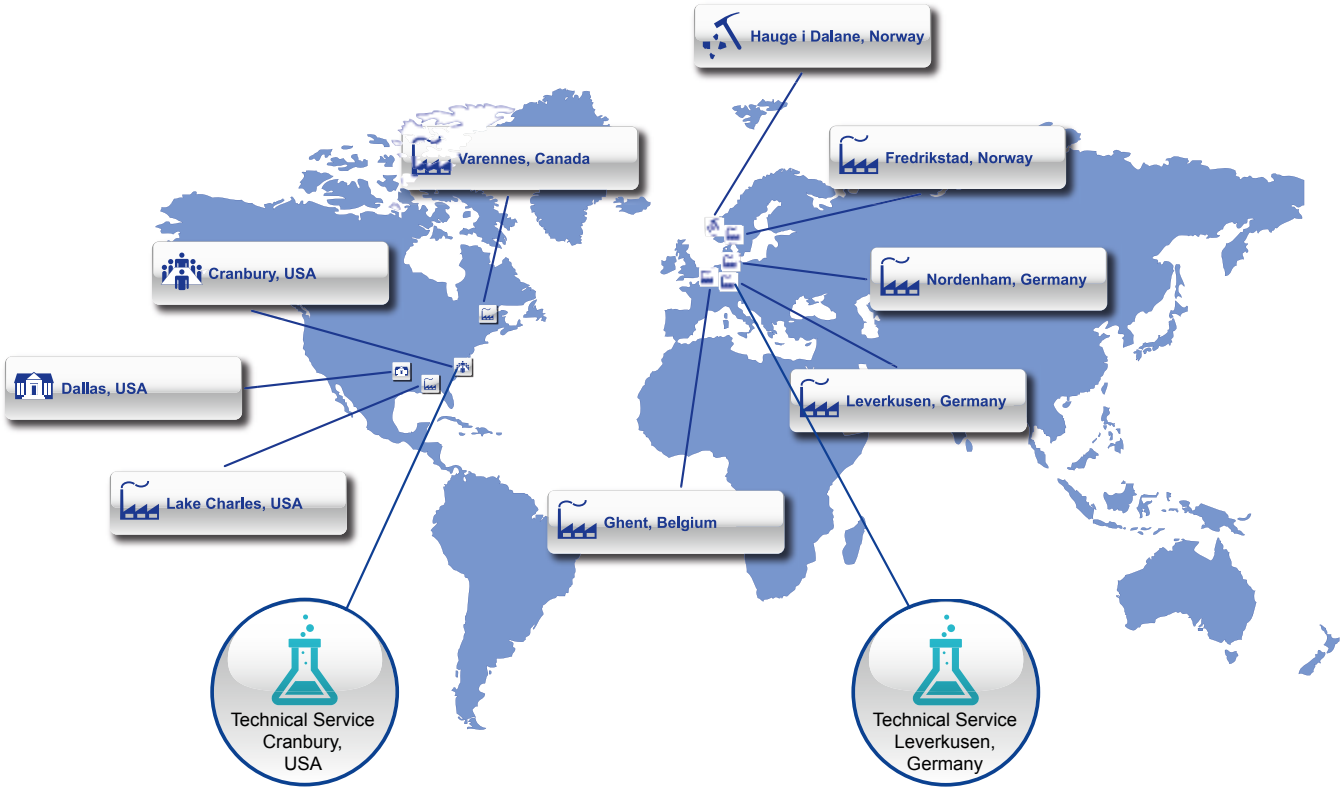
Not all titanium dioxide grades are suitable for use in inks and coatings in indirect contact with food. The amount of organic treatment on the pigment is often the limiting factor. These restrictions already apply in the USA (FDA Regulations), China and some other countries.

The Product Stewardship for KRONOS 2066 shows the full compliance list for the various countries worldwide. Please contact us for details.

Packaging

KRONOS TiO_2 pigments are delivered in:

- Standard 25 kg bags
- Intermediate Bulk Containers (”Big Bags“)
- Dry-bulk tankers



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