2Shape mini / 2Shape mini Procedure Pack / 2Shape mini assorted NiTi Root Canal Instruments

Protocol 2Shape mini

	Ø	%	L	Stop	Ring	RPM	Recommended torque (N.cm)
One Flare	25	9	17			250 - 400	3
One G	14	3	21 - 25 - 29			250 - 400	1.2
2Shape TS1 mini	25	4	21 - 25 - 31			250 - 400	TS1 : 2 TS2 : 2.5
2Shape TS2 mini	25	6					
2Shape F35 mini	35	6	21 - 25 - 31			250 - 400	F35 : 2.5 F40 : 2
2Shape F40 mini	40	4					

resistance can be felt. Perform a circumferential brushing movement against the canal wall. Do not force the instrument into the primary curvature. Remove the instrument from the canal, clean the grooves and irrigate the root canal. Then continue the preparation sequence with the next file. On average, 3 to 5 passages are required before reaching the apex.

3. Reprocessing instructions

- For all metal devices, it is recommended to use ultrasonic disinfecting and cleaning agents.
- For your own safety, please wear personal protective equipment (gloves, protective clothing, ...).
- Do not use cleaning or disinfecting agents containing phenol, aldehyde and alkaline composition.
- Always respect the instructions for use provided by the manufacturer of the products.

- Due to the product design and the materials used, no definite limit for the maximum number of performable processing cycles can be specified. Instruments that show medical device damage should be determined by their function and careful handling. Multiple use of single-use devices may result in damage to the device and/or cross-contamination.
- The user must ensure that the processing method used is suitable. This is usually done by using established procedures and observing the applicable requirements.
- The state of the art and national laws require that validated procedures be followed.

- Gloves, shoes, clothes are recommended by the manufacturer of cleaner and detergent
- Ultrasonic cleaning bath
- Disinfectant (example for Bacillol® 30 Tissues)
- Detergent (example for Bacillol® 30 Tissues)
- Container
- Cleaning tubs or washer-disinfector
- Drying cabinet or compressed air

Remark: All material used should be cleaned and replaced regularly. Observe the operating instructions of the process (initial treatment, cleaning or rinsing).

Instruction for use EN

1. Indication

One Flare: Root canal shaping and root canal preparation in endodontic treatment.

One G, F-files: glide path of root canals during non-surgical endodontic treatment.

2Shape mini: shaping and root canal preparation in endodontic treatment.

One G is for a dental professional only.

2. Contraindications

Apart from children under 2 years of age (ethylene oxide used in the sterilization process), there is no contraindication to the use of the device that is medically treating a tooth by orthograde route.

3. Complications

In case of incomplete anatomy, per-operative risks (instrumental breakage, ledge, stripping, zipping, false path, perforation...) could occur and reduce a risk of infectious processes.

4. Warning and precautions

- Use in continuous rotation at the recommended speed. In cases of complex anatomy, the movement range can be different from the value recommended by the manufacturer.
- Instruments supplied non-sterile; sterilization recommended (EN ISO 17664).
- Do not use in retrograde treatment.
- Instruments supplied non-sterile; Checking the integrity of the packaging before use. If damaged, do not use the instrument.
- If applicable, respect the expiry date.
- Do not use the instrument which is only on the labelling until the last use.
- Year of manufacture: see labelling.
- Store in a dry, clean and shaded place of storage conditions.
- Single use instrument. Do not reuse or resterilize. Otherwise the risk is a decrease of performances and security characteristics (fracture of the instrument in the tooth).
- In case of doubt concerning the product identification, do not use it.
- Check the instrument state before the use between each canal. If the instrument is damaged or shows signs of wear, discard it and use a new one.
- Inform the manufacturer and the country regulatory authority of any serious incident related to the instrument.

Packaging symbol	STERILE EO	Sterile using Ethylene Oxide. Do not re-use.	

Packaging symbol	STERILE R	Not Sterile. Do not re-use	
Packaging symbol		Not Sterile	
Symbole emballage	STERILE EO	Stérilisée à l'Oxyde d'Ethylène	

5. Clinical claims

2Shape mini in normal conditions.

6. Precautions

- Shaping ability: adapted debris removal and cutting efficiency
- Respect of canal shape
- Geometry adapted to irrigation
- Safety: controlled resistance to torsional fracture in its original position

Usability:

- Improved flexibility through heat treatment

Safety:

- Controlled risk of breakage
- Controlled resistance to cyclic fatigue

Note: K-Files and One G are glide path files used before rotary instruments. One G has a flaring instrument occurring.

7. Characteristics

K-files:

- Diameter 10 (purple handle),
- Taper 02 (red tip)
- Material of operative part: Stainless steel
- Lengths: 21 - 25 - 29 mm

Type 2 rotating instruments under EN ISO 3630-1: 2019 Couple:

- Material of operative part: Nickel-Titanium
- Recommended torque (not required): see table "Recommended Torque".

TS2 mini and F35 mini have a smaller wire diameter than TS1 mini and F40 mini, which results in the range to the corresponding ISO tools.

Material of operative part: Nitinol.

Use in connection with an endodontic contra-angle according to EN ISO 1797: 2017 (Type 1).

Number of uses: maximum of 3 canals recommended. Medical device class according to Directive 93/42 and MDR 2017/745: Yes.

8. Protocol

CT-Protocol.

Operating procedure :

Progressive movement in three waves (1 up and down movement) with a light pressure (1 circumferential filing movement). Insert the rotating instrument into the root canal until a

Cleaning/Rinsing/Drying

Place the instrument in the tray of the on the slide- in trolley of the washer/disinfector. Perform Cleaning cycle with a 0,5% Neodisher® MediZym

Remarks:

- *Disinfection (thermal or chemical thermal) is carried out automatically during the process as certified after the cleaning.*
- *Observe concentrations and concentrations given by the manufacturer of the cleaning agents.*
- *Follow the instructions of the washer-disinfector. Ensure that the load is free of visible soiling after each cycle is completed by the manufacturer.*
- *The final rinse step should be with demineralized water. For other rinse duration see the values defined by the manufacturer.*
- *Observe the manufacturer's instructions according to EN ISO 15883, maintenance and validated regulars.*

Visual inspection

Inspect the used products.

Do not use in case of a defect the product is visibly not clean or does not any damaged products.

Packaging

Place the instruments in a paper-plastic pouch for steam sterilization compliant with ISO 11607 and EN 868.

Remarks:

- *Use only devices that are not contained within a box, silicon tube or blister. Unpack instrument and the device to prevent packaging piercing. Seal the pouches according to the recommendation of the pouch manufacturer. If it is not mentioned, use a heat sealing device validated for these kinds of pouches must be calibrated and qualified.*

Sterilization

Sterilise the products with steam vapor

- Apparatus class B
- Temperature minimum: 132 °C
- Absolute pressure: 2,2 bar
- Vacuum retention: 20 min
- Correct the physics chemical indicators and type control.

Remarks:

- *The settings temperature at 134 °C and duration of 18 min are recommended for prion inactivation according to French regulations.*
- *Observe the validity of the sterile barrier system, autoclave cycle and load. Observe the maximum load is not exceeded.*
- *Observe the instructions of the sterilizer according to the recommendation given by the sterilizer manufacturer.*
- *Observe the instructions of removal steam strict. Cause corrosion or other defects on devices.*
- *Sterilization is carried out EN 285 full cycle conditions with unsaturated steam.*

Storage

Store the products in a dry, clean and dust-free storage room at room temperature in the original paper-plastic pouch for steam sterilization manufacturer.

Remark: Check the packaging and the medical devices before using them (packaging integrity, no damage, no corrosion, no dirt, no moisture).

9. Storage and transport conditions

Store sterile instruments in their original packaging, protected from sunlight and heat, in a clean and dry place.

There are no special storage and transport conditions for unsterile products.

10. Disposal

Used instruments must be placed in a secure container, taken to a collection point and disposed of in accordance with disposable biohazard as per good dexterity practices.

11. Symbols

NITI	NiTi - raw material		Root canal preparation
SS	Stainless steel handle		Assortment
CLASSICS	Handle		Do not use if packaging is damaged
	Medical device		Quantity

Instructions d'utilisation FR

1. Indication

One Flare : traitement coronaire durant un traitement endodontique non chirurgical.

2Shape mini : mise en forme initiale des canaux radiculaires durant un traitement endodontique non chirurgical.

One G, K-Files: cathétérisme des canaux radiculaires durant un traitement endodontique non chirurgical.

Utilisation par un professionnel dentaire uniquement.

2. Contre-indications

En dehors des enfants âgés de moins de 2 ans (oxyde d'éthylène employé durant le processus de stérilisation), il n'existe aucune contre-indication à l'utilisation de 2Shape mini pour traiter médicalement une dent par voie orthograde.

3. Complications

Dans les cas d'anatomie canalaires complexes, un risque opératoire (fracture instrumentale, marche, zip, perforation, fausse route) pourrait se produire et induire un risque de processus infectieux.

4. Mises en garde et Précautions

- Utiliser en rotation continue à la vitesse recommandée. Dans les cas d'anatomie complexe, le couple d'utilisation peut être différent de la valeur recommandée par le fabricant.
- Instruments fournis non stérile : stérilisation d'un instrument non stérile recommandée (EN ISO 17664).
- Ne pas utiliser pour un traitement endodontique rétrograde.
- Instruments fournis non stérile ; Vérifier l'intégrité de l'emballage avant utilisation. En cas de détérioration, ne pas utiliser l'instrument.
- Le cas échéant, respecter la date de péremption.
- Ne pas utiliser l'instrument dont la date sur le support des conditions de stockage.
- Usage unique : ne pas réutiliser l'instrument. Sinon le risque est une diminution des performances et des caractéristiques de sécurité (fracture de l'instrument dans la dent).
- En cas de doute concernant l'identification du produit, ne pas l'utiliser.
- Vérifier l'état de l'instrument avant utilisation entre chaque canal. Si l'instrument est endommagé ou présente d'usure, le jeter et utiliser un neuf.
- Informer le fabricant et l'autorité réglementaire du pays de tout incident grave lié à l'instrument.

Symbole emballage	STERILE EO	Stérilisé à l'oxyde d'éthylène. Ne pas réutiliser.	

5. Revendications cliniques

2Shape mini dans les conditions normales d'utilisation.

6. Précautions

- Capacité de mise en forme : remontée des débris et efficacité de coupe
- Respect de la forme canalaire
- Géométrie adaptée à l'irrigation
- Sécurité : résistance contrôlée à la fracture sur torsion dans sa position originale

Aptitude à l'utilisation :

- Flexibilité améliorée par traitement thermique

Sécurité :

- Risque de fracture limité
- Résistance contrôlée à la fatigue cyclique

Remarque : Les limes K et One G sont des limes manuelles pour le glissement de progression. Le One G présente un instrument effilant.

7. Caractéristiques

Limes K :

- Diamètre 10 (manche violet),
- Conicité -02 (cône rouge)
- Matériau de la partie active : acier inoxydable
- Longueurs : 21 - 25 - 29 mm

Instruments rotatifs type 2 de la norme EN ISO 3630-1 : 2019 : Couple recommandé maximum (non obligatoire) : voir tableau « Recommended Torque ».

TS2 mini et F35 mini ont un diamètre de fil plus petit que le TS2 mini et F40 mini, ce qui correspond à la plage de correspondance aux limes ISO.

Matériau de la partie active : Nickel-Titane.

Utilisation en connexion avec un contre-angle endodontique conforme à la norme EN ISO 1797 : 2017 (Type 1).

Nombre d'utilisation : 3 canaux maximum recommandés. Classe médicale selon la directive 93/42/CEE et le MDR2017/745 :

Continuous rotation

Date de mise à jour du mode d'emploi : 2017

Instructions d'utilisation FR

1. Indication

One Flare : traitement coronaire durant un traitement endodontique non chirurgical.

2Shape mini : mise en forme initiale des canaux radiculaires durant un traitement endodontique non chirurgical.

One G, K-Files: cathétérisme des canaux radiculaires durant un traitement endodontique non chirurgical.

Utilisation par un professionnel dentaire uniquement.

2. Contre-indications

En dehors des enfants âgés de moins de 2 ans (oxyde d'éthylène employé durant le processus de stérilisation), il n'existe aucune contre-indication à l'utilisation de 2Shape mini pour traiter médicalement une dent par voie orthograde.

3. Complications

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4. Mises en garde et Précautions

- Utiliser en rotation continue à la vitesse recommandée (ST). Dans les cas d'anatomie complexe, le couple d'utilisation peut être différent de la valeur recommandée par le fabricant.
- Instruments fournis non stérile : stérilisation d'un instrument non stérile recommandée (EN ISO 17664).
- Ne pas utiliser pour un traitement endodontique rétrograde.
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- Ne pas utiliser l'instrument dont la date sur le support des conditions de stockage.
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- Vérifier l'état de l'instrument avant utilisation entre chaque canal. Si l'instrument est endommagé ou présente d'usure, le jeter et utiliser un neuf.
- Informer le fabricant et l'autorité réglementaire du pays de tout incident grave lié à l'instrument.

Symbole emballage	STERILE EO	Stérilisé à l'oxyde d'éthylène. Ne pas réutiliser.	

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2Shape mini dans les conditions normales d'utilisation.

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Aptitude à l'utilisation :

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Instruments rotatifs type 2 de la norme EN ISO 3630-1 : 2019 : Couple recommandé maximum (non obligatoire) : voir tableau « Recommended Torque ».

TS2 mini et F35 mini ont un diamètre de fil plus petit que le TS2 mini et F40 mini, ce qui correspond à la plage de correspondance aux limes ISO.

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Dans les cas d'anatomie canalaires complexes, un risque opératoire (fracture instrumentale, marche, zip, perforation, fausse route) pourrait se produire et induire un risque de processus infectieux.

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- Instruments fournis non stérile : stérilisation d'un instrument non stérile recommandée (EN ISO 17664).
- Ne pas utiliser pour un traitement endodontique rétrograde.
- Instruments fournis non stérile ; Vérifier l'intégrité de l'emballage avant utilisation. En cas de détérioration, ne pas utiliser l'instrument.
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- En cas de doute concernant l'identification du produit, ne pas l'utiliser.
- Vérifier l'état de l'instrument avant utilisation entre chaque canal. Si l'instrument est endommagé ou présente d'usure, le jeter et utiliser un neuf.
- Informer le fabricant et l'autorité réglementaire du pays de tout incident grave lié à l'instrument.

Symbole emballage	STERILE EO	Stérilisé à l'oxyde d'éthylène. Ne pas réutiliser.	

5. Revendications cliniques

2Shape mini dans les conditions normales d'utilisation.

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- Capacité de mise en forme : remontée des débris et efficacité de coupe
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Aptitude à l'utilisation :

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Remarque : Les limes K et One G sont des limes manuelles pour le glissement de progression. La One G présente un instrument effilant.

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Instruments rotatifs type 2 de la norme EN ISO 3630-1 : 2019 : Couple recommandé maximum (non obligatoire) : voir tableau « Recommended Torque ».

TS2 mini et F35 mini ont un diamètre de fil plus petit que le TS2 mini et F40 mini, ce qui correspond à la plage de correspondance aux limes ISO.

Matériau de la partie active : Nickel-Titane.

Utilisation en connexion avec un contre-angle endodontique conforme à la norme EN ISO 1797 : 2017 (Type 1).

Nombre d'utilisation : 3 canaux maximum recommandés. Classe médicale selon la directive 93/42/CEE et le MDR2017/745 :

Continuous rotation

Date de mise à jour du mode d'emploi : 2017

Instructions for use EN

1. Indication

One Flare: Root canal shaping and root canal preparation in endodontic treatment.

2Shape mini: shaping and root canal preparation in endodontic treatment.

One G, K-files: glide path of root canals during non-surgical endodontic treatment.

One G is for a dental professional only.

2. Contraindications

Apart from children under 2 years of age (ethylene oxide used in the sterilization process), there is no contraindication to the use of the device that is medically treating a tooth by orthograde route.

3. Complications

In case of incomplete anatomy, per-operative risks (instrumental breakage, ledge, stripping, zipping, false path, perforation...) could occur and reduce a risk of infectious processes.

4. Warning and precautions

- Use in continuous rotation at the recommended speed. In cases of complex anatomy, the movement range can be different from the value recommended by the manufacturer.
- Instruments supplied non-sterile; sterilization recommended (EN ISO 17664).
- Do not use in retrograde treatment.
- Instruments supplied non-sterile; Checking the integrity of the packaging before use. If damaged, do not use the instrument.
- If applicable, respect the expiry date.
- Do not use the instrument which is only on the labelling until the last use.
- Year of manufacture: see labelling.
- Store in a dry, clean and shaded place of storage conditions.
- Single use instrument. Do not reuse or resterilize. Otherwise the risk is a decrease of performances and security characteristics (fracture of the instrument in the tooth).
- In case of doubt concerning the product identification, do not use it.
- Check the instrument state before the use between each canal. If the instrument is damaged or shows signs of wear, discard it and use a new one.
- Inform the manufacturer and the country regulatory authority of any serious incident related to the instrument.

Packaging symbol	STERILE EO	Sterile using Ethylene Oxide. Do not re-use.	

5. Clinical claims

2Shape mini in normal conditions.

6. Precautions

- Shaping ability: adapted debris removal and cutting efficiency
- Respect of canal shape
- Geometry adapted to irrigation
- Safety: controlled resistance to torsional fracture in its original position

Usability:

- Improved flexibility through heat treatment

Safety:

- Controlled risk of breakage
- Controlled resistance to cyclic fatigue

Note: K-Files and One G are glide path files used before rotary instruments. One G has a flaring instrument occurring.

7. Characteristics

K-files:

- Diameter 10 (purple handle),
- Taper 02 (red tip)
- Material of operative part: Stainless steel
- Lengths: 21 - 25 - 29 mm

Type 2 rotating instruments under EN ISO 3630-1: 2019 Couple:

- Material of operative part: Nickel-Titanium
- Recommended Torque (not required): see table "Recommended Torque".

TS2 mini and F35 mini have a smaller wire diameter than TS1 mini and F40 mini, which results in the range to the corresponding ISO tools.

Material of operative part: Nitinol.

Use in connection with an endodontic contra-angle according to EN ISO 1797: 2017 (Type 1).

Number of uses: maximum of 3 canals recommended. Medical device class according to Directive 93/42 and MDR 2017/745: Yes.

8. Protocol

CT-Protocol.

Operating procedure :

Progressive movement in three waves (1 up and down movement) with a light pressure (1 circumferential filing movement). Insert the rotating instrument into the root canal until a resistance can be felt. Perform a circumferential brushing movement against the canal wall. Do not force the instrument into the primary curvature. Remove the instrument from the canal, clean the grooves and irrigate the root canal. Then continue the preparation sequence with the next file. On average, 3 to 5 passages are required before reaching the apex.

9. Reprocessing instructions

- For all metal devices, it is recommended to use ultrasonic disinfecting and cleaning agents.
- For your own safety, please wear personal protective equipment (gloves, protective clothing, ...).
- Do not use cleaning or disinfecting agents containing phenol, aldehyde and alkaline composition.
- Always respect the instructions for use provided by the manufacturer of the products.

- Due to the product design and the materials used, no definite limit for the maximum number of performable processing cycles can be specified. Instruments that show medical device damage should be determined by their function and careful handling. Multiple use of single-use devices may result in damage to the device and/or cross-contamination.
- The user must ensure that the processing method used is suitable. This is usually done by using established procedures and observing the applicable requirements.
- The state of the art and national laws require that validated procedures be followed.

- Gloves, shoes, clothes are recommended by the manufacturer of cleaner and detergent
- Ultrasonic cleaning bath
- Disinfectant (example for Bacillol® 30 Tissues)
- Detergent (example for Bacillol® 30 Tissues)
- Container
- Cleaning tubs or washer-disinfector
- Drying cabinet or compressed air

Remark: All material used should be cleaned and replaced regularly. Observe the operating instructions of the process (initial treatment, cleaning or rinsing).

Initial treatment

- Place the instruments in a container or a wipe with tap water at 20-40 °C and 1,0 % neodisher® Septo Active for 5 to 10 min.
- Rinse the products with tap water at 20-40 °C for 1 min.
- Observe the instructions of the manufacturer. Make sure the device sizes mixed by packing it in a wet wipe. Do not exceed the recommended time.

Remark:

- *Do not use flushing agents or hot water (> 40 °C), as this causes fixation of residues and can lead to blockages in the lumen.*
- *Follow instructions of detergent concentrations and immersion times given by the manufacturer. Incorrect concentration may cause corrosion or other damages to devices.*

Cleaning

Insert the products in the ultrasound apparatus basket.

- Run ultrasound apparatus for 10-30min with tap water at 20-40 °C and 0,5% neodisher® MediClean forte.

Remark: Follow instructions, observe water quality, concentrations and cleaning time stated by the manufacturer of the cleaning solution.

Material of operative part: Nitinol.

Rinsing

- Rinse the products with tap water at 20-40 °C for 1 min.

Remark: *It is recommended to use demineralized water.*

Drying

- Dry the products with compressed air until products are visibly dried.

Sterilization

Sterilize the products in a steam autoclave

- Apparatus class B
- Temperature minimum: 132 °C
- Absolute pressure: 2,2 bar
- Vacuum retention: 20 min
- Correct the physics chemical indicators and type control.

Remarks:

- *The settings temperature at 134 °C and duration of 18 min are recommended for prion inactivation according to French regulations.*
- *Observe the validity of the sterile barrier system, autoclave cycle and load. Observe the maximum load is not exceeded.*
- *Observe the instructions of the sterilizer according to the recommendation given by the sterilizer manufacturer.*
- *Observe the instructions of removal steam strict. Cause corrosion or other defects on devices.*
- *Sterilization is carried out EN 285 full cycle conditions with unsaturated steam.*

Storage

Store the products in a dry, clean and dust-free storage room at room temperature in the original paper-plastic pouch for steam sterilization manufacturer.

Remark: Check the packaging and the medical devices before using them (packaging integrity, no damage, no corrosion, no dirt, no moisture).

10. Storage and transport conditions

Store sterile instruments in their original packaging, protected from sunlight and heat, in a clean and dry place.

There are no special storage and transport conditions for unsterile products.

11. Disposal

Used instruments must be placed in a secure container, taken to a collection point and disposed of in accordance with disposable biohazard as per good dexterity practices.

12. Symbols

NITI	NiTi - raw material		Root canal preparation
SS	Stainless steel handle		Assortment
CLASSICS	Handle		Do not use if packaging is damaged
	Medical device		Quantity

Instructions for use EN

1. Indication

One Flare: Root canal shaping and root canal preparation in endodontic treatment.

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One G, K-files: glide path of root canals during non-surgical endodontic treatment.

One G is for a dental professional only.

2. Contraindications

Apart from children under 2 years of age (ethylene oxide used in the sterilization process), there is no contraindication to the use of the device that is medically treating a tooth by orthograde route.

3. Complications

In case of incomplete anatomy, per-operative risks (instrumental breakage, ledge, stripping, zipping, false path, perforation...) could occur and reduce a risk of infectious processes.

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- Use in continuous rotation at the recommended speed. In cases of complex anatomy, the movement range can be different from the value recommended by the manufacturer.
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- If applicable, respect the expiry date.
- Do not use the instrument which is only on the labelling until the last use.
- Year of manufacture: see labelling.
- Store in a dry, clean and shaded place of storage conditions.
- Single use instrument. Do not reuse or resterilize. Otherwise the risk is a decrease of performances and security characteristics (fracture of the instrument in the tooth).
- In case of doubt concerning the product identification, do not use it.
- Check the instrument state before the use between each canal. If the instrument is damaged or shows signs of wear, discard it and use a new one.
- Inform the manufacturer and the country regulatory authority of any serious incident related to the instrument.

Packaging symbol	STERILE EO	Sterile using Ethylene Oxide. Do not re-use.	

5. Clinical claims

2Shape mini in normal conditions.

6. Precautions

- Shaping ability: adapted debris removal and cutting efficiency
- Respect of canal shape
- Geometry adapted to irrigation
- Safety: controlled resistance to torsional fracture in its original position

Usability:

- Improved flexibility through heat treatment

Safety:

- Controlled risk of breakage
- Controlled resistance to cyclic fatigue

Note: K-Files and One G are glide path files used before rotary instruments. One G has a flaring instrument occurring.

7. Characteristics

K-files:

- Diameter 10 (purple handle),
- Taper 02 (red tip)
- Material of operative part: Stainless steel
- Lengths: 21 - 25 - 29 mm

Type 2 rotating instruments under EN ISO 3630-1: 2019 Couple:

- Material of operative part: Nickel-Titanium
- Recommended Torque (not required): see table "Recommended Torque".

TS2 mini and F35 mini have a smaller wire diameter than TS1 mini and F40 mini, which results in the range to the corresponding ISO tools.

Material of operative part: Nitinol.

Use in connection with an endodontic contra-angle according to EN ISO 1797: 2017 (Type 1).

Number of uses: maximum of 3 canals recommended. Medical device class according to Directive 93/42 and MDR 2017/745: Yes.

8. Protocol

CT-Protocol.

Operating procedure :

Progressive movement in three waves (1 up and down movement) with a light pressure (1 circumferential filing movement). Insert the rotating instrument into the root canal until a resistance can be felt. Perform a circumferential brushing movement against the canal wall. Do not force the instrument into the primary curvature. Remove the instrument from the canal, clean the grooves and irrigate the root canal. Then continue the preparation sequence with the next file. On average, 3 to 5 passages are required before reaching the apex.

9. Reprocessing instructions

- For all metal devices, it is recommended to use ultrasonic disinfecting and cleaning agents.
- For your own safety, please wear personal protective equipment (gloves, protective clothing, ...).
- Do not use cleaning or disinfecting agents containing phenol, aldehyde and alkaline composition.
- Always respect the instructions for use provided by the manufacturer of the products.

- Due to the product design and the materials used, no definite limit for the maximum number of performable processing cycles can be specified. Instruments that show medical device damage should be determined by their function and careful handling. Multiple use of single-use devices may result in damage to the device and/or cross-contamination.
- The user must ensure that the processing method used is suitable. This is usually done by using established procedures and observing the applicable requirements.
- The state of the art and national laws require that validated procedures be followed.

- Gloves, shoes, clothes are recommended by the manufacturer of cleaner and detergent
- Ultrasonic cleaning bath
- Disinfectant (example for Bacillol® 30 Tissues)
- Detergent (example for Bacillol® 30 Tissues)
- Container
- Cleaning tubs or washer-disinfector
- Drying cabinet or compressed air

Remark: All material used should be cleaned and replaced regularly. Observe the operating instructions of the process (initial treatment, cleaning or rinsing).

Initial treatment

- Place the instruments in a container or a wipe with tap water at 20-40 °C and 1,0 % neodisher® Septo Active for 5 to 10 min.
- Rinse the products with tap water at 20-40 °C for 1 min.
- Observe the instructions of the manufacturer. Make sure the device sizes mixed by packing it in a wet wipe. Do not exceed the recommended time.

Remark:

- *Do not use flushing agents or hot water (> 40 °C), as this causes fixation of residues and can lead to blockages in the lumen.*
- *Follow instructions of detergent concentrations and immersion times given by the manufacturer. Incorrect concentration may cause corrosion or other damages to devices.*

Cleaning

Insert the products in the ultrasound apparatus basket.

- Run ultrasound apparatus for 10-30min with tap water at 20-40 °C and 0,5% neodisher® MediClean forte.

Remark: Follow instructions, observe water quality, concentrations and cleaning time stated by the manufacturer of the cleaning solution.

Material of operative part: Nitinol.

Rinsing

- Rinse the products with tap water at 20-40 °C for 1 min.

Remark: *It is recommended to use demineralized water.*

Drying

- Dry the products with compressed air until products are visibly dried.

Sterilization

Sterilize the products in a steam autoclave

- Apparatus class B
- Temperature minimum: 132 °C
- Absolute pressure: 2,2 bar
- Vacuum retention: 20 min
- Correct the physics chemical indicators and type control.

Remarks:

- *The settings temperature at 134 °C and duration of 18 min are recommended for prion inactivation according to French regulations.*
- *Observe the validity of the sterile barrier system, autoclave cycle and load. Observe the maximum load is not exceeded.*
- *Observe the instructions of the sterilizer according to the recommendation given by the sterilizer manufacturer.*
- *Observe the instructions of removal steam strict. Cause corrosion or other defects on devices.*
- *Sterilization is carried out EN 285 full cycle conditions with unsaturated steam.*

Storage

Store the products in a dry, clean and dust-free storage room at room temperature in the original paper-plastic pouch for steam sterilization manufacturer.

Remark: Check the packaging and the medical devices before using them (packaging integrity, no damage, no corrosion, no dirt, no moisture).

10. Storage and transport conditions

Store sterile instruments in their original packaging, protected from sunlight and heat, in a clean and dry place.

There are no special storage and transport conditions for unsterile products.

11. Disposal

Used instruments must be placed in a secure container, taken to a collection point and disposed of in accordance with disposable biohazard as per good dexterity practices.

12. Symbols

NITI	NiTi - raw material		Root canal preparation
SS	Stainless steel handle		Assortment
CLASSICS	Handle		Do not use if packaging is damaged
	Medical device		Quantity

Instructions for use EN

1. Indication

One Flare: Root canal shaping and root canal preparation in endodontic treatment.

2Shape mini: shaping and root canal preparation in endodontic treatment.

One G, K-files: glide path of root canals during non-surgical endodontic treatment.

One G is for a dental professional only.

2. Contraindications

Apart from children under 2 years of age (ethylene oxide used in the sterilization process), there is no contraindication to the use of the device that is medically treating a tooth by orthograde route.

3. Complications

In case of incomplete anatomy, per-operative risks (instrumental breakage, ledge, stripping, zipping, false path, perforation...) could occur and reduce a risk of infectious processes.

4. Warning and precautions

- Use in continuous rotation at the recommended speed. In cases of complex anatomy, the movement range can be different from the value recommended by the manufacturer.
- Instruments supplied non-sterile; sterilization recommended (EN ISO 17664).
- Do not use in retrograde treatment.
- Instruments supplied non-sterile; Checking the integrity of the packaging before use. If damaged, do not use the instrument.
- If applicable, respect the expiry date.
- Do not use the instrument which is only on the labelling until the last use.
- Year of manufacture: see labelling.
- Store in a dry, clean and shaded place of storage conditions.
- Single use instrument. Do not reuse or resterilize. Otherwise the risk is a decrease of performances and security characteristics (fracture of the instrument in the tooth).
- In case of doubt concerning the product identification, do not use it.
- Check the instrument state before the use between each canal. If the instrument is damaged or shows signs of wear, discard it and use a new one.
- Inform the manufacturer and the country regulatory authority of any serious incident related to the instrument.

Packaging symbol	STERILE EO	Sterile using Ethylene Oxide. Do not re-use.	

5. Clinical claims

2Shape mini in normal conditions.

6. Precautions

- Shaping ability: adapted debris removal and cutting efficiency
- Respect of canal shape
- Geometry adapted to irrigation
- Safety: controlled resistance to torsional fracture in its original position

Usability:

- Improved flexibility through heat treatment

Safety:

- Controlled risk of breakage
- Controlled resistance to cyclic fatigue

Note: K-Files and One G are glide path files used before rotary instruments. One G has a flaring instrument occurring.

7. Characteristics

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- Diameter 10 (purple handle),
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- The user must ensure that the processing method used is suitable. This is usually done by using established procedures and observing the applicable requirements.
- The state of the art and national laws require that validated procedures be followed.

- Gloves, shoes, clothes are recommended by the manufacturer of cleaner and detergent

2Shape mini / 2Shape mini procedure pack / 2Shape mini assorted NiTi Root Canal Instruments

Nødvendig materiell	
	• Hansker, munnbind, bluse som anbefalt av produsenten av rengjøringsmiddelet • Rennende eller avionisert vann • Desinfeksjonsmiddel (neodisher® Septo Active) • Rengjøringsmiddel (neodisher® MediZym) • Små, myke børster • Beholder • Ultralydbeholder eller rengjørings- og desinfeksjonsautomat • Steriliseringsapparat klasse B *Bemerkning: Alt materiell skal rengjøres og skiftes ut med jevne mellomrom. Identifiser materiell som brukes i hvert trinn av prosessen (første behandling, rengjøring eller skylling).*

	1	**Første behandling** Plasser brukte produkter i en beholder eller tørk dem rene med vann fra springen ved 20–40 °C og 1,0 % neodisher® Septo Active i 5 til 15 min. Skyll produktene med kranvann ved 20–40 °C i 1 min. Hvis det er ventetid frem til neste trinn, må det sørges for at utstyret holdes fuktig ved å pakke det inn i en våtserviett. Ikke la ventetiden overskride 1 time. *Bemerkninger:* • *Bruk ikke festemidler eller varmt vann (>40 °C), da dette fører til at rester fester seg og kan svekke rengjøringen.* • *Følg instruksjonene og overhold produsentens angivelser om konsentrasjon og bløtleggingstider (for sterk konsentrasjon kan føre til korrosjon eller andre defekter på utstyr).*
	2	**Forberedelse før rengjøring** Hvis utstyret har synlige urenheter, anbefales det å utføre manuell forrengjøring ved å børste det under kranvann ved 20–40 °C i minst 1 min med en myk børste, helt til alle urenheter er borte. *Bemerkning: Følg instruksjonene og overhold produsentens angivelser av konsentrasjon og bløtleggingstider (for sterk konsentrasjon kan føre til korrosjon eller andre defekter på utstyr).*
	3	**Visuell kontroll** Kontroller de brukte produktene og kasser skadde produkter (brutte, forvridde eller unormalt bøyde).
manuell	4	**Rengjøring** Legg produktene i beholderen for rengjøring med ultralyd. Kjør ultralydapparatet i 10–30 min med kranvann og 0,5–2,0 % neodisher® MediZym. *Bemerkninger: Følg instruksjonene, overhold vannkvalitet, konsentrasjoner og rengjøringstid som produsenten av rengjøringsløsningen har spesifisert.*
manuell	5	**Skylling** Skyll produktene med kranvann ved 20–40 °C i 1 min. *Bemerkning: Det anbefales å bruke avionisert vann.*
manuell	6	**Tørking** Tørk produktene med trykkluft til produktene er synlig tørre.
automatisk	4 5 6	**Rengjøring/skylling/tørking** Legg instrumentene på brettet på glidetrallen til rengjørings- og desinfeksjonsautomaten. Utfør en rengjøringssyklus med 0,2–1,0 % neodisher® MediZym Utfør tørking. *Bemerkninger:* • *Det kreves ikke desinfeksjon (termisk eller kjemisk-termisk), ettersom produktene steriliseres etter rengjøring.* • *Følg instruksjonene og konsentrasjonene som produsenten av rengjøringsløsningen har angitt.* • *Følg instruksjonene for rengjørings- og desinfeksjonsautomaten, og kontroller at kriteriene for vellykket rengjøring er oppfylt etter hver syklus iht. produsentens opplysninger.* • *Siste skylling skal utføres med avionisert vann. Overhold i de øvrige trinnene den vannkvaliteten som produsenten har definert.* • *Bruk kun godkjente rengjørings- og desinfeksjonsautomater som samsvarer med EN ISO 15883, og som vedlikeholdes og valideres med jevne mellomrom.*
	7	**Visuell kontroll** Kontroller de brukte produktene. Gjenta punkt 4-5-6 hvis produktet er synlig skittent, og kasser alle skadde produkter.
	8	**Emballasje** Plasser instrumentene i en papir/plast-pose for dampsterilisering i samsvar med standardene ISO 11607 og EN 868. *Bemerkninger:* • *Det skal plasseres silikonslanger rundt skarpt utstyr som ikke er lagt i en boks, slik at en hindrer at det stikkes hull på emballasjen.* • *Forsegl posene som anbefalt av poseprodusenten. Dersom det brukes et varmeforseglingsapparat, må prosessen valideres og varmeforseglingsapparatet må være kalibrert og kvalifisert.*
	9	**Sterilisering** Steriliser produktene med damp • Apparat: klasse B • Minimum temperatur: 132 °C • Minimum tid: 3 min • Absolutt trykk: 2,2 bar • Minimum tørketid: 20 min Kontroller de fysisk-kjemiske indikatorene og syklusparameterne. *Bemerkninger:* • *Innstillingene temperatur 134 °C og varighet 18 min anbefales for inaktivering av prioner iht. franske forskrifter.* • *Når flere instrumenter steriliseres i én autoklavsyklus, må det påses at maksimal påfylling av sterilisatoren ikke overskrides.* • *Legg posene i dampsterilisatoren iht. anbefalingene fra sterilisatorprodusenten.* • *Bruk kun dampsterilisator med prevakuum fjerning av luft som samsvarer med kravene i NS-EN 13060 (klasse B, liten sterilisator) og NS-EN 285 (sterilisator i full størrelse), med mettet damp.*
	10	**Oppbevaring** Oppbevar produktene i papir-plast-pose på et tørt, rent og støvfritt sted ved den temperatur som produsenten av dampsterilisatoren har spesifisert. *Bemerkning: Kontroller emballasjen og det medisinske utstyret før bruk (uskadd emballasje, ingen fuktighet og holdbarhetsdato). Ved skade skal det utføres en komplett ny syklus.*

9. **Krav til oppbevaring og transport**
Oppbevar instrumentene i originalforpakningen på et rent og tørt sted; ikke utsett dem for sollys og varme.

Det finnes ikke spesielle krav til oppbevaring og transport av ikke-sterilt utstyr.

10. **Kassering**
Etter bruk må instrumentene legges i en sikker beholder for oppsamling av skarpe eller spisse instrumenter (som kanyler eller skalpeller) i samsvar med god praksis innen tannmedisin.

11. **Symboler**

NiTi	NiTi råmateriale		Rotkanal preparering
SSt	Rustfritt stålmateriale		Sortiment
CLASSICS	"CLASSICS"-håndtak		Skal ikke brukes hvis emballasjen er skadet
MD	Medisinsk utstyr		Kvantitet
	Kontinuerlig rotasjon		

År for CE-merking: 2017

Gebruiksaanwijzing NL

1. **Indicatie**
One Flare: verwijding tijdens niet-chirurgische endodontische behandelingen.

2Shape mini: vormgeving van het wortelkanaal tijdens niet-chirurgische endodontische behandelingen.

One G, K Files: aanbrengen van een glijpad in het wortelkanaal tijdens niet-chirurgische endodontische behandelingen.

Alleen bedoeld voor gebruik door professionele tandheelkundigen.

2. **Contra-indicaties**
Afgezien van het gebruik bij kinderen onder de 2 jaar (in verband met de toepassing van ethyleenoxide bij het sterilisatieproces), zijn er geen verdere contra-indicaties voor het gebruik van 2Shape mini bij een orthograde endodontische behandeling.

3. **Complicaties**
Gevallen met een complexe anatomie kunnen gepaard gaan met peri-operatieve risico's (instrumentbreuk, richelvorming, stripeffect, apicale zip, via falsa, perforatie…). Hierdoor kunnen zich infecties voordoen.

4. **Waarschuwing en voorzorgsmaatregelen**
• De beslissing om een endodontisch instrument te gebruiken moet altijd worden genomen op basis van een vakkundige beoordeling van de klinische casus, vooral bij een kanaalanatomie die als te complex wordt beschouwd.
• Patiënten die risico lopen op een infectieuze endocarditis.
• Bevat nikkel en titanium en mag niet worden gebruikt bij patiënten met een bekende overgevoeligheid voor deze metalen.
• Pas goede tandheelkundige werkmethodes toe, in het bijzonder het gebruik van een cofferdam en het dragen van handschoenen.
• Gebruik het instrument continu roterend, op de aanbevolen snelheid.

[…]

weerstand te voelen is. Pas een borstelende beweging langs de omtrek toe als er weerstand te voelen is, om beperkingen aan het begin van het kanaal te elimineren. Haal de vijl uit het wortelkanaal, reinig de groeven en irrigeer het wortelkanaal. Ga dan door met de progressieve beweging omlaag. Gemiddeld gesproken zijn 2 of 3 cycli nodig voor de apex wordt bereikt.

8. **Gebruiksaanwijzing voor reiniging, desinfectie en sterilisatie**

• Voor alle instrumenten van metaal wordt het gebruik van niet-corrosieve reinigings- en …

[…]

連續旋轉

CE 標誌年度：2017

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