

# TECHNICAL DATA SHEET

## GAL

### Workwear

Article NO: H12001

Material: thick split leather

Size: UNI



Leather gaiters with buckles, for welders.

This personal protective equipment is in conformity with these harmonized European Standards:

EN 13688:2013 : Protective clothes - General requirements.

EN ISO 11611:2015: protective clothing for use in welding and allied processes (Class 1, A1).

Certified by notified body no. 2369 (VIPO, Gen. Svobodu 1069/4, Partizánske),  
Certificate number 00222/111/1/2019, dated 25<sup>th</sup> October 2019.

Polybag packing (pieces): 1

**USE:** Complementary protective clothing for welders provide complementary protection for concrete parts of body (eg. sleeves, gaiters, apron) when are using together with protective clothing for welders which are at least of class 1.

Choice according to process	Work with equipment
Hand welding with a low incidence of spatter and molten drops:	
- MMA welding (electrode with rutile packaging)	- equipment for cutting by oxygen
- MIG welding	- equipment for cutting by plasma
- flame welding	- equipment for resistance welding
- TIG welding	- equipment for thermal deposition
- micro plasma welding	- working table for welding
- soldering	
- spot welding	



Protective clothing provides short-time protection against flame, molten drops, molten or burning piece, thermal radiation and accidental contact with electric lines. All parts of arc welding equipment under voltage can not be protected against direct contact because of operational reasons. It is necessary to use complementary clothing together with protective clothing (eg. welding above head). Clothing protect only against unintentional short-time contact with live parts of welding circuit so in the case of increased danger of injury by electrical current there are necessary additional electrical insulating layers or clothes which are determined for protection against short-time or accidental contact with live electrical conductors under unidirectional voltage up to 100 V. Every type of arc welding cause UV radiation. UV radiation of arc welding contains UVA, UVB and UVC parts in large amount. Textile degrades gradually while using so it can not continue to provide protection. Characteristics of clothing can change especially while using some methods of arc welding (especially MIG and MAG welding) which can cause changes and rapidly reduce the effectiveness of protection due to intensive UV radiation, heat, hearty sparkling or drops of molten metal. In these cases is needed higher level of protection, eg. additional protective leather sleeves, aprons etc., which extend efficiency of clothing and help to protect user. Endurance of clothing is determined by welding process, welding technique, welding manner, spatter production and welding position. Users which are in contact with UV radiation must be acquaint with danger and need of regular check of personal protective equipment. The simple manner of control is to hold clothing in light of 100 W wolfram bulb in the distance of taut hand. If the light shines through, the UV radiation also penetrate. If the user feels symptoms similar to too much suntan, the UVB radiation penetrates through. In this case change the clothing.

**WARNING:** Complementary protective clothing is determined as a complement for use together with protective clothing which provides protection against danger during weathering. Choose the right size of protective clothing- aprons must cover front part of welder's body from one side of seam to second side. The level of protection against flame reduces if the protective clothing for welders is contaminated by flammable material. Increased content of oxygen in the air distinctly reduces protection of clothing for welders against flame. Pay attention to welding in the close areas where can be air enrich by oxygen. Electrical insulation which is provided by this clothing is reducing by humidity, impurity or sweating. If the clothing is assemble from two pieces they must be used together to achieve required level of protection.

**MAINTANENCE:** Complementary and protective clothing protect against rapid drying, organic solvents, effect of greases, fats and mineral oils. It must not be in contact with water. Rough impurities clear by brush. It is needed to check clothing after every use.

**STORE:** For storing complementary protective clothing apply these conditions: temperature from +5 to +30°C, humidity from 55 to 75%. Short-time exceeding to these conditions do not have any consequences on the quality of products. Limit values are from +5 to +30°C and from 45 to 85%. The products must be at least 1,5 m from heating. When storage and transport conditions are followed, the warranty time is 2 years from the production date.

**LIQUIDATION:** When using complementary protective clothing it is needed to proceed according the appropriate regulations for waste liquidation according to character of their use.

#### **MARKING:**

285681

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AP 7

II.Q.2010

EN ISO 11611:2007

type marking of the product

production date

number and year of standard issue

**ARDON SAFETY s. r. o.**

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Třída 1 A1



pictogram „Protection during welding“

mark for conformity

Table: *Basic safety requirements*

Requirement	Class 1	Class 2
Tensile strength	min 80 N	min 80 N
Tearing strength	min 20 N	min 20 N
Seam strength	min 110 N	min 110 N
Fat content	max 15 %	max 15 %
Flame spread	Method A (ignition of surface) Method B (ignition of edges) No combustion up to upper or one of side edge No burned holes No burning or molten pieces Average time for afterburning max 2 s Average time for decay max 2 s	Method A (ignition of surface) Method B (ignition of edges) No combustion up to upper or one of side edge No burned holes No burning or molten pieces Average time for afterburning max 2 s Average time for decay max 2 s
Impact of metal drops	min 15 drops	min 25 drops
Transmission of heat (radiation)	RHTI (24° C) min 7 s	RHTI (24° C) min 16 s
Electrical resistance	$> 10^5 \Omega$	$> 10^5 \Omega$

A1 - means that it suits to examination of flame spread according to method A

A2 - means that it suits to examination of flame spread according to method B