## Contents

# Non mandatory datasheet, for indication only

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**Supersedes: revision 01/13 and revision 04/08**

## 1. Identification

### 1.1 Product

Optical glass fiber (standard single-mode and multimode type), wound on plastic reel.

### 1.2 Manufacturers

The Netherlands:
**Draka Comteq Fibre B.V.**
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**Draka Comteq France S.A**
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**Draka Comteq**
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Sorocaba SP
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Please ask for the local Health and Safety Manager or local QHSE representative.

## 2. Composition and description

### 2.1 Fibre and fibre reel composition

| Component | Substance | Weight % | CAS number |
|---|---|---|---|
| Fibre | Glass | 40 | |
| | Amorphous Silica Components | < 20 | 61790-53-2 |
| | Germanium Components | < 5 | 7440-56-4 |
| Coating | Poly-acrylate coating | 60 | Available on request |
| Fibre reel | ABS | - | 9003-56-9 |
| | PS | - | 9003-53-6 |
| | Foam coating | - | Not available |
| | Labels | - | Not available |
| | Domestic foil | - | Not available |
| | Polypropylene cover | - | 9003-07-0 & 9010-79-1 |

### 2.2 Description

A glass fibre is a thin quartz glass fibre with a polyacrylate coating. The coating can have any colour or marking. For transport the fibre is wound on a plastic (ABS or PS) reel equipped with a soft underlayer foam. For dust protection, the fibre package has a domestic foil coating; reels may contain a cover instead of the foil. The reel bears various labels.

## 3. Risks

Regular use and processing of the optical fibres do not involve risks.

Optical fibre is an article, according to the REACH definition.
Optical fibre is not a dangerous substance in relation to EU-directive 2001/58/EC.

In exceptional cases the human skin is slightly irritated when coming into contact with the acrylate coating. The known data justify the conclusion that optical fibres are not a hazardous material.

Some precaution may be needed when handling and processing optical fibres, see 4.

## 4. First-aid precautions

### 4.1 Contact with eyes

Small glass splinters may cause irritation. This is a general reaction caused by the shape of splinter not by the material properties.
Flush open eyes with lavish water. Consult eye specialist, if required.

### 4.2 Contact with skin

Remove glass splinters from stab wounds.
Consult physician, if required.

### 4.3 Swallowing

Glass splinters may irritate the digestive system, although usually briefly.
This is a general reaction caused by the shape of splinter not by the material properties.
When in doubt, consult a physician.

### 4.4 Inhalation

Glass splinters may irritate nose, throat and lungs. This is a general reaction caused by the shape of splinters not by the material properties. During regular use and processing of the optical fibres inhalation is very unlikely.
Consult lung specialist when large quantities have been inhaled.

### 4.5 Processing

It is advisable not to eat or drink anything during optical fibre processing.

## 5. Fire precautions

Both acrylate coating and ABS or PS reel are combustible at high temperatures.

### 5.1 Fire suppression

Suitable fire extinguishing media are water, water-based foam, carbon dioxide and ABC powder. The choice depends on the fire environment.

### 5.2 Hazards inherent to burning substances, combustion products and resulting vapors

The burning of acrylate coating goes with the formation of toxic combustion products, carbon dioxide, carbon monoxide, water and decomposition products (monomers/hydrocarbons).
The burning of the reel results in the formation of not only monomers and hydrocarbons, but also hydrogen cyanide, carbon dioxide, carbon monoxide and water.

### 5.3 Fireman's protection

Full personal protection using compressed-air respiration systems.

## 6. Precautions against unintentional release of material

### 6.1 Personal protection

During removal of optical fibre residues or waste it is recommendable to protect hands against stabbing using appropriate gloves, and shield eyes using safety glasses with side masks.

### 6.2 Fiber residue discharge

The best way of discharging loose optical fibre residue particles is using a vacuum cleaner with an end filter.

## 7. Handling and storage

### 7.1 Handling

For other operations it is advisable to shield the eyes using safety goggles with side masks.

### 7.2 Storage

Store optical fibres clean and dry. Avoid excessive heat.

## 8. Personal protection measures

### 8.1 Potential hazards

Polyacrylate coating: no known hazards
Quartz fibre: no known hazards
Reel: no known hazards

### 8.2 Means of personal protection

Eyes: Safety goggles with side masks
Skin: Wearing gloves is recommended when large quantities are handled.

## 9. Physical properties and chemical composition

Outward appearance: Fibre
Color:

1) Colourless and transparent; discoloration under the influence of light and moisture.
2) Specially coloured optical fibres contain an additional thin (few microns thick) layer of coloured acrylate coating
3) Colorlock optical fibres appear with a coloured acrylate coating

Smell: Light acrylate smell
Melting point: not applicable
Boiling point: not applicable
Ignition point: not known
Vapor pressure: not known/not applicable
Density: Glass: about 2.2 g/cm3
Acrylate coating: about 0.9-1.2 g/cm3
Reel: about 1 g/cm3
Solubility: Insoluble in water
p-value: not applicable
Viscosity: not applicable

## 10. Stability

Both optical fibre, acrylate coating and reel are non-reactive and stable under regular conditions. Note, however, it is advisable to avoid temperatures over 100 °C, to prevent reel softening.
Precautions against fire are described in 5.

## 11. Toxicological data

$LD_{50}/LC_{50}$: unknown
Both acrylate coating and reel are non-carcinogenic according to suppliers' specifications.

## 12. Ecological data

Since both optical fibre and reel are stable and insoluble in water, they are non-hazardous to the ecological system.

## 13. Instructions for discharge

Since they are stable and insoluble in water, it is permissible to discharge both optical fibre and reel on any dumping site on land, or to deliver them to waste incinerators without any danger arising. The reels can be recycled wholly or as loose material.

## 14. Transport data

### 14.1 Means of transport

All means of transport are permissible.
Optical glass fibre is regulated as non-hazardous in transport.

### 14.2 Transport conditions

Transport optical fibres dry and dustproof. Do not expose reels with optical fibres to heavy impacts such as dropping and throwing.

## 15. Legislation

Since optical fibres and reels are non-hazardous, labelling and danger classification are not required nor applicable.

## 16. Other data

Optical fibre and reel are no dangerous substance in relation to EU-directive 2001/58/EG. As a result there is no obligation to make or distribute a material safety datasheet.
Nevertheless we compiled this datasheet based on the directive EU-directive 2001/58/EG annex “Guide to the compilation of safety data sheets”.
Optical fibre is an article, according to the REACH definition. Optical fibre contains no substance that is intended to be released during normal and reasonably foreseeable conditions of use.

Prysmian is aware of the REACH regulations and the derived obligations. A complete REACH statement can be made available upon request.
Prysmian is aware of the RoHS regulations and the derived obligations. A complete RoHS statement can be made available upon request.

Although the information contained in this datasheet has been prepared using reasonable care and is believed to be correct as of December 2012, Prysmian makes no representations as to the completeness or accuracy thereof. Those who use this product are responsible for determining; (A) the suitability of the product for the intended use and (B) the appropriate manner for processing the product to insure safety and quality. In no event will Prysmian be responsible for damages of any nature resulting from the use or reliance upon the information contained herein.

Document history. This data sheet has been established in June 2012 by merging existing (and former locally created) documents per individual fibre plant (mentioned in 1.2) and therefore replaces all former and/or local sheets.