

DIY Workbook 2016

www.campingaz.com

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WICE HADE

Easy soldering with Campingaz[®]

There are two main techniques :

Soldering is a process that joins metallic parts together by means of a filler metal that is melted between the two parts. There are three different processes: soft soldering, hard soldering and brazing.

CAMPINGAZ

Welding is a process whereby the parts to be assembled are molten, in order to form one single piece. There are two different types: welding and autogenous welding.

The following table will help you to select the most suitable technique for the work that you wish to carry out:

Applications	Heating tempertaure *	Tools Filler metal		Types of soldering	
Electronics, electric, modellism soldering	200 °C	Soldering iron	Tin	Soft soldering	
Assembly of cold water pipes, repair of small metal objects	up to 450 °C	Blowtorch or Hose Torch	Tin	Soft soldering	
Assembly of hot water pipes or gas heating system (copper / copper)	from 450 to 700 °C	Hose Torch or Dual Gas Set Brazing Copper /		Hard Soldering	
Repair of metal objects, installation heating (iron / iron or iron / copper)	from 750 to 920 °C	Dual gas set	Coated Brass solder	Brazing	
Steel assembly / steel (autogenous)	1500 °C	Dual gas set	Filler metal	Welding or autogenous welding	

* This temperature corresponds to the temperature at which the parts must be heated to be worked. The tool used has to provide a flame temperature (at the outlet of the device) about 2 times the one indicated above, due to the loss of heat between the equipment and the parts. Thia table is just indicating the most frequently used technique. Considering each own level of expertise, the user can choose a different techniques from the one indicated

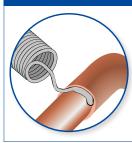
Usage recommendations for all types of soldering and welding techniques

To start correctly, always:

• Clean the parts with sand paper; coating the parts with pickling gel is recommended in the case of soldering if the tin filler metal does not contain a fluxing agent to prevent them from rusting and facilitate the work. Campingaz® tin filler metals contain a fluxing agent.

- Position the parts
- Heat the tool and adjust it After these first three stages, the work is continued according to the type of bonding performed:

Soft Soldering



• Heat the parts to be assembled (not the tin filler metal) and then move the flame away and apply the tin solder wire at the junction of the parts; upon coming into contact with the heated parts, it will melt and immediately spread out between them. Proceed in this same way along the entire length of your weld. When finished, let it cool.

Soft soldering is done using a soldering iron or blowtorch



Hard Soldering

- - Heat the parts to be assembled (not the solder).
 - When the parts glow red, approach the solder rod to the parts while continuing to heat them. Spread the solder along the entire length of your weld. Unlike when soft soldering, the parts must remain under the flame throughout the operation. When finished, leave it to cool.

Hard soldering is performed with a gas hose torch or with a bi-gas welding kit.

Brazing



Choose your tool

Soldering irons, blowtorches or hose torches... There is a wide range of tools to choose from when welding; the tool to use depends on the parts to be bonded, the expected strength of the weld and the level of experience of the user:



	Blowtorches	Hose Torches	Soldering Irons	
Description	The versatile devices for all the plumbing works and many other things	The perfect tool for plumbing with a high power	For jobs in electronics and electricity	
Flame temperature*	1930°C	1930°C	300-550°C	
Use	Plumbing repairs, paint stripping, thawing pipes, cooking (crème brulée, etc.)	Installation and repair of common plumbing, paint strip- ping, thawing pipes, bending	Electrical, electronics, hi-fi, model-making, pyrography	
Advantages	Versatility, ease of use, manageability	Autonomy, power **, wide range of compatible accesso- ries, lightweight, long battery life	Accuracy, ease of use, manageability	

to be considered on top of flame temperatur The power is the amount of heat supplied. At the same temperature, two heat sources do not have the same power. Ex a match and a fire do not have the same power, wet they have the same temperature (700°C). Power is a function of the amount of energy transferred to









Campingaz[®] Hyperformance Technology

More power for accomplishing jobs faster!

Campingaz[®] presents the **newest innovation** in DIY technology.

Get your DIY jobs done in a flash with the new **Hyperformance technology**. The combination of the new Campingaz[®] Hyperformance Gas[®] and the new distinct nozzle designs on the Hyperformance blowtorch range provide **ultra performance** by transmitting more energy and heating up metals faster.

The new Hyperformance blowtorches have been re-designed and improved to optimize the benefits of the new Campingaz[®] Hyperformance Gas[®] blend.

Campingaz[®] Hyperformance Gas[®] Blend

Hyperformance **Blowtorch Nozzle**

The special new gas blend is faster and more powerful for a much faster transmission of energy

The new design ensures a reduced pre-heat time and transmits more energy in less time



CAMPINGAZ HYPERFORNANCE GAS®

so that you can start working sooner to get the job done faster.



Heat map of a pipe heated by a Hyperformance and a standard blowtorch* - After 2 minutes and at a distance of 35mm



New Hyperformance Blowtorch Nozzle Design

The new Campingaz[®] Hyperformance Gas[®] blowtorch boasts a streamline design and an improved and innovative nozzle providing three key benefits:

Reduced Pre-Heat Liquid Phase Time

Resistance

Start working sooner to get the job done faster









For fast soldering results, pipes need to



Work upside down without

Increased Power

Used in combination with the Campingaz[®] Hyperformance Gas[®] Blend, the higher wattage achieved and the increased flow rate give the blowtorch ultimate power to accomplish jobs faster.



Hyperformance Blowtorches

Hyperformance blowtorches are ideal for for all types of soldering and brazing jobs.

They are essential tools due to their versatile capabilities: aside from soldering, they can also be used to light barbecues, defrost pipes, brazing, burning, heating, etc. Hyperformance blowtorches offer up to 35% more power than standard butane gas blowtorches. The large range of adaptable burners available also provide the blowtorches with additional capabilities.







	HyperTorch™ A3000 PZ
SKU	300004138
Cartridge type	CG3500HY
Cartridge included	Yes
Ignition	Piezo
Flame Temperature in C°	1930
Power in Watt	2240
Gas Consumption	160 g/h
Dimensions with cartridge	14.5 x 42 x 7 cm
Weight	280g
Nozzle	Pre-heat nozzle, T1852
Compatible Nozzle Accessories	T 1650, XP1650
	10



Matching consumables Tin solders as filler materials, Pickling gel for preparing the parts, Ammonia stone to clean the tips

NEW

- Effortless upside down working capabilities with only 5 seconds pre-heat time
- Hyperformance gas cartridge included
- Ergonomic handle for extra comfort
- Control knob for improved flow regulation
- Dissipation holes
- Stabilizer
- Fine flame nozzle for precision work





	HyperTorch™ A2000 PZ
SKU	3000004131
tridge type	CG1750HY
dge included	Yes
Ignition	Manual
mperature in C°	1930
ver in Watt	2240
Consumption	160 g/h
ns with cartridge	29 x 20 x 7 cm
Weight	270g
Nozzle	Pre-heater nozzle, T1852
atible Nozzle cessories	T 1650, XP1650
master carton	8

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Blowtorches 7





Hyperformance blowtorches

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Pierceable cartridge blowtorches

These blowtorches offer an economical and high performance alternative to valve cartridges. Once connected, the cartridge can't be disconnected.



Blowtorches 9





2000026174	
C206	
No	
Manual	
1800	
1650	
120 g/h	
25 x 11 x 19 cm	
480g	
X1550	
XP1650, X1650	
10	

PT2000
2000026173
C206
No
Manual
1800
1650
120 g/h
26 x 12 x 15 cm
400g
X1400
XP1650, X1650

CAMPINGAZ

Hose torches and accessories

Hose torches are powerful and ideal for plumbing installation work (such as hard soldering or brazing). They offer extended burn times and can be used for a large variety of applications using adaptable accessories. They have an ergonomic design that is lightweight but also robust and durable.



	Chalutorch Profil kit		
SKU	202059		
Ignition	Manual		
Power Control	Knob & trigger		
Flame Temperature in °C	1850		
Consumption g/h	300 g/h		
Dimensions	30 x 8 x 4 cm		
Hose lenght in cm	146		
Weight in g	435		
Type of Nozzle	L300		
Qt per master carton	6		

Gas connection



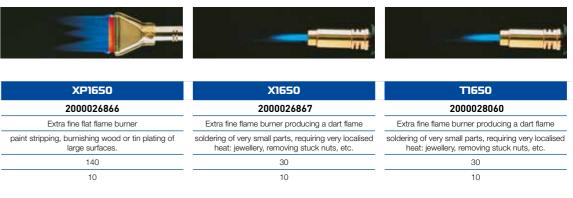
- Butane: without regulator - Propane: with DR 2 regulator

• Connection to Campingaz[®] cylinders (904, 907) with connecting tap

Chalugaz Profil

Accessories for blowtorches

A complete range of adaptable and interchangeable burners that provide your blowtorch with additional capabilities. They can be adapted to all Campingaz[®] blowtorches (except Spotflam[®]).



	XP1650	
SKU	2000026866	
Description	Extra fine flat flame burner	Extra
Usage	paint stripping, burnishing wood or tin plating of large surfaces.	soldering hea
Consumption g/h	140	
Qt per master carton	10	

Spotflam®

SKU

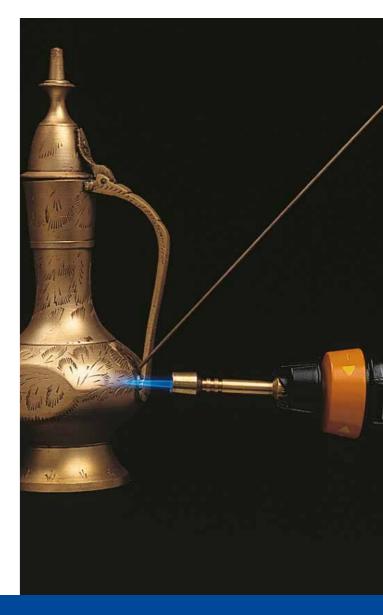
Just a bit bigger than a pencil, this small blowlamp is ideal for precision work and small surfaces (jewellery, model construction, crafts, etc.). It can has a finely adjustable flame and can be used in any position without preheating.



SKU	64778		
Ignition	Manual		
Power Control	Knob		
Flame Temperature in °C	1850		
Consumption g/h	300 g/h		
Dimensions 30 x 7 x 4 cm			
Hose lenght in cm	146		
Weight in g	435		
Type of Nozzle	L300		
Qt per master carton	6		

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	L500	BP300	TS30	FC350	Connection Tap
SKU	202513	202509	202514	202510	202983
Description	High power extra fine dart flame burner.	Extra fine flat flame burner.	Soldering iron tip for working with tin solder.	Enveloping flame burner. Fast, great comfort and excellent welds.	Tap to connect all types of hose torches on the Campingaz 904 and 907 cylinders
Usage	brazing of large pipes, bending work, central heating installation.	stripping of wood or metal, laying plastic tiles, as heaters and for burning in general.	electricity (tin plating), small sheet metal work, zinc work, pyrography	Increases the performance of joining pipes up to ø 22mm, enabling any hard soldering work to be done as well as some brazing jobs.	/
Consumption g/h	500	300	30	100	/
Qt per master carton	6	6	6	6	6

Blowtorches 1





Soldering irons

Soldering irons enable welds with tin filler (soft soldering) to be performed in areas of application such as electricity, radio, hifi, electronics and model construction. In order to meet all needs, Campingaz® offers three product ranges: the L range with economic soldering irons that have many advantages; the FL range, high guality soldering irons with adjustable power; and finally the LR100 soldering gun, which is an instantly heating soldering gun.









Matching consumables

Tin solders as filler materials, Pickling gel for preparing the parts, Ammonia stone to clean the tips

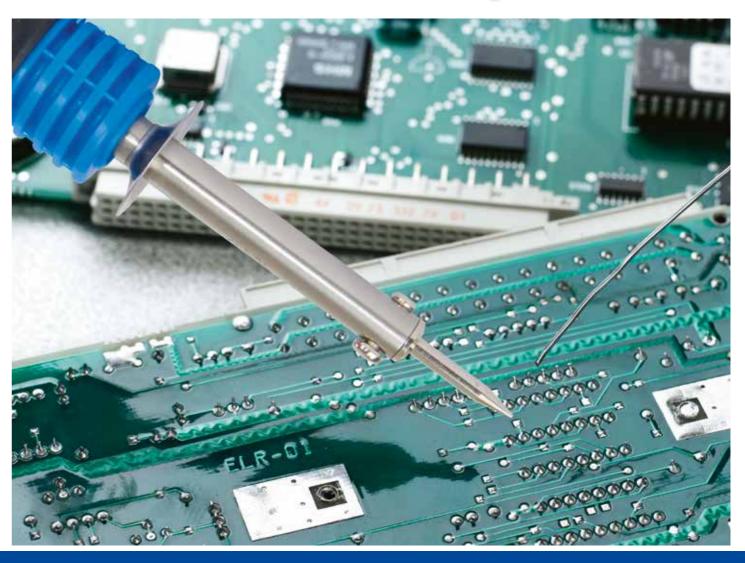
LR100 soldering gun: The fast 100W soldering gun

100W instant soldering gun: the soldering gun can be used within seconds after being switched on.

 Power variations, 3 positions Iron Holder

 Copper nickel-chromed tip • Extra curved tip

	LR100
SKU	205072
Usage	Copy from french Catalogue
Power in W	30
Temperature in C°	400
Weight in g	627
Dimensions in cm	70x4
Qt per master carton	10



Soldering Irons B



Integrated bulb to illuminate the work area. Ergonomic design with antisliding grip. Delivered with 2 spare tips.



Choosing the appropriate welding consumables

Choosing the appropriate welding consumables

There are 5 categories of welding consumables:

- Tin for soft soldering
- Solders for hard soldering
- Coated brass for brazing

- Steel for welding
- Electrodes for arc welding

The choice of welding consumables depends on the metals to be assembled and on the desired mechanical strength:

Low mechanical strength

Some repairs do not require high mechanical strength, for example repairs on a circuit board or a cold water pipe. Tin is often used for these types of soldering jobs:

	Steel / Iron	Copper	Cast Iron	Brass	Lead	Zinc
Steel / Iron	Coated Brass	Tin	Brazing Silver	Tin		
Copper	Tin	Tin		Tin	Tin	Tin
Cast Iron			Tin		Tin	
Brass	Tin	Tin		Tin	Tin	Tin
Lead		Tin	Tin	Tin	Tin	Tin
Zinc		Tin				Tin

High mechanical strength

Conversely, to repair a stool, or to assemble metal parts or gas pipes, a high mechanical strength is required. Hard soldering, brazing and welding techniques require other types of filler consumables:

	Steel / Iron	Aluminum	Copper	Cast Iron	Brass
Steel / Iron	Filler Metal (Steel)		Brazing Silver	Coated Brass	Brazing Silver
Aluminum		Brazing Aluminum			
Copper	Brazing Silver		Brazing Silver / Coppe r/ Phos- phorous		Brazing Copper or Brazing Silver
Cast Iron				Coated Brass	
Brass	Brazing Silver		Brazing Silver		Brazing Silver/ Copper

Fluxing agents and pickling gels

For tin solders

Before applying, clean the parts well with sandpaper. This has two functions :

• Preventing the rusting of the parts during and after assembly

• Increasing the adhesion of the filler material



Drinking water pipes Work on these pipes requires the use of lead-free fillers, which It is necessary to use an ATG silver solder (Ref: 2000025003) and an corresponds to 97% tin fillers. (Ref: 2000024994, 2000024996, ATG fluxing agent (Ref: 2000025002). 2000024998)



To obtain ATG*

approval

(essential for gas pipes))

Tin solders

For soft soldering. Tin melts between 180 and 250°C.

TYPE	NAME	SKU	APPLICATIONS	TOOLS	ASSEMBLY METALS	
	TIN WIRE 40%-2MM-50G	2000024993	Routine works, repair and installation of	Soldering irons, blowtorches,		
	TIN WIRE 40%-2MM-80G 2000024995 sanitary copper pipes, plumbing		hose torches			
	TIN WIRE 50%-1,5MM-30G	2000024992	Small welding in electricity, radio,	Octobering have		
T in 14/in a	TIN WIRE 50%-1,5MM-60G	2000025007	small domestic appliances, tv, stereo, modelisme			
Tin Wire	TIN WIRE 60%-1MM-10G	2000024990	Small welding in electricity and elec-	Soldering Irons	All, except aluminum and stainless steel	
	TIN WIRE 60%-1MM-40G	2000024991	tronics			
	UNLEAD.TIN WIRE 97% CO3%-2mm-30G	2000024994	Food along the set in the set in the set of			
	UNLEAD. TIN WIRE-CO-2MM-80GR	2000024996	Food pipes plumbing (food industry)	Soldering irons, blowtorches, hose torches		
Tin Paste	UNLEAD.TIN WIRE-97%CO3%-2mm- 80G	2000024998	Tinning breakdowns, routine work			
Tin Rods	BRAZ.TIN RODS 33% -1MM-35CM X1	2000024997	Soldering works	Blowtorches, Hose Torches		
Othore	BURNING OFF GEL 50ML	2000025000	Pieces preparation for soft soldering	/	/	
Others	AMMONIACAL STONE	2000024999	Cleaning soldering irons failures	/	/	

All our tin wires and tin paste have the flux included and offer a mechanical resistance of 5kg/mm2

Solders, coated brass and filler metals

For hard soldering, brazing and welding.

TYPE	NAME	SKU	°C FUSION	APPLICATIONS	TOOLS	ASSEMBLY METALS	TECHNIQUE
Brazing silver 34%	BRAZ SILVER RODS 34%-0,8mm-35cm-X2	2000025001	630	Copper and stainless steel pipes, sanitary and heating installations, objects repairing, model making	Blowtorches, hose torches, dual gas sets	Steel, stainless steel, tin, lead, iron. All other metals except aluminum	Hard soldering, excellent fluidity
	BRAZ SILVER RODS 34%-1,5mm-35cm-X2	2000026171	630				
	BRAZ.SILVER RODS 6%-2MM-35CM X5 - ATG	2000025003	630				
	BRAZ SILV ROD34%-2mm-35cm-X2 FLUX INTEGR	2000025961	630				
	BRAZ SILV ROD34%-1,5mm-35cm-X2 FLUX INTEGR	4%-1,5mm-35cm-X2 FLUX 2000025060 620					
Flux	SILVER FLUX ATG 30G	2000025002		Necessary for pieces preparations for hard soldering	/	/	/
Brazing copper, phosphorous, silver	BRAZ.CO/PH/SI RODS 2MM-35CM X5	2000025004	810	Sanitary and heating installa- tions, objects repairing, model making	Blowtorches, hose torches, dual gas sets	Copper and brass	Hard soldering
Brazing copper,	BRAZ.COPPER/PHOSPH RODS-2MM X7	2000025005	820				
phosphorous	BRAZ.CO/PH RODS-2MM-35CM X30	2000026172	820				
Brazing Aluminum	BRAZ.ALU.RODS-2MM-35CM X5+FLUX	2000025006	575	Aluminum objects reparing	Blowtorches, hose torches, dual gas sets	Aluminum	Hard soldering
Coated brass	COATED BRASS RODS-2MM-35CM X10	2000010074	875	Object repairing, model making, metal furniture	Dual gas sets	Copper, steel, iron, cast iron, brass	Brazing
	COATED BRASS RODS 2MM 35MM X30	2000010075	875				
Cilles Metel	STEEL RODS-1,2MM-35CM X20	38193	1530	Steel objects repairing,	Dual gas sets	Steel	Welding
Filler Metal	STEEL RODS-2MM-35CM X20	38194	1530	ironwork, metalwork			

All our brazing rods offer a mechanical resistance from 40kg/mm2 to 65kg/mm2

Electrodes

For autogenous welding with an arc welding kit. Melting at 1,500°C.

TYPE	NAME	SKU	ASSEMBLY METALS	APPLICATIONS	
	STEEL ELECTRODES-1,6mm-35cm 12	38200	luura ata du itta tai dua any Orang		
	STEEL ELECTRODES-1,6MM-35CM 40 38201 Iron, steel with thickness < 2r		Iron, steel with thickness < 2mm		
Steel	STEEL ELECTRODES-2MM-35CM X15	38202		All locksmith and metallurgy works, assembly metal elements for grids, balconies, stairs, tra lers, fences and tubes, sheet metal, ironwork a rework of worn/used parts, repairs of commo objects	
	STEEL ELECTRODES-2MM-35CM (40)	38203	Iron, steel with thickness from 2 to 3 mm		
	STEEL ELECTRODES-2,5MM-35CM 12	38206			
	STEEL ELECTRODE-2,5MM-35CM X40	38207	Iron, steel with thickness from 3 to 5 mm		
	STEEL ELECTRODE 2,5MM-35CM X80	38208			
	STEEL ELECTRODES 3,2MM-35CM X8	38210			
	STEEL ELECTRODES-3,2mm-35cm 15	38211	Iron, steel with thickness from 5 to 7 mm		
	STEEL ELECTROD-3,2MM-35CM X40	38212			
Iron	CAST IRON ELECTR2,5MM-35CM 5	38216	Cast iron	Ironworks	
Stainless Steel	STAINLESS STEEL ELECTR.5MM X5	38217	Stainless Steel	Stainless Steel works	

All our electrodes offer a mechanical resistance of 50kg/mm2







Gas (Cartridges, Cylinders and Bottles) 7

Campingaz[®] devices must only be used with Campingaz[®] cartridges, cylinders and bottles. Our butane/ propane valve cartridges, oxygen and kyrene bottles must only be used only with Campingaz[®] appliances and devices. Our Atal[®] and Argon cylinders can be adapted to MIG welding kits.

Pierceable Cartridges

Pierceable cartridges can't be disconnected once they've been plugged into an appliance, so they're suitable for more intensive or longer use - they're also our most economical and widely available cartridges.

C206 GLS

CAMPINGAZ

The cartridge has a new integrated flow reducing system, the Gas Lock System, which is compliant to the new European standard EN 417:2012 legislation. The system prevents the majority of residual gas from escaping the cartridge when accidentally disconnecting it from the appliance, thereby also preventing flare-ups.

C206 GLS Contains 190g Butane or Butane/Propane mix Ref: 3000002290 - Butane EAN: 3138522069179 Ref: 3000002295 - Butane/Propane mix EAN: 3138522069216

Valve Cartridges

Our range of valve cartridges have a high security self-sealing valve giving them all the advantages of being resealable – so they can be disconnected and reconnected even when they're not empty. Ideal for periodic, moderate use.



Exchange your cylinder

What to do with a refillable bottle when it is empty?

The 3 different gas bottle recycling models:

1/ The common model

A deposit is left when you purchase your first bottle of gas. Part of this deposit is received back when you return it to a retailer of gas. This model is usually limited to the national territory. For example, generally a French returnable bottle cannot be exchanged in another country.

2/ The Campingaz[®] model

The Campingaz refillable bottle model that has been used for more than 60 years is different; when you purchase a gas cylinder you become the owner of this cylinder. You can exchange your empty bottle for a full bottle whenever you want and wherever you go, even abroad. This exchange model for empty bottles, with which you only purchase the actual bottle once, gives you more flexibility. All information about this system is printed on the top of each bottle.

Recycling returnable bottles

If you don't need to use your bottle anymore, you can return it to a retailer or a recycling centre. They will be accepted free of charge.

All returned bottles are brought back to the factory where they were initially filled, where they are repaired and given a second life if their condition allows it. If it is not the case, they will be recycled. This initiative is aligned with the Campingaz[®] value for environmental and sustainable development.

Refillable Cylinders

These bigger, heavier cylinders are designed for more prolonged, intensive or regular use. They are fitted with a safety valve and are available in most European countries.

Exchange your cylinder



With the Campingaz[®] cylinder exchange system, you can bring your empty cylinder to a Campingaz[®] product retailer in France, UK, Germany, Italy, Spain (and dozens of other countries), and get a full cylinder for the price of just the refill. It's as simple as that.



* References for empty cylinder. Please contact local distributor for further information on gas cylinders.



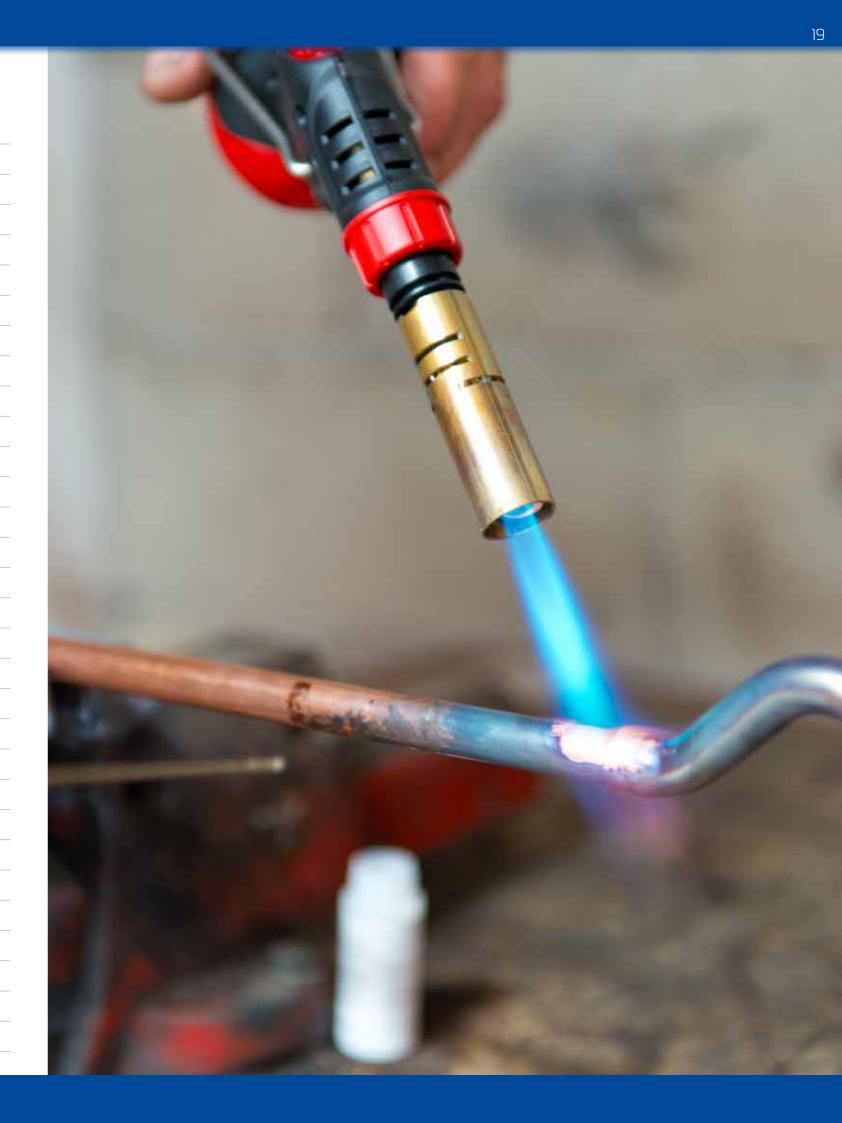




 Contains 2.75 kg Butane Ref: 30410⁺ EAN: 3138520061717



NOTES





Benelux & Nordic Coleman Benelux B.V.

Minervum 7168 - 4817 ZN Breda THE NETHERLANDS Tel: +31 76 572 85 00 infoBNL@coleman.com

www.campingaz.com

ISO 9001 Quality Management System Approved by LRQA

Over the years, Campingaz[®] has demonstrated its commitment to customer satisfaction by focusing on the quality and safety of its products. Application des Gaz (Saint Genis Laval, France) and Camping Gaz Italia (Centenaro di Lonato, Italia) have both been awarded Iso 9001 certificates in recognition of their quality assurance programmes which are applied to every stage of product design, manufacturing, quality control, development and delivery.



The Quality Management System is applicable to design, inter-company purchasing or sourcing, industrialization, manufacturing, storage and distribution of gas appliances and other outdoor leisure and camping products, barbecue and accessories. LPG cartridges, gas cylinders, DIY appliances and accessories under the Campingaz[®] brand name.

Due to our policy of continuous improvement, Application des Gaz reserves the right to alter or change the specifications of models shown. Some articles may vary in availability and specification from country to country. Please check with your local Campingaz[®] organization for further details. All pictures are non-contractual. All trademarks contained herein are the property of their respective owners.