Date of printing:2011-05-17 Revised: 09-03-27

1 Product and Company Identification

Details on the product

Commercial product name: TTF - K 104 N

Manufacturer/Supplier: Leonhard Kurz Stiftung & Co. KG

Schwabacher Str. 482

D-90763 Fürth Tel.: +49 911/7141-0

Responsible office: Environmental and Security Department

2 Composition/Information on Ingredients

Chemical characteristics:

Polyester film with pigmented lacquer coating (organic and/or inorganic pigments)

Polyester: polyethylene terephthalate approx. 4,5 µ

3 Hazards Identification

Risks for human health: not known

Security risks: not known

Environmental risks: not known

4 First-Aid Measures

No particular procedures necessary.

5 Fire-Fighting Measures

Suitable extinguishing media:

CO₂-, powder and foam extinguisher, water

Particular risks arising from the product/products of combustion/generated gases:

When burned the following substances can be formed:

carbon monoxide (CO), small quantities of nitric oxide, trace amounts of hydrogen chloride and acetic acid.

Protective equipment:

Use breathing equipment independent from circulating air and protective clothes.

Further information:

Risk of explosion in the case of an electrostatic charge of the product in the presence of solvent vapours or dust.

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6 Accidental Release Measures

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7 Handling and Storage

Handling:

Electrostatic charges can be developed on the film. This may cause an explosion in the presence of solvent vapours or product dusts. Process product only in well ventilated rooms.

Observe the general instructions on industrial work hygiene.

Storage:

Store product at ambient temperature, avoid heat from direct sunlight and extremes of humidity.

8 Exposure Controls/Personal Protection

Technical protection measures:

Suck off product dust that may be generated directly at the place of origin.

Personal protective equipment: not necessary

Observe general protection and hygiene measures.

9 Physical and Chemical Properties

form: solid

color: black

odour: characteristic

value/range

change in physical

melting point/melting range: > 220°C boiling point/boiling range: n.a.

flash point: $> 300^{\circ}$ C

ignition temperature: > 350°C

danger of explosion: n.a.

explosion limits:

lower limit: n.a. upper limit: n.a.

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9 Physical and Chemical Properties

value/range

vapour pressure: n.a.

density: $> 1.3 \text{ g/cm}^3 \text{ at } 20^{\circ}\text{C}$

solubility in water: at 20°C practically insoluble

pH-value: n.a.

viscosity: n.a.

10 Stability and Reactivity

Hazardous reactions: none when used appropriately

Hazardous decomposition products: in case of burning please refer to point 5.

11 Toxicological Information

Harmful effects due to exposure to the product are not known.

12 Ecological Information

General information:

The product presents no risk worth mentioning for the environment.

13 Disposal Considerations

Disposal key number: 12 01 99

Disposal definition: waste not otherwise specified (coated polyester film)

Waste disposal:

Waste material can be correctly disposed of or burned in a suitable incinerator in accordance with local regulations.

Packaging materials like carton and film can be recycled.

14 Transport information

The product is not subject to the regulations concerning transport of dangerous goods (GGVSE in the actually valid version).

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15 Regulatory Information

The product is not a dangerous working substance according to the German "Gefahrstoff-Verordnung" in its existing valid version.

16 Other Information

According to the information received from our raw material suppliers and according to the foil formulation the foil coating complies with the EN 71, Part 3 regarding heavy metal content.

Since no examination of each individual production batch is made with regard to compliance with the a. m. regulations, no guarantee or warranty is provided, that in every single case the permitted limits might not be exceeded. In case of need upon request and based on a written agreement we can provide you with tested and certified foils against charging of a price surcharge as well as of the costs for examination by an approved testing laboratory.

The information provided herein is given according to our best knowledge and experience as of the date of this document, but NO REPRESENTATION, GUARANTEE OR WARRANTY, EXPRESS OR IMPLIED IS MADE AS TO THE ACCURACY, RELIABILITY OR COMPLETENESS OF THE INFORMATION OR TO ANY SPECIAL QUALITY OR FITNESS OF THE PRODUCTS FOR A SPECIAL APPLICATION. This information does not release our customer from his own liability for care examination of any fitness of the products for his special application. This especially applies to any further production steps following subsequent to the foil application, which may have considerable influence on the result of the foil application, but which are completely out of the control of Kurz.