DETECTAMET

Technical Data Sheet

Document Reference	800
Date of Issue	23 rd Oct 2024
Revision Number	001
Date of Last Revision	23 rd Oct 2024

800 Nylon Cable Ties



Technical Data Sheet Applicable To:

800-CT03-1229-X11	Cable Ties Nylon 250x4.5mm 100pcs
800-CT03-1230-X11	Cable Ties Nylon 280x4.5mm 100pcs
800-CT03-1232-X11	Cable Ties Nylon 140x3.5mm 100pcs
800-CT03-1233-X11	Cable Ties Nylon 180x4.5mm 100pcs
800-CT03-1234-X11	Cable Ties Nylon 200x4.5mm 100pcs
800-CT03-1235-X11	Cable Ties Nylon 380x4.5mm 100pcs
800-CT03-1236-X11	Cable Ties Nylon 360x7.5mm 100pcs
800-CT03-1237-X11	Cable Ties Nylon 100x2.5mm 100pcs
800-CT03-S113-X39	Cable Ties Nylon 145x3.4mm 100pcs
800-CT03-S114-X39	Cable Ties Nylon 150x3.5mm 100pcs

800-CT03-S116-X39	Cable Ties Nylon 185x4.6mm 100pcs
800-CT03-S118-X39	Cable Ties Nylon 200x4.6mm 100pcs
800-CT03-S125-X39	Cable Ties Nylon 380x4.7mm 100pcs
800-CT03-S126-X39	Cable Ties Nylon 390x7.6mm 100pcs
800-CT03-S139-X39	Cable Ties Nylon 92x2.4mm 100pcs
800-CTO4-S126-X39	Cable Ties Nylon 390x4.6mm 100pcs

Industry Usage

The metal detectable nylon cable tie is specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small 'cut-off' sections of the tie to be detected by standard equipment. Ideally suited for the installation of cabling in and around the manufacturing process. The cable ties do have a releasable function thus they can be reopened and reused.

Features and Benefits:

Total metal dispersion throughout the tie. Supports quality processes around the production of food stuffs. Blue colour most common for easy visual Greatly reduces risk of contamination Magnetic detectable (detection level depending on specific application).

Material	Materia I shortc ut	Operating temperature	Colour	Flammability	Material properties*	Material specification s
Aluminium alloy	AL	-40°C to + 180°C	Natural (NA)		.Corrosion resistant. .Antimagnetic.	RoHS
Chloroprene rubber	CR	-20°C to + 80°C	Black (BK)		.Weather resistant. .High yield strength.	RoHS
Ethylene tetrafluoroethylen e (Tefzel®)	E/TFE	-80°C to +170°C	Blue (BU)	UL 94 V0	.Resistance to radioactivity. .UV resistant, not moisture sensitive. .Good chemical resistance to acids, bases, oxidizing agents.	RoHS
Polyacetal	POM	-40°C to +90°C (+110°C, 500h)	· · · ·	UL 94 HB	.Limited brittleness sensitivity. .Flexible at low temperatures. .Not moisture sensitive. .Robust on impact	RoHS

Material and Compliance Information:

Polyamide 11	PA11	-40°C to +85°C (+105°C, 500h)	Black (BK)	UL 94 HB	.Bio-plastic, derived from vegetable oil. .Strong impact resistance at low temperature. .Very low moisture absorption. .Weather resistant. .Good chemical resistance.	HF RoH S
Polyamide 12	PA12	-40°C to +85°C (+105°C, 500h)	Black (BK)	UL 94 HB	.Good chemical resistance to acids, bases, oxidizing agents. .UV resistant.	HF RoH S
Polyamide 4.6	PA46	-40°C to +130°C (+150°C, 5000h); +195°C, 500h	Natural (NA), Grey (GY)	UL 94 V2	.Resistance to high temperatures. .Very moisture sensitive. .Low smoke sensitivity.	HF LFH RoH S
Polyamide 6 Polyamide 6 (high impact modified)	PA6 PA6HIR	-40°C to +80°C -40°C to +80°C	Black (BK) Black (BK)	UL 94 V2 UL 94 HB	.High yield strength .Limited brittleness sensitivity. .Higher flexibility at low temperature.	RoHS RoHS
Polymide 6.6	PA66	-40°C to +85°C (+105°C, 500h)	· · ·	UL 94 V2	.High yield strength	HF RoHS
Polyamide 6.6 (glass- fibre reinforced)	PA66GF13	-40°C to +105°C (+105°C, 500h)	Black (BK)	UL 94 HB	.Good resistance to lubricants, fuels, salt water and solvents.	HF RoH S
Polyamide 6.6 (heat and UV- stabilised)	PA66HSUV	-40°C to +105°C (+105°C, 500h)	Black (BK)	UL 94 V2	.High yield strength. .Modified elevated maximum temperature. .UV resistant	HF RoH S
Polyamide 6.6 (heat stabilised)	PA66HS	-40°C to +105°C (+105°C, 500h)	Black (BK) Natural (NA)	UL 94 V2	.High yield strength. .Modified elevated maximum temperature.	HF RoH S
Polyamide 6.6 (heat stabilisedand UV- stabilised)	PA66HSHS U V	-40°C to +110°C	Black (BK)	UL 94 HB	.Limited brittleness sensitivity. .Higher flexibility at low temperature. .Modified elevated maximum temperature. .High yield strength, UV resistant.	RoH S
Polyamide 6.6 (high impact modified, high stabilised)	PA66HIRHS	-40°C to +105°C (+105°C, 500h)	Black (BK)	UL 94 HB	.Limited brittleness sensitivity. .Higher flexibility at low temperature. .Modified elevated maximum temperature.	RoH S

Polyamide 6.6 (high impact modified, scan black)	PA66HIR(S)	-40°C to +80°C (+105°C, 500h)	Black (BK)	UL 94 HB	.Limited brittleness sensitivity. .Higher flexibility at low	RoH S
Polyamide 6.6 (UV resistant)	PA66W	-40°C to +85°C (+105°C, 500h)	Black (BK)	UL 94 VS	temperature. .High yield strength. .UV resistant	HF RoH S
Polyamide 6.6 (with metal particles)	PA66MP	-40°C to +85°C (+105°C, 500h)	Blue (BU)	UL 94 HB	.High yield strength. .Metal and x-ray detectable	HF RoH S
Polyamide 6.6 (with metal particles)	PA66MP+	-40°C to +85°C	Blue (BU)	Not flame- retardant	.High yield strength. .Metal and x-ray detectable	HF RoH S
Polyamide 6.6 V0	PA66V0	-40°C to +85°C	White (WH)	UL 94 V0	.High yield strength. .Low smoke emission	HF LFH RoH S
Polyester	SP	-50°C to +150°C	Black (BK)		.UV resistant. .Good chemical resistance to most acids, bases and oils.	HF LFH RoH S
Poly- etheretherketone	PEEK	-5°C to +0°C	Beige (BGE)	UL 94 V0	.Resistance to radioactivity. .Not moisture sensitive. .Good chemical resistance to cids, bases, oxidizing agents.	HF LFH RoH S
Polyethlene	PE	-40°C to +50°C	Black (BK) Natural (NA)	UL 94 HB	.Low moisture absorption. .Good chemical resistance to most acids, bases, alcohol, oils.	HF RoH S
Polyolefin	PO	-40°C to +90°C	Black (BK)	UL 94 V0	.Low smoke emissions	HF LF H RoH S
Polypropylene	рр	-40°C to +115°C	Black (BK) Natural (NA)	UL 94 HB	.Floats in water. .Moderate yield strength .Good chemical resistance to acids, bases and solvents.	HF Ro HS
Polypropylene ethylene propylene diene terpolymer (rubber free of nitrosamine)	PP, EPDM	-20°C to +95°C	Black (BK)	UL 94 HB	.Good resistance to high temperature. .Good chemical and abrasion resistance.	HF Ro HS

Polypropylene (with metal particles)	PPMP	-40°C to +115°C	Blue (BU)	UL 94 HB	.Metal and x-ray detectable. .Heat resistant. .Moderate yield strength .Good chemical resistance.	RoHS
Polypropylene (with metal particles)	PPMP+	-40°C to +85°C	Blue (BU)	Not flame- retardant	.High yield strength. .Metal and x-ray detectable.	HF RoH S
Polyvinylchloride	PVC	-10°C to +70°C	Black (BK) Natural (NA)	UL 94 V0	Low moisture absorption. .Good chemical resistance to acids,bases,salts,alcohol , oils.	RoHS
Stainless steel	SS304,SS316	-80°C to +538°C	Natural (NA)	Non burning	.Corrosion resistant. .Antimagnetic. .Weather resistant. .Chemical resistant.	HF LFH RoH S
					.SS316 also resistant against seawater, salt spray and anorganic acids.	
Thermoplastic Polyurethane	TPU	-40°C to +85°C	Black (BK)	UL 94 HB	.High elasticity. .Good chemical resistance to acids, bases and oxidizing agents.	HF RoH S

*These details are only guide values. They should not be regarded as a exhaustive material specification and are no substitute for suitability tests.

HF = Halogen Free LFH = Limited Fire Hazard RoHS = Restriction of Hazardous Substances



= Minimum loop tensile strength for cable ties (newton)

Metal Detectable Nylon (PA 66) Products

Detectamet Limited manufactures cable management products made of metal detectable nylon (PA66) Compounds (the "products"). These products are intended for use in the proximity of food processing, handling, and packaging operations. In addition, these products are used for cable management on food processing and packaging equipment, and inside electrical control panels found in the food processing and packaging operations.

Subject to the provisions of clause 3 below, Detectamet Ltd declares that these products made be used as food contact according to:

Regulation (EC) No 1935/2004.

Detectamet Ltd follows good manufacturing principles (gmp) according to Regulation (EC) No 2023/2006 when manufacturing these products.

Regulation (EU) No 10/2011 (as amended by Regulation(EU) No 1282/2011):

The monomers as well as the other starting substances, additives and polymer production aids used in the manufacture of these products are listed in annex I (union list) with the following specific restrictions:

- Hexamethylendiamine: SML 2.4mg/kg
- 1,6- Hexamethylen-bis [3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionamid]: SML =45 MG/KG
- Iron: SML = 48MG/KG

The meanings of the used abbreviations are:

SML = Specific migration limit in food or in food stimulant The Generic specific migration limit of 60 mg/kg according to Regulation (EU) No 10/2011, article 11(2) and the overall migration limit of 10 mg/dm² according to the article 12(1) have to be observed.

This material contains dual-use additives, which are not subject to a restriction.

The pigments used for colouration comply with requirements of the European Resolution AP (89) 1 or the German Recommendation IX of BfR (Federal Institute for Risk Assessment).

This statement of compliance applies to products supplied in original form as manufactured by Detectamet Limited i.e. without any subsequent modification. Since conditions of use/application of Products are outside Detectamet Ltds control, Detectamet Ltd gives no guarantees, warranties (express or implied) and assumes no liability whatsoever for any loss, damage or expense arising from or in connection with the use of this information.

The suitability of the products for the application concerned, included their effect on the smell and taste of the context and the observance of the given limitations (for example overall migration, specific limits and other analytical requirements) must be checked in each case by the user.

No warranty is given or implied with respect to this information or patent infringement. Detectamet Ltd do not accept liability for loss or damage arising from the use of this information. Results are based on a test sample, our general experience and information from suppliers. Data and results may be confirmed by the buyer by testing for its intended conditions of use. Safety You Detect

detectamet.global