



C412 30P

Sew-on tape

Flame resistant m-aramid

Perforated

Domestic wash

Yellow-silver-yellow

Red-silver-red

Orange-silver-orange

Technical Data Sheet

Product Description

Coats Signal C412 30P is an aramid based perforated fluorescent yellow-silver-yellow, red-silver-red and orange-silver-orange reflective tape for industrial wash heat and flame protective clothing especially firefighter uniforms. Combined with retro reflective and fluorescent elements, it helps to maximise the visibility in nighttime, during daytime or low light conditions.

Product Construction

Coats Signal C412 30P is made of fluorescent yellow, red or orange part and high performance glass beads based silver part laminated on a durable 100% m-aramid fabric backing. The silver part is in the middle of fluorescent yellow or orange part. The tape is customised with perforation which brings breathability and comfort to the garment.

Areas of Applications

Coats Signal C412 30P is a sewn-on reflective tape for high visibility industrial wash heat and flame protective clothing especially firefighter uniforms where EN 469, EN ISO 11612, EN ISO 14116, EN ISO 15384 and NFPA certifications are required. All high visibility flame resistant garments should be made according to proper standards.

Product Certification

Colour and Reflective Performance – EN 20471

Coats Signal C412 30P is approved according to EN 20471 high visibility norm. The fluorescent yellow, red or orange part meets the chromaticity and min. luminance factor requirements. The silver part delivers maximum retro reflective performance. The typical reflective performance (RA in cd/lux/m²) according to EN ISO 20471, table 4 is shown below.

Observation angle	Entrance angle	Coats Signal C412 30P	Minimum norm requirement
12'	5°	500 (silver part)	330

Article Number / Make-up

Art. No.: C412 30P - roll of 100 m / available in 50.8mm (±0.8) and 75.8mm (±0.8) widths

Care Instructions

Domestic Wash



High visibility clothing must not be laundered with other coloured garments. Doing so could cause colours to bleed and destroy the luminance of the fluorescent material. The visibility garment would then no longer fulfill requirements according EN ISO 20471.

Physical Performance

Coats Signal C412 30P silver part meets or exceeds in origin the performance as per EN ISO 20471, clause 6.1 as well as the requirements in clause 6.2 after exposure to abrasion, flexing, folding at cold temperature, temperature variation, washing, dry cleaning and influence of rainfall. The following table shows the detail specifications.

Tests	Details
Retro reflective performance in origin	EN ISO 20471:2013+A1:2016, pt. 6.1, table 4 Test method: CIE 54.2
Retro reflective performance after pre-treatment	EN ISO 20471:2013+A1:2016, pt. 6.2, table 6 Test method: CIE 54.2
Colour new, after xenon test and ageing	EN ISO 20471:2013+A1:2016, pt. 5.1, 5.2, 7.5 Test method: CIE 15:2004
Abrasion	EN ISO 12947-2:2007, 9 kPa, wool, 5000 cycles
Flexing	EN ISO 7854:1997, method A, 7500 cycles
Folding at cold temperature	ISO 4675:2017, (-20 ±2)°C
Temperature variation	EN ISO 20471:2013, pt. 7.4.4, 12 hours @ (+50±2)°C & 20 hours @ (-30±2)°C
Domestic washing 60°C with tumble drying	EN ISO 6330:2012, method 6N+F, 60 cycles
Dry cleaning	EN ISO 3175-2:2010, perchloroethylene, 50 cycles
Influence of rain	EN ISO 20471:2013+A1:2016, annex C

Heat Resistance and Limited Flame Spread Performance

Coats Signal C412 30P meets the heat resistance and limited flame spread requirements according to EN 469, EN ISO 11612, EN ISO 14116, EN ISO 15384 and NFPA. The following table shows the detail specifications.

Tests	Details
Heat resistance	ISO 17493, 5 min. (180 ± 5) °C
EN 469:2020, clause 6.2.6.4	ISO 17493, 5 min. (260 ± 5) °C
EN ISO 11612:2015, clause 6.2.1	
EN ISO 15384:2020, clause 6.1	
Limited flame spread	ISO 15025, Procedure A (face ignition)
EN 469:2020, clause 6.2.1.1	ISO 15025, Procedure B (bottom edge ignition)
EN ISO 11611:2015	
EN ISO 11612:2015	
EN ISO 14116:2015	
EN ISO 15384:2020, clause 6.3	

	NFPA 1950 (1951)	NFPA 1970 (1971)	NFPA 1950 (1977)	NFPA 2112	CAN/CGSB 155.20	CAN/CGSB 155.22
C412 30P YSY		X	X	X		
C412 30P OSO	X	X	X	X	X	X

STANDARD 100 by OEKO-TEX®

This article is certified according to STANDARD 100 by OEKO-TEX®, class II.

Storage and Shelf Life

Coats Signal reflective tapes should be stored in a cool (5°C to 25°C) and dry place (less than 70% relative humidity) and used within one year of date of receipt. The used rolls should be returned to original packaging or suspended from the middle by using a rod.

General Safety Information

Since conditions and applications vary considerably in the use of reflective tape, user should assure herself or himself by preliminarily testing that the reflective tape is suitable for the end use intended. Coats Signal cannot guarantee an absolute visibility especially in severe weather conditions.

Further Assistance

Please contact your local Coats representative for further assistance.