

**TORCHES & GAS** 

HOBBY

HEATING

UTILITY/PLUMBING

BRAZING

AIR CONDITIONING/REFRIGERATION



HOT

1750°C 0°C







HOTTER

0°C 1871°C







HOTTEST

0°C 2010°C





#### **BASICS**

**SOLDERING** 

**DEFINITION:** The process of joining two copper

pipes to create a water tight seal

#### STEPS:

- 1. Clean fitting and pipe with abrasive cloth
- 2. Apply flux to the fitting and pipe
- 3. Heat joint with primary flame (see page 9) until flux sizzles
- 4. Apply solder to the joint

NOTE: Solder should be melted by the heat of the pipe and fitting, not direct contact with the flame.

#### **RECOMMENDED TORCHES:**

- •TS1100-E •TS7000T
- PBLAN • TS4000T • UL100
  - TS99T
- JT680 •TS99CKV
- TS3000T
- TS3000KC
- TS3000KB

#### **BRAZING**

**DEFINITION:** The process of joining two independent pieces of metal to form one strong load bearing joint

#### STEPS:

- 1. Place metal pieces into desired position
- 2. Heat joint until it glows
- 3. Apply brazing rod to joint while continuing to heat

NOTE: Brazing rod should be melted by the heat of the metal pieces, not direct contact with the flame.

#### **RECOMMENDED TORCHES:**

- TS7000T
- TS839T
- TS799T
- TS839ZKC • JTH7
- T757
- JT539T

#### **FLAME TYPES**

#### **MULITIPURPOSE**



Good for all applications except when high heat intensity is required, like brazing. Slightly softer and less intense than Pencil Point and Swirl.

#### **SWIRL FLAME**



Generates higher heat concentration on the work piece. Good for most applications except when very low heat more heavy duty jobs. intensity is required.

#### **JUMBO FLAME**



Flame is like an enlarged pencil point flame and designed to be used for

**PENCIL FLAME** 



Produces a fine pencil point, which is needed when heat has to be concentrated into a small area. Ideal for detailed and fine jobs.



#### **CONTENT**

нот		HOTTER		HOTTEST		ACCCESSO	DRIES	LEAK DETECTO	DRS
BUTANE 0 - 1750°C BF9-E PS135 PS100 ST100T ST1100T ST150K	4 4 4 4 4	PROPANE 1850°C - 1950°C TS3000T TS3000KB TS3000KC  TX9 JT680	(3400°F) 7 7 7 7	MAPP 1950°C - 2000°C MG9 JT539T JTH7 T757 TS7000T TS4000T	8 (3650°F) 8 8 8 9 9	SSW300-E SSW300PK-E SRC300-E SAC300-E SFB400-E SWSF100-E	11 11 11 11	TX3A TX12A TX12MA	7 7 7
MIXED GAS 1750°C - 188 PB190-E PB175-E PB330-E PBLAN TS1100-E		UL100	7	TS799 TS99ZKF TS839T TS839ZKC	10 10 10 10	810-E 84NIB AL3-E PC3-E WB5-E NS3-E	11 11 11 11 11 11		



#### **BUTANE**

APPLICATIONS

- Hot Blow
- Heat Shrink Jewellery
- Soft soldering maintenance
- Electrical Soldering

• Hot Knife



#### **PROPANE**

**APPLICATIONS** 

- Soldering
- Stripping Paint
- Loosening Rusted Nuts and Bolts
- Removing Paint, Caulk, and Putty



#### **MIXED GAS**

**APPLICATIONS** 

- Soft Soldering
- Paint Stipping
- Barbecue lighting
- Tile / Label Removal



#### **MAPP**

**APPLICATIONS** 

- Brazing
- Hardening Steel
- Soldering
- Hard Soldering Thawing Frozen General Heating Pipes

Pipes

- Stripping Paint
- Loosening Rusted Nuts and Bolts
- Removing Paint, Caulk, and Putty

# 0°C - 1750°C

### butane/propane mixed products

What is your job?

#### **HOT** DIY

- Jewellery
- Cooking
- Electric Soldering Craft and Hobby work





**Choose your fuel!** 

**Choose your torch!** 



- · Cordless for maximum portability
- · Metal Catalyst for optimum heat transfer
- · Solid Steel Tip lasts longer
- 30 seconds warm up. Fast, ready to use
- · Burns 80 min before re filling

10503510



- · Solid Steel Tip lasts longer
- 30 seconds warm up. Fast, ready to use
- · Burns 80 min before refilling

10503509



LIGHTWEIGHT MICRO FLAME TORCH Refillable precision needle point flame torch

- · For light, detailed work
- Refillable for convenience
- · Kit includes: microflame torch and soldering tip

10503512



- Storage Case
- Solder Tube
- ST100T
- · Soldering Tips
- · Hot Knife
- Sponge



10503511



BF9-E



#### **BERNZOMATIC 2.1 OZ. DISPOSABLE BUTANE CYLINDER** Use with Micro and Mini Torches

- 2.1 oz./60 gram Butane cylinder
- · For use with Micro Torches and lighters



10503514





#### MICRO TORCH TRIGGER START **BUTANE REFILLABLE**

Heat Output: 165 W

Refillable precision needle point flame torch with built-in push button igniter. Includes spark igniting solder tip attachment.

- · Micro flame torch for light, detailed work
- Trigger start for easy lighting
- Refillable for convenience
- · Kit includes: micro flame torch and soldering tip



10503513

HOT

## 1750°C - 1850°C



#### butane/propane mixed products

What is your job?

#### HOT DIY

- Paint Stripping
- Barbecue Lighters
- Tile Removal







**Choose your fuel!** 





25 - 35 seconds to solder

Choose your torch!

#### **KEY FEATURES AND BENEFITS**

Feature:

Fracture Groove

Benefit:

Safety no danger of explosion

Feature: Unique design

Benefit:

Powerful aesthetics, durable look and better reach in

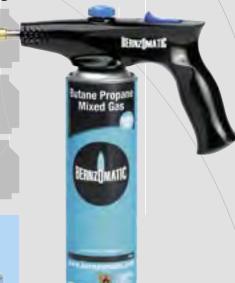
tight places

Feature:

Plastic cylinder stand

Benefit:

Makes Torch more stabel



Antiflare for Safety

#### Feature:

Easy to start

Benefit:

Can be lit with one finger: Piezo ignition

Feature:

Ergonomic handle to avoid cold can

Benefit:

Non-slip ledge for safety. True one-hand use

Feature:

One or two finger flame adjustment with distinct setting

Benefit:

User safety, better control and comfort

**PBLAN** 

#### PB190-E



#### **BUTANE PROPANE MIXED GAS**

- Cartridge (Piercable)
- Netweight 190g/6.70z 360ml

10503496

# PIERCE CAN TORCH Heat Output: 250W

- Pencil Flame type
- Antiflare for Safety

10503508

### PB175-E / PB330-E



#### **BUTANE PROPANE MIXED GAS**

- Butane 65%
- Propane 35%



#### TS1100-E



#### TRIGGER START TORCH KIT

Kit includes: TS1100 + PB330-E

- Heat Output: 800W
- With high quality brass burn tip
- Antiflare for safety
- General Purpose Flame type



## HOTTER

#### 1850°C - 1950°C HEAT + SOLDER

propane products

#### What is your job?

#### HOTTER **PLUMBING**

- Solder Copper Pipes
- Thaw Frozen Pipes
- Maintenance
- Air conditioning refrigeration
- Loosen Stubborn Bolts
- Bending plastic, laminates and PVC pipe



#### **Choose your fuel!**





15 - 20 seconds to solder

#### **Choose your torch!**

#### **PROPANE GAS & TORCHES**

Solid Brass burn tip heats up fast

Stainless Steel burn tube prevents corrosion

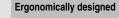
**Built-in regulator ensures** efficient operation in any position

Pressure regulated to burn upside down

Self igniting quick start trigger

Fracture Groove in torch for extra safety if dropped





Wide mulit-purpose flame

45° Angled nozzle to reach hard to access places

Adjustable flame switch for greater control

Soft grip handle

Antiflare for Safety



# HOTTER 1850°C - 1950°C HEAT + SOLDER



19099

propane products



Heat Output: 1460W

Ergonomically designed comfort grip. Regulated to burn upside down. Stainless steel burn tube and brass tip for durability. Adjustable flame control.

- Trigger start for ease of lighting
- Ergonomic grip for comfort
- Adjustable flame for a wide vareity of applications
- General purpose flame type
- Antiflare
- Regulated valve for control and safety
- · For use with propane fuel only

19028





for use with propane fuel only







# **LEAK DETECTORS**

Reliable and easy to use for the Air Conditioning Industries







# HOTTEST 1950°C - 2000°C HEAT + SOLDER + BRAZE

mapp products

#### What is your job?

#### HOTTEST **PROFESIONAL**

- Brazing Metals
- For Heavy Repairs
- Rapid Soldering of Dry or Damp Pipes (up tp 1,5mm wall thickness)







#### **Choose your fuel!**

1950°C - 2000°

**T757** 



5 - 10 seconds to solder

#### Choose your torch!

#### HAND TORCHES- FEATURES & BENEFITS

#### **Lock Button**

For continuous burning

#### Self-Igniting Trigger & On/Off Switch

- · Lights without external ignition source
- Helps prevent accidental lighting

#### Optimum Performance in an array of conditions

- · Regulator allows the torch to burn properly when turned in all directions including upside down
- Regulator also allows consistent perfomance in both high and low temperatures

HIGHEST HEAT OU Heat Value (MAPP) 3125 BTU R STAR

#### Removable Brass Tip

For easy cleaning and replacement

#### Adjustable Flame Control

Control by dial on back of torch

#### **Cast Aluminium** Construction

For greater durability

#### CGA-600 Cylinder Connection

For 16oz MAPP and 14oz Propane





#### BERNZOMATIC HAND **TORCH**

Heat Output: 3432 W Heavy Duty Trigger Start Flame Control Torch

- Self-igniting
- · Ultra swirl flame
- · Removable brass tip
- Trigger lock
- Cast aluminium construction
- CGA-600 cylinder connection
- · Fracture Groove

10505366

#### **TS7000T**

#### TRIGGER-START **FLAME CONTROL TORCH**

Heat Output: 2190 W

Adjusting knob for optimal gas consumption and heat output. Instant On-Off trigger improves fuel savings and convenience. Lock button keeps torch lit for finger-free use. Replaceable brass tip. Burn tip produces swirl flame for maximum heat output. Pressure regulated to burn in all directions. Cast aluminum body, stainless steel burntube, and brass burntip for durability.

- · Trigger start for ease of lighting
- · Piston regulated to burn in all directions
- Efficient swirl flame provides high heat output
- Cast aluminum construction provides added durability
- · Fracture Groove

19070

#### **TS4000T**

#### TRIGGER-START TORCH

Heat Output: 1946 W

Instant On-Off trigger increases fuel savings and convenience. Lock button keeps torch lit for finger-free use. Replaceable brass tip. Burn tip produces swirl flame for maximum heat output. Pressure regulated to burn in all directions. Cast aluminum body, stainless steel burntube, and brass burntip for durability.

- · Trigger start for ease of lighting
- Piston regulated to burn in all directions
- · Efficient swirl flame provides high heat output
- Cast aluminum construction provides added durability
- Fracture Groove









#### **MAPP vs. Propane**

## GET JOBS DONE 33% FASTER USING MAPP FUEL!





- Work is completed most efficiently with the primary flame
- MAPP fuel has 51% more heat transfer in the primary flame than Propane

		_	
L	SECONDARY FLAME	PRIMARY FLAME	

Fuel Type	PROPANE	MAPP	,
Flame Temperature In Air (°C)	1870°C	2010°0	С
Primary Combustion Heating Value (BTU/CuFt)	255	517	

#### **WHY MAPP TORCHES?**



 Swirl flame design helps create the hottest temperatures to do work faster, last longer & wrap around the workpiece



- All MAPP torches are regulated to constantly & consistantly regulate pressure coming from the bottle at any given outside temperature
- Anti-flare design in any position with rugged construction quality & safety

#### **WHY MAPP FUEL?**



- 33% faster than pure Propane.
- 50% more heat release than pure Propane to solder thicker pipes
- Lasts over 20% longer than 400g Propane









#### BERNZOMATIC 160Z. DISPOSABLE MAPP CYLINDER

Use only with multi-application torches and appliances specifying "for use with MAPP gas or propylene.

- 16oz.Mapp cylinder
- Applications include: general heating, soldering and brazing
- Mapp is 30% faster than propane to complete the job faster

19375

#### JT539T



#### **SWIRL FLAME BRAZING TORCH**

Highest Heat Value (MAPP) 3484 BTU Heat Output: 3020 W

neat Output. 3020 v

Pressure regulated to burn in all directions. Specially designed burntip produces a turbo charged swirl action flame for maximum heat output.

- Efficient swirl flame provides high heat output
- Adjustable flame for a wide variety of applications
- Solid brass regulators for durability
- Fracture Groove

19190

#### JTH7



Pressure regulated to burn in all directions. 4' hose for accessibility. Burntip produces a turbo-charged swirl action flame for maximum heat output. Includes burner wand with swirl flame burntip, hose, and cylinder clip, pressure regulator, flash back arrestor.

- · Efficient swirl flame provides high heat output
- 4 ft. hose for extended reach
- Adjustable flame for a wide variety of applications
- Solid brass regulators for durability
- Fracture Groove
- Belt Clip for easy use

19199

# HOTTEST

#### 1950°C - 2000+°C HEAT + SOLDER + BRAZE

mapp products

#### **SWIVEL TORCHES - FEATURES & BENEFITS**

#### **Self-Igniting Trigger**

- · Lights torch without external ignition source
- · Heavy duty igniter for great durability

Burn Tube Swivels 360°

For better accessibility



**Solid Brass Regulator** Provides greater durability

#### **Efficient Swirl Flame**

Provides maximum targeted heat output

Double "O" Ring Connection

Helps prevent gas leaks

#### **TS99T**

#### TRIGGER-START SWIVEL **HEAD TORCH**

Heat Output: 3686 W

360° degree swivel head allows for accesibility into tight and awkward spaces. Trigger start makes lighting more convenient by eliminating the need for a sparker. Efficient swirl flame produces maximum heat output. Double "O" ring connection to help prevent gas leaks. Brass regulator for durability.

- Burn tube swivels 360 degrees for increased acessability in tight work spaces
- Trigger start for ease of lighting
- · Efficient swirl flame provides high heat output
- · Adjustable flame for a wide variety of applications



19542



**TS799** 



**Greater Accessibility** 

Heat Output: 3686 W

- 360 degree swivel Targeted heat output
- · Swirl flame durable construction
- · Solid brass regulator
- · Adjustable targeted heat output
- CGA-600 Cylinder connection for 16oz MAPP and 14oz Propane

10505367

# TS99ZKC PIEZO IGNITION BRAZING TORCH **SWIVEL HEAD WITH MAPP GAS** 19543





Heat Output: 2520 W

Stainless steel burntube rotates 360 degrees. Push button igniter. Swirl action flame heats work quickly. Pressure regulated to burn in all directions.

- Efficient swirl flame provides high heat output
- · Adjustable flame for a wide variety of applications
- · Solid brass regulators for durability
- · Trigger start for ease of lighting
- · Fracture Groove

19088

# **ACCESSORIES**



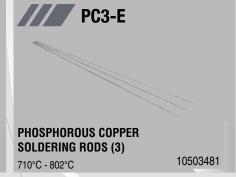
























#### **WELDING & BRAZING RODS**

**BERNZOMATIC®:** offers a wide variety of welding and brazing rods for various types of metals when hard soldering, brazing and welding

WELDING/BRAZING RODS	WORKING T	EMP	BRINELL HARDNESS	TENSILE STRENGTH (PSI)
AL3 Aluminium Soldering Rods	750°F	400°C	100	
PC3 Phosphorus Copper Soldering Rods	1450°F	790°C		40,000
NS3 Nickle Silver Soldering Rods	1250°-1750°F	625 - 955°C		85,000
WB3 Premium Bronze Brazing Rods	1600°F	870°C		60,000

Torch Per Propan&l	rformance Mapp												
Torch F Model	Fuel Service		Flame Temperature		Heat Value in Primary Flame		Total Heat Value		Burn Time on Full Cylinder		Flame Type	Soft Soldering Capacity	
		(°F/°C)		(BTU/hour)		(BTU/hour)		(hours)			Copper Tube Diameter (inch)		
	Propane	MAPP	Propane	MAPP	Propane	MAPP	Propane	MAPP	Propane	MAPP		Propane	MAPP
JT680	Yes	No	3.400/1870	N/A	558	N/A	4914	N/A	4,08	N/A	Pencil	1/8 - 1	N/A
TS3000	Yes	No	3.400/1870	N/A	524	N/A	4613	N/A	4,35	N/A	Utility	1/8 - 1	N/A
JTH7	Yes	Yes	3.400/1870	3.650/2010	1458	3484	13939	12715	1,44	1,53	Swirl	1/8 - 3	1/4 - 4
JT539	Yes	Yes	3.400/1870	3.650/2010	1458	3484	13939	12715	1,44	1,53	Swirl	1/8 - 3	1/4 - 4
TS839	Yes	Yes	3.400/1870	3.650/2010	1356	2819	11993	10288	1,68	2,14	Swirl	1/8 - 3	1/4 - 4
TS4000	Yes	Yes	3.400/1870	3.650/2010	809	1835	7119	6276	2,82	2,91	Swirl	1/8 - 3	1/4 - 4
TS799	Yes	Yes	3.400/1870	3.650/2010	1355	2197	13549	9986	1,60	2,08	Swirl	1/8-2	1/4 - 3
T757	Yes	Yes	3.400/1870	3.650/2010	1396	3125	12285	11712	1,63	1,70	Swirl	1/4-3	1/4 - 4
TS7000	Yes	Yes	3.400/1870	3.650/2010	809	1835	7119	6276	2,82	2,91	Swirl	1/8 - 3	1/4 - 4
TS99T	Yes	Yes	3.400/1870	3.650/2010	809	1835	7119	6276	2,82	2,91	Swirl	1/8 - 3	1/4 - 4

Order Code	Part	Description					
19028	TS3000T	Quickfire Torch Head	6				
19040	TS4000T	Trigger Start Cast Aluminimum Torch	6				
19070	TS7000T	Trigger Start Cast Aluminimum Torch	6				
19086	TS839ZKC	Spark Igniting Kit with Mapp gas	6				
19088	TS839T	Spark igniting Swivel head Torch Kit	6				
19098	TS3000KC	Quickfire Torch Kit	6				
19099	TS3000KB	Quickfire Plumbers Kit	6				
19110	JT680	Jumbo Flame Torch Head	6				
19190	JT539T	Swirl Flame Brazing Torch	6				
19199	JTH7	Brazing Hose Torch kit	6				
19205	UL100	2 Piece Pencil Flame Torch Kit	6				
19260	TX3A	Halide Leak Detector	6				
19265	TX12A	Halide Leak Detector and Propane	6				
19270	TX12MA	Halide leak Detector Kit in Carry Case	6				
19375	MG9	Mapp Gas 16 Ounce	12				
19400	TX9	Propane Gas 14.1Ounce	12				
19542	TS99T	Piezo Ignition Brazing Torch - Swivel Head	6				
19543	TS99ZKC	Piezo Ignition Brazing Torch - Swivel Head with Mapp	6				
95620	S4N1B	Four in One Brush	12				
10503480	AL3-E	Aluminium Soldering Rods (2)	12				
10503481	PC3-E	Phosphorous Copper Soldering Rods (3)	12				
10503482	WB5-E	Premium Bronze Brazing Rods (4)	12				
10503483	NS3-E	Nickel Silver Brazing Rods (2)	12				
10503484	SSW300-E	85g Solid Wire Solder	12				
10503485	SSW300PK-E	85g Solder, 28.5g Flux, Brush, Abrasive	12				
10503486	SRC300-E	85g Rosin Core Solder	12				
10503487	SAC300-E	85g Acid Core Solder	12				
10503488	SFB400-E	100mm Flux Brushes (5)	12				
10503489	SWSF100-E	Water Soluble Flux (28.5g)	12				
10503493	810-E	Flame Spreader plus addaptor	12				
10503496	PB190-E	190G Butane/Propane Mixed Gas	36				
10503497	PB175-E	175g Butane/Propane Mixed Gas	24				
10503498	PB330-E	330g Butane/Propane Mixed Gas	24				
10503502	TS1100-E	Trigger Start Torch Kit	6				
10503508	PBLAN	Pierce Can Torch	12				
10503509	PS135	Soldering Iron Butane Refillable 3 in 1	6				
10503509	PS100	PS100 Soldering Iron Refillable	6				
10503510	ST150K	Small Butane Refillable Micro Flame Torch Kit - Refillable	6				
10503511	ST100T	Small Butane Refillable Micro Flame Torch - Refillable	6				
10503512	ST1100T	Micro Flame Torch - Refillable	6				
10503513	BF9-E	60g Butane Gas	12				
10505314	T757	Trigger Start High Output Hand Torch - Adjustable Flame	6				
10505367	TS799	360 Degree Swivel Torch with Ignition	6				

#### **DEFINITION**

#### **HEAT TRANSFER VALUES**

are expressed in BTU (British Thermal Units). One BTU is the amount of heat needed to raise the temperature of 1 pound of water by 1°F

