

BORINOX PASTE

Brazing Flux Paste for Silver Alloy

Rev. 09/2016

TECHNICAL DATA SHEET 418B

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045	Approval
K-Fluo-Borates	500 - 800	FH 10	-

Characteristics:

BORINOX PASTE is very active in nature and to be used with Silver brazing alloy. Flux active temperature range is 550 - 800°C and best for the alloys whose melting temperature is between 590-730°C. This flux is suitable for all flames, Induction and Resistance brazing procedures. It does not fume much. **This Product is RoHS Compliance.**

Applications:

BORINOX PASTE is recommending to be used for brazing Steel, Copper, Copper Alloys as well as Nickel & Nickel alloys. Typical applications are found in electrical Industry, Construction of vehicles and in the copper tube installation. To be used with Brazargent Ternary and Quaternary alloys.

Direction of Use:

BORINOX PASTE should be stirred well before used to ensure homogenous mixture through out. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and the flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating.

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

	Standard	Packing (gi	m)		000	*	
150	200	400	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
V	V	Х	Х	√	V	V	

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



BORINOX Powder

Brazing Flux Powder for Silver Alloy

TECHNICAL DATA SHEET 418

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045	Approval
K-Fluo-Borates	500-800	FH 10	-

Characteristics:

BORINOX is scouring flux to be used for brazing Silver brazing alloy. The flux remain active for wide temperature range and best for the alloys who's melting temperature is between 590-730°C. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume much.

Applications:

BORINOX is recommending to be used for brazing Steel, Copper, Copper Alloys as well as Nickel & Nickel alloys. Typical applications are found in electrical Industry, Construction of vehicles and in the copper tube installation. To be used with Brazargent Ternary and Quaternary alloys.

Direction of Use:

BORINOX flux powder should be mixed with water. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating.

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

Standard	Packing (gm)		000	*	
200	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
V	V	√	V	V	V

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



AG ACTIVE PASTE

Paste for Silver Brazing Alloys

TECHNICAL DATA SHEET 518

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045
Complex Fluoborates	550-880	FH 10

Characteristics:

AG ACTIVE PASTE ready to use. A stream of strong brazing for Copper Stainless Steel and nickel alloys. Paste composed of mixture of Complex Fluoroborates ensuring very good protection of brazing component at high temperature. It comes in the form of a white paste **free of boric acid** and soluble borates. Paste is also available for auto dispensing equipment.

Base Metal, Copper and its alloys, Stainless Steel and Nickel Alloys. Good with Filler Metal CuP/ CuPAg/ Ag alloys

Applications:

AG ACTIVE PASTE is very good for not only for manual torch brazing but also use in the process of induction & Furnace Brazing. Being a homogeneous and stable dough, it can use in automatic dispensable unit. It used in a wide variety of joining applications for many different finished products including applications Switchgears, Farm machinery, Heat Exchanger, Heating equipment, Plumbing Fixtures, Refrigeration and Air conditioning, Ship Repair, Steel Furniture.

Direction of Use:

AG ACTIVE PASTE.to be stirred the mixture thoroughly before use. Apply the mixture across the joint surface before assembled by brush. Further Paste should then be applied externally on the either side of joint.

Cold Rodding where, a cold brazing rod is dipped into Paste and it adhering to the rod. The Paste is transferred to the joint area. This is an effective fluxing method, but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating. For Flame brazing, the Paste is only conditionally suitable (due to relatively short time until the flux will be saturated with oxides).

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use Flux melting is work as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

Standard Packing (gm)					000		*	F	
500	1000	OXXX	CETYLÈNE	Ľ				501	IDVOVEN
$\sqrt{}$	V	OXY/A	V	INL	V	AERO-	PROPANE	FOU	JR/OVEN V

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



AGFLUX HP Paste

For CuPAg & Silver Brazing Alloys

Rev. 06/2017

TECHNICAL DATA SHEET 191B

Specifications:

Base	Active Temperature Range (°C)	DIN EN 1045	Approval
Fluoro-Boro complex	500-800	FH 10	-

Characteristics:

AGFLUX HP PASTE is to be used for brazing of high Silver containing alloys as well as CuPAg. The flux remain active for wide temperature range and best for the alloys who's melting temperature is between 500-800°C. The aggressive flux formulation gives very good fluidity and capillary action of the alloy. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume much.). **This Product is RoHS Compliance.** This flux can use in conjunction with our range

- Phosbraz AG XXX: To braze brass with Copper
- Brazargent 15XX & 50XX: Silver brazing alloys with melting temperature lower than 800°C

Applications:

AGFLUX HP Paste is recommending to be used for brazing Steel, Copper, Copper Alloys as well as Nickel & Nickel alloys. Typical applications are found in electrical Industry, Construction of vehicles and in the copper tube installation. To be used with Brazargent Ternary and Quaternary alloys.

Direction of Use:

AGFLUX HP paste: It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

Standard Packing (gm)			000	*		
200	500	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
V	$\sqrt{}$	$\sqrt{}$	V	V	V	V

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



AGFLUX HP

For CuPAg & Silver Brazing Alloys

TECHNICAL DATA SHEET 191

Specifications:

Base	Active Temperature Range (°C)	DIN EN 1045	Approval
Fluro-Boro complex	500-800	FH 10	-

Characteristics:

AGFLUX HP is to be used for brazing of high Silver containing alloys as well as CuPAg. The flux remain active for wide temperature range and best for the alloys who's melting temperature is between 500-800°C. The aggressive flux formulation gives very good fluidity and capillary action of the alloy. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume much. It can be used in the paste form, with addition of water (4:1). **This Product is RoHS Compliance.** This flux can use in conjunction with our range

- Phosbraz AG XXX: To braze brass with Copper
- Brazargent 15XX & 50XX: Silver brazing alloys with melting temperature lower than 800°C

Applications:

AGFLUX HP is recommending to be used for brazing Steel, Copper, Copper Alloys as well as Nickel & Nickel alloys. Typical applications are found in electrical Industry, Construction of vehicles and in the copper tube installation. To be used with Brazargent Ternary and Quaternary alloys.

Direction of Use:

AGFLUX HP flux powder should be mixed with water. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating.

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

Standa	rd Packing (gı	m)		000	*	****
200	500	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
V	$\sqrt{}$	V	V	V	V	

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



AGFLUX PASTE

Brazing Flux Paste for Silver & Copper Alloy
Flux Certified A.T.G. Certigaz

TECHNICAL DATA SHEET 17B

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045	ATG
KF-Fluo-Borates	500-800	FH 10	N°1530 et N°1614

Characteristics:

AGFLUX PASTE ready to use. Formulated as general purpose silver brazing Paste. Recommended for brazing Copper, Brass, Nickel, Steel, Stainless Steel brazing radiators, heating elements. To be Used in combustible gas installations together with our PAG 60 (A.T.G. No.1530) or BRAZARGENT 34 GAZ (A.T.G. No.1614). This flux can be used in conjunction with our range

- Phosbraz: To braze brass with Copper
- Brazargent: Silver brazing alloys with melting temperature lower than 800°C

Applications:

AGFLUX PASTE is used in a wide variety of joining applications for many different finished products including applications Switchgears, Farm machinery, Heat Exchanger, Heating equipment, Plumbing Fixtures, Refrigeration and Air conditioning, Ship Repair, Steel Furniture.

Direction of Use:

AGFLUX PASTE.to be stirred the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Cold Rodding where, a cold brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a pre-fluxed area during heating. For Flame brazing, the flux is only conditionally suitable (due to relatively short time until the flux will be saturated with oxides).

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

	Standard	Packing (gr	n)		000	*	
60	200	400	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
	$\sqrt{}$	$\sqrt{}$		V			

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.

Conformity

Approval concerning BRAZARGENT 34 GAZ/AGFLUX – PAG60/AGFLUX following A.T.G. specification B.524 and A1(2011).



AGFLUX

Brazing Flux for Silver Alloys

Rev. 09/2016

TECHNICAL DATA SHEET 19

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045
KF-Fluo-Borates	450-800	FH 10

Characteristics:

AGFLUX is to be used for brazing Silver brazing alloy. The flux remain active for wide temperature range and best for the alloys who's melting temperature is between 550-730°C. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume much. **This Product is RoHS Compliance.** This flux can be used in conjunction with our range

- Phosbraz: To braze brass with Copper
- Brazargent: Silver brazing alloys with melting temperature lower than 800°C

Applications:

AGFLUX is recommending to be used for brazing Steel, Copper, Copper Alloys as well as Nickel & Nickel alloys. Typical applications are found in electrical Industry, Construction of vehicles and in the copper tube installation. To be used with Brazargent Ternary and Quaternary alloys.

Direction of Use:

AGFLUX flux powder should be mixed with water. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating.

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

	Standard	Packing (gr	n)	000		000		••••
60	200	400	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN	
Х	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	V	V	V	V	

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



FLUX ALUNOX NC

Non-Corrosive Aluminium Brazing Flux

TECHNICAL DATA SHEET 416

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045
Potassium Aluminium Florides	560 - 600	FL 20

Characteristics:

ALUNOX NC is non-corrosive flux to be used for brazing Aluminium and low alloyed Aluminium alloys with solidus and liquidus temperatures of 630°C or higher. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume. **This Product is RoHS Compliance**

Applications:

ALUNOX NC is recommending to be used for brazing Aluminium Alloys Typical applications are brazing radiators, heating elements, sandwich bottom pots and deep fat fryers.

Physical Properties:

Colour	Solidus Temperature (°C)	Bulk Density g/cm ³	Corrosive
White Powder	550	2.70	non

Direction of Use:

ALUNOX NC flux powder should be mixed with water (Recommended ratio of flux to water (distilled/ demineralised) is 1:1 or 1:1.5. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating. For Flame brazing, the flux is only conditionally suitable (due to relatively short time until the flux will be saturated with oxides).

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The Flux being a non-corrosive in nature there is no need to remove the flux residue after brazing from the component.

Standard Packing and Storage:

Standard Packing (gm)			000	*			
60	200	400	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
Χ	V	Χ	$\sqrt{}$	V			

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



FLUX ALUNOX NC3

Non-Corrosive Aluminium Brazing Flux

TECHNICAL DATA SHEET 414

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045	
Potassium Aluminium Florides	560 - 600	FL 20	

Characteristics:

ALUNOX NC3 is non-corrosive flux to be used for brazing Aluminium and low alloyed Aluminium alloys with solidus and liquidus temperatures of 630°C or higher. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume. **This Product is RoHS Compliance**

Applications:

ALUNOX NC3 is recommending to be used for brazing Aluminium Alloys Typical applications are brazing radiators, heating elements, sandwich bottom pots and deep fat fryers.

Physical Properties:

Colour	Solidus Temperature (°C)	Bulk Density g/cm ³	Corrosive
White Powder	550	2.70	non

Direction of Use:

ALUNOX NC3 flux powder should be mixed with water (Recommended ratio of flux to water (distilled/ demineralised) is 1:1 or 1:1.5. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating. For Flame brazing, the flux is only conditionally suitable (due to relatively short time until the flux will be saturated with oxides).

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The Flux being a non-corrosive in nature there is no need to remove the flux residue after brazing from the component.

Standard Packing and Storage:

Standard Packing (gm)			000	*			
60	200	400	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
Х	√	Χ	1		√	√	1

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company FSH Welding Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for FSH Welding Group. Fumes: Consult information on MSDS, available upon request.

Rev. 09/2016



FLUX ALUNOX NCs

Non-Corrosive Aluminium Brazing Flux

TECHNICAL DATA SHEET 415

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045
Cs-Al-F Complex Mixture	400 - 450	FL 20

Characteristics:

ALUNOX NCs is non-corrosive flux to be used for soft brazing Aluminium and low alloyed Aluminium alloys (except aluminium with magnesium contents) with Stainless or Copper. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume. **This Product is RoHS Compliance.**

Applications:

ALUNOX NCs is recommending to be used for brazing Aluminium Alloys Typical applications are brazing radiators, heating elements, sandwich bottom pots and deep fat fryers.

To be use with ours **ZINAL 4** Alloy

Physical Properties:

Colour	Solidus Temperature (°C)	Bulk Density g/cm ³	Corrosive
White Powder	400	3.80	non

Direction of Use:

ALUNOX NCs flux powder should be mixed with water (Recommended ratio of flux to water (distilled/ demineralised) is 1:1 or 1:1.5. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating. For Flame brazing, the flux is only conditionally suitable (due to relatively short time until the flux will be saturated with oxides).

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The Flux being a non-corrosive in nature there is no need to remove the flux residue after brazing from the component.

Standard Packing and Storage:

Standard Packing (gm)			000	*	0000		
60	200	500	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
Х	V	V		V		V	

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



FLUX ODAL

Corrosive Aluminium Brazing Flux

TECHNICAL DATA SHEET 412

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045	Approval
Alkaline Chlorides + Complex Fluorides	>550	FL 10	-

Characteristics:

FLUX ODAL is corrosive flux to be used for brazing Aluminium and low alloyed Aluminium alloy. The flux is not recommended for brazing Mg-bearing alloys. It gives very good alloy wettability and good deoxidising action. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume. **This Product is RoHS Compliance Applications:**

FLUX ODAL is recommending to be used for brazing Aluminium Alloys Typical applications are brazing radiators, heating elements, sandwich bottom pots and deep fat fryers.

Physical Properties:

Colour	Solidus Temperature (°C)	Bulk Density g/cm ³	Corrosive
White Powder	400	-	Yes

Direction of Use:

FLUX ODAL flux powder should be mixed with water (Recommended ratio of flux to water (distilled/ demineralised) is 1:1 or 1:1.5. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating. For Flame brazing, the flux is only conditionally suitable (due to relatively short time until the flux will be saturated with oxides).

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The Flux being a corrosive in nature there is needed to remove the flux residue after brazing from the component. Immersion of the part in the boiling water. A chloride flux is highly soluble in water and the boiling water removes most of it.

Standard Packing and Storage:

	Standard Packing (gm)				000	*	••••
150	200	400	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
Х	V	Х	Х		√		√

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



PHOS FLUX (L)

Liquid Flux for joining Copper & Copper Alloys

TECHNICAL DATA SHEET 519

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045	
Complex borates	580-880	FH 10	

Characteristics:

PHOS FLUX (L) ready to use transparent liquid Flux for Copper & Copper Alloys joining. The liquid composed of mixture of Complex borates and fluorine Salts. Give a very good protection of brazing component at high temperature.

Base Metal, Copper and Copper alloys. Good with Filler Metal CuP/ CuPAg/ Ag alloys

Applications:

PHOS FLUX (L) is very good for manual torch brazing. Being a homogeneous and stable dough, it can use in automatic dispensable unit. It used in a wide variety of joining applications for many different shapes of copper and copper alloys using CuP & CuPAg alloys.

Application: Heat Exchanger, Heating equipment, Plumbing Fixtures, Refrigeration and Air conditioning,

Direction of Use:

PHOS FLUX (L) has to be used in original concentration. Apply liquid across the joint surface before assembled by brush. Further liquid should then be applied externally on the either side of joint.

For Flame brazing, the liquid is only conditionally suitable (due to relatively short time until the flux will be saturated with oxides). It is good practice to mechanically clean and degrease the joint surface before applying liquid. Heat slowly and evenly to the brazing temperature, without local overheating.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad or by mechanical cleaning.

Standard Packing and Storage:

Standard Packing (L)						
0.5 L	1 L	5 L	10 L			
√	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			



Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.



POLYFLUX

Brazing Flux for Braze-welding

TECHNICAL DATA SHEET 10

Specifications:

Base	Active Temperature Range (°C)	NF EN 1045	
Mix of Fluorides and Borates	800-1000	FH 20	

Characteristics:

POLYFLUX is in Powder or Paste form is ready to use for general brazing alloys and autogenous cast brazing. Its aggressive action gives perfect cleaning on uncleaned surface. It improves brazing alloys fluidity. The flux remain active for wide temperature range and best for the alloys who's melting temperature is >700°C. The flux is suitable for all flames used for brazing, Induction brazing and Resistance brazing procedures. It does not fume much. **This Product is RoHS Compliance.** This flux can use in conjunction with our range

• Cuprox, Nicrox, Super Cuprox/Nicrox (1%Ag) and Brazargent 1505, 1512Si, 1520Si.

Applications:

POLYFLUX is recommending to be used for brazing Steel, Copper, Copper Alloys as well as Nickel & Nickel alloys. Typical applications are found in electrical Industry, Construction of vehicles and in the copper tube installation. To be used with Brazargent Ternary and Quaternary alloys.

Direction of Use:

POLYFLUX powder should be mixed with water. Stir the mixture thoroughly. Apply the mixture across the joint surface before assembled by brush. Further flux should then be applied externally on the either side of joint.

Hot Rodding is where, a warm brazing rod is dipped into flux powder and flux adhering to the rod is transferred to the joint area. This is an effective fluxing method but difficult to achieve good penetration of capillary joints. It can be used to supplement a prefluxed area during heating.

It is good practice to mechanically clean and degrease the joint surface before applying flux. Heat slowly and evenly to the brazing temperature, without local overheating. Use flux as a temperature guide, i.e. it will become clear or opaque as brazing temperature is reached. If blackening of the surface occurs this is often sign of insufficient flux, overheating or flux exhaustion.

Flux Residue Removal:

The post braze flux residue should be removed to avoid potential corrosion. Deep the component in hot water (60°C) for 30mins and then brushing with a rag or non-woven abrasive pad. Additional measures include mechanical cleaning with a wire brush, steam jet or abrasive blasting media such as grit, soda or dry ice. If permit, quench hot brazed joint in water when reached below 300°C (specifically Sn containing alloys). This quenching will make the flux residue more fragile and with mechanical cleaning it will remove.

Standard Packing and Storage:

	Standard Packing (gm)				000	*	***
60	200	400	1000	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
Х	V	V	$\sqrt{}$	√	√	√	V

Customised packing other than above standard dimensions is solicited case to case basis. Flux to be stored in the temperature range +5 to 30°C. Avoid rapid changes in temperature.

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company FSH Welding Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for FSH Welding Group. Fumes: Consult information on MSDS, available upon request.

Rev. 09/2016