

1. Introduction

This classification report defines the classification assigned to **U-UTP Cat6a LSZH** in accordance with the procedures given in ČSN EN 13501-6 (EN 13501-6)



**CLASSIFICATION OF REACTION TO FIRE
FOR ELECTRIC CABLES
IN ACCORDANCE WITH ČSN EN 13501-6 (EN 13501-6)**

| | |
|-----------------------------------|---|
| Sponsor: | Caleb Cable Industrial Ltd. 107 Luyuan Rd, Keyuancheng, Tangxia, Dongguan City, Guangdong Province, People Republic of China |
| Prepared by: | ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p. Pod Lisem 129, 171 02, Prague 8 - Troja Czech Republic |
| Notified Body No.: | 1014 |
| Product name: | U-UTP Cat6a LSZH |
| Classification report No.: | 704677-01/01 CLASS |
| Issue number: | 1 |
| Date of issue: | 22.1.2018 |

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2. Details of classified product

2.1 General

The product **U-UTP Cat6a LSZH** in accordance with the procedures given in ČSN EN 13501-6 (EN 13501-6), is defined as a **LAN Cable** according to ČSN EN 50575 (EN 50575).

2.2 Product description

The product, **U-UTP Cat6a LSZH**, is described below

Standard:

ISO/IEC 11801:2011 (Ed. 2.2) ;
IEC 61156-5:2012 (Ed. 2.1);
ANSI/TIA-568-C.2:2009

Conductor:

Solid Bare copper;

Insulation:

The insulation material is HDPE

No.of pairs: 4 pairs

Core identification:

| | |
|--------------------|---------------------|
| Blue, White/Blue | Orange,White/Orange |
| Green, White/Green | Brown, White/Brown |

Spline :

The spline/filler material is HDPE.

Wrapper :

Wrapper material is PET

Non Continuous Al-Pet Foil

Outer sheath:

The sheathing material is LSZH

3. Reports and results in support of this classification

3.1 Reports

Enter details of report here as applicable

| Name of Laboratory | Name of sponsor | Report ref. No. | Test method and date/field of application rules and date |
|---|---|-----------------|--|
| ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p. | Caleb Cable Industrial Ltd. 107 Luyuan Rd, Keyuancheng, Tangxia, Dongguan City, Guangdong Province, People Republic of China | 704677-01/01 | EN 50399 |
| | | 704677-01/01 | EN 60332-1-2 |
| | | 704677-01/01 | EN 60754-2 |
| | | 702389-01/01 | EN 60754-2:14 |

3.2 Results

| Test method and test number | Parameter | No. Tests | Results | |
|-----------------------------|-------------------------------------|-----------|-------------------------------|----------------------------|
| | | | Continuous parameter - mean m | Compliance with parameters |
| ČSN EN 60332-1-2 | Flame spread $H \leq 425$ mm | 1 | N/A | P |
| ČSN EN 50399 | FS \leq not required | 1 | >2 | N/A |
| | peak $HRR_{avg\ class}$ [kW] | | 220,5 | N/A |
| | peak $SPR_{avg\ class}$ [m^2/s] | | 0,484 | N/A |
| | $THR_{1200s\ class}$ [MJ] | | 49,8 | N/A |
| | $TSP_{1200s\ class}$ [m^2] | | 111,7 | N/A |
| | $FIGRA_{class}$ [$W.s^{-1}$] | | 618,9 | N/A |
| ČSN EN 60754-2 | Flaming droplets/particies | 3 | d2 | YES $\geq 10s$ |
| | pH | | 4,3 | N/A |
| | Conductivity [$\mu S/mm$] | | 2,5 | N/A |

N/A – not applicable, P – Pass, F – Fail

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with ČSN EN 13501-6 (EN 13501-6).

4.2 Classification

The product, **U-UTP Cat6a LSZH**, in relation to its reaction to fire behaviour is classified:

D_{ca}

The additional classification in relation to smoke production is:

s2

The additional classification in relation to flaming droplets / particles is:

d2

The additional classification in relation to acidity is:

a1

The format of the reaction to fire classification for electric cables is:

| Fire behaviour | | Smoke production | | | Flaming droplets | | | Acidity | |
|-----------------------|---|------------------|----------|---|------------------|----------|---|----------|----------|
| D_{ca} | - | s | 2 | , | d | 2 | , | a | 1 |

i.e. **D_{ca} – s2,d2,a1**

Reaction to fire classification: D_{ca}-s2,d2,a1

4.3 Field of application

This classification is valid for the family of electric power cables **U-UTP Cat6a LSZH** described in section 2 and listed below as determined in the extended application process (EXAP) according to ČSN CLC/TS 50576 (CLC/TS 50576).

| Cable Identification | Diameter (mm) |
|----------------------|---------------|
| U-UTP Cat6a LSZH | 7.2+/-0.50 |

Intended use of the product: Supply of communication in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke.

5. Limitations

This classification will be valid until:

- The test method remains unchanged
- Product standard or technical approval remains unchanged
- Constructional or material modifications do not exceed limits of the field of application defined in section 4.3.

This classification document does not represent type approval or certification of the product.

Include the following statement when the product is being CE marked under attestation of conformity system 3:

„The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Regulations.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.“

SIGNED

signature of person undertaking classification

Josef Malý

APPROVED

signature of person authorizing this report

Dalibor Tatýrek

