
Statement of RoHS, REACH, SVHC and California 65 Compliance – OFS OSP & Premises Cable Products

Application Note AN-1003

Restriction of Hazardous Substances: European Union Directive 2002/95/EC (aka “RoHS”)

To the best of our knowledge, as well as that of our raw materials suppliers, all OFS Premises optical cable products are fully compliant with the following regulations, with no exemptions:

- European Union Restriction on Hazardous Substances (RoHS) Directive (EU Directive 2002/95/EC),
- California SB20/SB 50, with no exemptions.

The materials of construction used in these products do not deliberately include or contain any of the substances whose use is restricted by the regulations cited above.

RoHS Recast Directive: European Union Directive 2011/65/EU (aka “RoHS 2”)

In 2011, the European Union introduced the RoHS2 directive, EU Directive 2011/65/EU, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011L0065:EN:NOT>, commonly known as “RoHS 2”. Among other things, this directive requires manufacturers of Electrical and Electronic Equipment (“EEE”) sold in the EU to file a Declaration of Conformity and obtain authorization to mark EEE with the CE label. Optical fibers and optical cables are not dependent on electric currents or electromagnetic fields, and therefore are explicitly excluded from RoHS2 requirements (see Q5.1 and Q7.2, http://ec.europa.eu/environment/waste/rohs_eee/pdf/faq.pdf).

However, OFS recognizes that many customers use OFS Premises Optical Cable Products as components or subcomponents in EEE. Q7.3 of the RoHS2 FAQ, http://ec.europa.eu/environment/waste/rohs_eee/pdf/faq.pdf, states “... components being used in finished EEE or for repair or upgrade of used EEE, which is in the scope of RoHS 2 **must meet the substance restrictions according to Art. 4 but do not need CE marking.**”

To the best of our knowledge, as well of that of our suppliers, all OFS Premises optical cable products are fully compliant with the substance restrictions of Article 4 of EU Directive 2011/65/EU, with no exemptions. The materials of construction used in these products do not deliberately include or contain any of the substances whose use is restricted by EU

Additional Restricted Substances: Commission Delegated Directive (EU) 2015/863 (aka "RoHS 3" or "RoHS 10")

In 2015, the European Union introduced Directive 2015/863, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L0863>. This amended Annex II of the RoHS2 directive (2011/65/EU) to place restrictions on the use of four phthalate plasticizers in EEE, bringing the total of restricted substances to 10. The new restrictions shall be effective on 22 July 2019.

As noted in the section above, OFS optical cable products are exempt from RoHS2 CE labeling requirements. However, when used as components within EEE, OFS optical cable products must meet the substance restrictions of Directive (EU) 2015/863.

To the best of our knowledge, as well of that of our suppliers, all OFS Premises optical cable products are fully compliant with the substance restrictions of Directive (EU) 2015/863, with no exemptions. The materials of construction used in these products do not deliberately include or contain any of the substances whose use is restricted by Directive (EU) 2015/863.

REACH Substances of Very High Concern

The Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) regulation came into force in the European Union on 1 June 2007. This regulation is administered by the European Chemical Agency (ECHA). Under the definitions of REACH, OFS Premises optical cable products are "complex objects", each made up of more than one "article". An "article" is defined as "*an object which during production is given a special shape, surface or design which determines its function to a greater degree than its chemical composition.*" As a supplier of articles, OFS is required to communicate if any of its products contain substances on the current Candidate List of substances of very high concern for Authorization (SVHC), available online at: <https://echa.europa.eu/regulations/reach/candidate-list-substances-in-articles>.

To the best of our knowledge, as well of that of our suppliers, all OFS Premises and OSP optical cable products do not contain any materials on the current Candidate List of substances of very high concern for Authorization above allowable thresholds. The materials of construction used in these products do not deliberately include or contain any of the substances on the current Candidate List.

California Proposition 65

California Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, became law in November 1986. Proposition 65 requires businesses to provide warnings to Californians (and others doing business in the State of California) about significant exposures to chemicals that are known to cause cancer, birth defects or other reproductive harm. On August 31, 2016, the State of California Office of Environmental Health Hazard Assessment (OEHHA) adopted certain amendments to Article 6, Clear and Reasonable Warnings for California Proposition 65 which became effective on August 30, 2018. For more information on warnings, go to www.P65Warnings.ca.gov

To the best of our knowledge, as well as that of our suppliers, all OFS Premises and OSP optical cable products do not contain certain substances regulated by California Proposition 65 above safe harbor levels. As such, the California Proposition 65 warning labels are attached to the cable reels and or boxes.

Premises Cable

BUFFERED FIBER: All OFS buffered fiber (*LGBF and MTBF products*)

BUFFERED FIBER CORDAGE: All OFS buffered fiber cordage, including single fiber and duplex cordage. (*9P and 9U products*)

BUFFERED FIBER FTTH CABLES: All OFS buffered fiber FTTH cables (*IO, IR and IT products*)

RIBBON CABLE: OFS AccuFlex+ ribbon cables (*ARRC and AFRR products*), OFS AccuRiser® indoor cable (*8FLX products*), OFS AccuRiser® RR indoor/outdoor cable (*8RIO products*).

DISTRIBUTION CABLE: All OFS ACCUMAX® (*LGBC*) and AccuDRY® (*LGIO*) distribution cables using buffered fiber.

BREAKOUT CABLE: All OFS MiniCord® Breakout Cable.

AccuPack™ CABLE: All OFS APBC and APIO AccuPack™ Interconnect Cables.

M-Pack™ INTERCONNECT CORDAGE & BACKBONE CABLE: All OFS M-Pack™ cables using OFS bare fiber(s). (*MP, MB and MO products*)

OSP Cables – Loose Tube

AccuTube™ & AccuTube+™ CABLE – All totally gel-free high fiber count outdoor loose tube cables, single jacket, double jacket and light armor constructions

Fortex™ DT & Fortex™ 2DT CABLE – All totally gel-free outdoor loose tube cables, single jacket, double jacket and light armor constructions

DryBlock™ CABLE – All Classic OSP loose tube cables, single jacket, double jacket and light armor constructions

MiDia™ FX & MiDia™ GX CABLE – All microduct installed small diameter loose tube cables

OPTIONI™ DT CABLE - All indoor -to-outdoor gel-free riser rated single jacket & armored

PowerGuide™ Cables- All dielectric loose tube ADSS cable designs, DT, ShortSpan DT, TTH

OSP Cables – Central Core

AccuRibbon® & Rollable Ribbon CABLES - All totally gel-free, high fiber count outdoor central core cables, single jacket, double jacket and light armor constructions, DC, DC-TL, DC-Tonable, DuctSaver-DT, LXE

DuctSaver® Rollable Ribbon (RR) CABLES -All totally gel-free high fiber count highly flexible outdoor central core cables, single jacket and armored designs,