TEST REPORT

Head Protection Combination "Protos Integral" with defined colours





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KWF-Utility Value Approval: February 2021 Valid for: 5 years (extension possible) First approval 2016

Test No.: 6519

SHORT DESCRIPTION

Helmet (Type/description): uni- or multicoloured helmet with closable

ventilation holes.

Production date provided on inside front of the

helmet.

Service life: 5 years after putting into operation, or earlier if

subjected to impact. Up to 12 months in the retail chain are not subject to this time life. It is possible to replace the helmet shell without interior after this time, if it is still usable.

The hygiene kit should be replaced regularly.

Ear defender (Type/description): Protos ear defenders with new arms

Attenuation (HML) M=24 dB(A), suitable for

daily exposure values \leq 104 dB(A).

Visor (Type/description): etch metal visor available in two versions G16

(coarse) und F39 (fine).

Weight of head protection combination: 837 g

Verified standard compliance: **CE tested**, DIN EN 397, DIN EN 352 part 3,

visor complies with EN 1731

EVALUATION SUMMARY

Evaluation results of the field test 2016

Application field all-year forestry tasks, especially suited for chainsaw work.

Product worn for a total of 924 working days at all test stations.

Test item	Overall evaluation
Comfort complete combination	+
Comfort of ear defender pads	+
Comfort of visor	+/++
Durability/care/maintenance	+/++
Complete combination	good – excellent

+ + = excellent; + = good; o = satisfactory; - adequate; - - = inadequate

INDIVIDUAL OPINIONS FROM THE PRODUCT TEST:

Head protection combination	Comments(+)	Comments (-)
Comfort	Despite the relative heaviness of the helmet, the unit feels comfortable. This is due to the good weight distribution and wearing characteristics of the combination. The attenuation achieved by the ear defenders lies at the lower end of the recommended value. Ventilation is good. The helmet is securely fastened to the head and the joint where visor meets helmet attained top ratings from the test persons. In the passive position, the visor does not obstruct the field of view.	Das Schweißband wurde teilweise als unangenehm empfunden, mit geringer Saugwirkung.
Durability	Generally, the test persons found the durability of the combination excellent and that the product makes a tough impression. The durability of the visor received the best single evaluation of the test.	
Features	The mechanisms for opening and closing are smooth and quiet. Although it is possible to mount the Peltor LiteCom on the head protection combination it is not retractable. The coarser visor is best suited for wet conditions (less water absorption), the finer visor is best for dusty conditions (less dust penetration).	The original arm for attaching the ear defenders was faulty and was replaced by the manufacturer. The new improved arm can be replaced free of charge if this has not already happened.
Care	The parts that require care (e.g. sweat band) are easy to remove or access	It is difficult to clean the inside of the helmet.
Summarized evaluation	The Protos Integral is a comfortable head protection combination in all usual weather conditions. This is a tough and highly functional product. Small limitations of the sweatband cannot spoil the positive overall impression. The additional cup attachment arm does a good job and ensures satisfactory attenuation.	

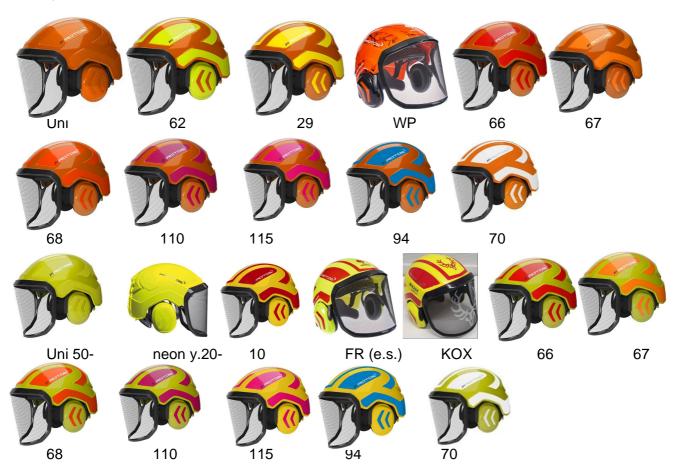
<u>Tested accessories</u>: Several additional accessories proved to be very useful during the test. The optical insert is tough and can be adapted to the visual acuity of the wearer. The insert is well-integrated into the helmet and is easy to fold in and out. The Crash-Absorber improves shock absorption in case of an accident and does not reduce comfort. The attachment system of the SympaTex neck protector is durable; the protector does not stick to the skin and fulfils its purpose very well.

<u>Accessories not tested</u>: Radio cups and flashlight. No statements can be made about these accessories (functionality, durability, comfort).

List of all colour – combinations with KWF-Profi-approval:

orange uni 60-	yellow uni 50-
	Neon-yellow 20-
orange with neon-yellow stickers -62	 yellow with red stickers -10
 orange with lemmon-yellow reflective stickers -29 	 yellow with red stickers/KOX -10
 orange with woodprint stickers (e.s.) -WP 	 yellow with blazing red stickers (e.s.) -FR
orange with neon-red stickers- 66	 yellow with neon-red stickers -66
 orange with neon-orange stickers -67 	 yellow with neon-orange stickers -67
 orange with neon-red-orange stickers -68 	 yellow with neon-red-orange stickers 68
orange with pink stickers -110	 yellow with pink stickers -110
 orange with neon-pink stickers -115 	 yellow with neon- pink stickers -115
 orange with light-blue reflective stickers -94 	 yellow with light-blue reflective stickers -94
 orange with white stickers -70 	 yellow with white stickers -70

The other colour combinations do not comply with the agreed basic requirements of the KWF for colour design of work garments and head protection that are necessary from our point of view for ensuring visibility in the forest.



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