

## Derustit 4020/4120 T - Pickling Paste Standard/Turbo

### PRODUCT DESCRIPTION AND POSSIBLE APPLICATIONS

|                          |                                                                                                        |
|--------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Description:</b>      | pasty mixture of hydrogen fluoride (hydrofluoric acid), hydrogen nitrate (nitric acid) and their salts |
| <b>Intended use:</b>     | pickling of stainless steel welding seams                                                              |
| <b>Suitable for:</b>     | welding seams and other heat-treated zones on stainless steel                                          |
| <b>Handling methods:</b> | pickling brush (acid-resistant)                                                                        |
| <b>Advantages:</b>       | time saving in case of Derustit 4120 T<br>(pickling times of less than 10 minutes possible)            |
| <b>Packing sizes:</b>    | plastic tub (2 kg - 4 tubs in one cardboard box)                                                       |

### PRODUCT TYPES

|                       |                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Derustit 4020</b>  | pickling paste "Standard"<br>for ambient temperatures of between approx. 22 and 25 °C                        |
| <b>Derustit 4120T</b> | pickling paste "Turbo"<br>for descaling pickling effects, short pickling times and highly brilliant surfaces |

Special products can be developed according to customer's requirements.

### INSTRUCTIONS FOR USE

|                           |                                                                                                                                                                                                                                                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General notes:</b>     | Please respect safety data sheet and instructions for use. Reaction times and results depend on different factors. Practical tests with sample parts should be carried out to define the optimum parameters.                                                                                                                  |
| <b>Preparation:</b>       | Remove oil, grease, welding spray, coatings and adhesives.<br>Shake well before application or stir thoroughly with a plastic stick!                                                                                                                                                                                          |
| <b>Application:</b>       | Apply evenly in a coating of approx. 2 mm.                                                                                                                                                                                                                                                                                    |
| <b>Reaction time:</b>     | 30 to 120 minutes at an optimum ambient temperature between 22 to 25 °C when using Derustit 4020. When using Derustit 4120T, less than 10 minutes possible. Please consider loss of brilliance possible at highly polished surfaces. In case of a temperature difference of +/-10 °C, reaction time may be halved or doubled. |
| <b>Further treatment:</b> | Thoroughly rinse treated parts with water until rinsing water is neutral and surfaces are acid-free.                                                                                                                                                                                                                          |
| <b>Please note:</b>       | Use water with a hardness of < 10° dH in order to minimise water stains and lime residues!                                                                                                                                                                                                                                    |
| <b>Additional notes:</b>  | Do not use at high temperatures or under direct sunlight.                                                                                                                                                                                                                                                                     |

## Derustit 4020/4120 T - Pickling Paste Standard/Turbo

### REMARKS ON DANGERS AND SAFETY PRECAUTIONS

|                              |                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General notes:</b>        | The user is responsible for the compliance with legal regulations.<br>In case of improper use, Derustit disclaims liability for possible damages.                                                                                                                                                                                                 |
| <b>Classification:</b>       | UN 2922 Corrosive liquid, toxic, n.o.s. (hydrofluoric acid and nitric acid), 8<br>(6.1) II, T<br><b>Danger</b><br><b>Skull and Crossbones (GHS06) Corrosive (GHS05)</b>                                                                                                                                                                           |
| <b>Remarks on storage:</b>   | Store product in tightly closed original container and inaccessible for unauthorized persons. Make sure that storing area is furnished with good aeration and a floor coating which is adapted to the components.<br>Store in accordance with national and regional regulations! Protect from heat and sunlight. Storing temperature: 0 to 30 °C. |
| <b>Shelf life:</b>           | 12 months.                                                                                                                                                                                                                                                                                                                                        |
| <b>Protective equipment:</b> | Wear suitable acid-resistant protective equipment and breathing protection as per safety data sheet.                                                                                                                                                                                                                                              |
| <b>Exhaust air:</b>          | Extract exhaust air via air washer with HF neutralization and NOx decontamination.                                                                                                                                                                                                                                                                |
| <b>Waste water/disposal:</b> | Untreated product and rinsing water must not enter sewerage system.                                                                                                                                                                                                                                                                               |

# Material Safety Data Sheet

according to Regulation (EC) 1907/2006



**Product name :** Beizpaste 4120  
**Revision :** 21.06.2011  
**Print date :** 09.09.2011

**Version :** 1.0.0

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Beizpaste 4120 (CP5030)

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

There are no data available on the product itself.

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier :** Deutsche Derustit GmbH  
**Street/P.O.Box :** Emil-von-Behring-Str. 4  
**Country code/Postal code/Town/City :** 63128 Dietzenbach  
**Telephone :** +4960744903-0  
**Telefax :** +4960744903-33  
**Contact :** dr.hess@derustit.de

### 1.4 Emergency telephone number

+491705876215 während der normalen Bürozeiten  
Hr. Dr. Hess

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### Directive 67/548/EEC or 1999/45/EC

Very toxic by inhalation, in contact with skin and if swallowed. · Causes severe burns.

T+ ; R 26/27/28 · C ; R 35 · Xi ; R 37

#### Regulation (EC) No 1272/2008 (GHS)

Fatal if swallowed. · Causes severe skin burns and eye damage.

Acute Tox. 1 ; H310 · Acute Tox. 1 ; H330 · Acute Tox. 2 ; H300 · Skin Corr. 1A ; H314 · STOT SE 3 ; H335

### 2.2 Label elements

#### Directive 67/548/EEC or 1999/45/EC

##### Danger symbol and danger designation



T+ ; Very toxic



C ; Corrosive

##### Hazard-determining components of labelling

HYDROFLUORIC ACID 16 % ; CAS-No. : 7664-39-3

NITRIC ACID 7 % ; CAS-No. : 7697-37-2

##### R-phrases

26/27/28

Very toxic by inhalation, in contact with skin and if swallowed.

35

Causes severe burns.

37

Irritating to respiratory system.

##### S-phrases

56

Dispose of this material and its container to hazardous or special waste collection point.

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- 35 This material and its container must be disposed of in a safe way.  
51 Use only in well-ventilated areas.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ... (to be specified by the manufacturer).  
63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

## Regulation (EC) No 1272/2008 (GHS)

### Hazard pictograms



Skull and crossbones (GHS06) · Corrosion (GHS05)

### Signal word

Danger

### Hazard-determining components of labelling

HYDROFLUORIC ACID 16 % ; CAS-No. : 7664-39-3

NITRIC ACID 7 % ; CAS-No. : 7697-37-2

### Hazard statements

- H300 Fatal if swallowed.  
H310 Fatal in contact with skin.  
H330 Fatal if inhaled.  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

### Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P262 Do not get in eyes, on skin, or on clothing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P320 Specific treatment is urgent (see ... on this label).  
P403/233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container to ...

## 2.3 Other hazards

None.

## 3. Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous components

HYDROFLUORIC ACID ; EC-No. : 231-634-8; CAS-No. : 7664-39-3

Percentage : 15 - 20 %

Classification 67/548/EEC : T+ ; R26/27/28 C ; R35

Classification 1272/2008 (GHS) : Acute Tox. 2 ; H300 Acute Tox. 1 ; H310 Acute Tox. 2 ; H330 Skin Corr. 1A ; H314

NITRIC ACID ; EC-No. : 231-714-2; CAS-No. : 7697-37-2

Percentage : 5 - 10 %

Classification 67/548/EEC : O ; R8 C ; R35

Classification 1272/2008 (GHS) : Ox. Liq. 3 ; H272 Skin Corr. 1A ; H314

For the wording of the listed risk phrases refer to section 16.

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## 4. First aid measures

### 4.1 Description of first aid measures

#### General

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

#### After inhalation

Take the casualty into the fresh air and keep warm. Keep at rest. Irregular breathing/no breathing: artificial respiration. Unconsciousness: lateral position - call a physician.

#### After skin contact

Immediately remove all contaminated clothing. Wash away with soap and water and rinse. Do NOT use solvents or thinners.

#### After eye contact

Remove contact lenses, keep eyelids open. Flush with plenty of water (10 - 15 min.). Call a physician.

#### After ingestion

Contact a doctor immediately. Keep at rest. Do not induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed

None known.

### 4.3 Indication of any immediate medical attention and special treatment needed

None.

## 5. Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Alcohol resistant foam, CO<sub>2</sub>, powders, water spray.

#### Unsuitable extinguishing media

Waterjet.

### 5.2 Special hazards arising from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

### 5.3 Advice for firefighters

Appropriate breathing apparatus may be required.

### 5.4 Additional information

Cool endangered containers with water in case of fire. Do not allow the quenching water into the sewage system.

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Remove ignition sources. Provide for sufficient ventilation. Do not inhale the vapour. Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

### 6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent; avoid use of solvents.

### 6.4 Reference to other sections

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None.

## 7. Handling and storage

### 7.1 Precautions for safe handling

#### Information for safe handling

Prevent the creation of inflammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the OEL (=Occupational Exposure Limit). Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid contact with skin and eyes. Do not inhale the vapour. Do not eat or drink during work - no smoking. Comply with the health and safety at work laws.

#### Information about protection against explosions and fires

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Requirements to be met by storerooms and containers

Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### Information about separation of incompatible products

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.

#### Further information about storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep away from ignition sources - No smoking.

**Storage class (VCI) :** 6.1B

### 7.3 Specific end use(s)

None.

## 8. Exposure controls/personal protection

### 8.1 Control parameters

HYDROFLUORIC ACID ; CAS-No. : 7664-39-3

**Specification :** TRGS 900 - maximum limit in the atmosphere at the workplace ( D )

**Value :** 1 ppm / 0,83 mg/m<sup>3</sup>

**Category :** 2(I)

**Remarks :** H, Y

**Version date :** 02.07.2009

**Specification :** TRGS 903 - biological maximum limits ( D )

**Parameter :** Fluoride / Urine (U) / before next shift

**Value :** 7 mg/g Kr

**Version date :** 31.03.2004

**Specification :** TRGS 903 - biological maximum limits ( D )

**Parameter :** Fluoride / Urine (U) / End of exposure or end of shift

**Value :** 4 mg/g Kr

**Version date :** 31.03.2004

**Specification :** Limit value (Short term) ( EC )

**Value :** 3 ppm / 2,5 mg/m<sup>3</sup>

**Version date :** 08.06.2000

**Specification :** Limit value (8 hours) ( EC )

**Value :** 1,8 ppm / 1,5 mg/m<sup>3</sup>

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**Product name :** Beizpaste 4120  
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**Print date :** 09.09.2011

**Version :** 1.0.0

Version date : 08.06.2000  
NITRIC ACID ; CAS-No. : 7697-37-2  
Specification : TRGS 900 - maximum limit in the atmosphere at the workplace ( D )  
Value : 1 ppm / 2,6 mg/m<sup>3</sup>  
Version date : 02.07.2009  
Specification : Limit value (Short term) ( EC )  
Value : 1 ppm / 2,6 mg/m<sup>3</sup>  
Version date : 07.02.2006

## 8.2 Exposure controls

### Personal protective equipment

#### General protective and hygiene measures

Wash hands before breaks and after work.

#### Respiratory protection

If workplace limits are exceeded, a gas mask approved for this purpose must be worn.

#### Hand protection

Solvent-resistant protective gloves must be worn. After washing hands replace lost skin fat by fat containing skin creams.

#### Eye protection

Use safety glasses.

#### Body protection

Personal should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact.

### Additional information about engineering measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit) , suitable respiratory protection must be worn.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Relevant safety data

|                                |              |   |                         |
|--------------------------------|--------------|---|-------------------------|
| <b>Boiling point / range :</b> | ( 1013 hPa ) | > | 120 °C                  |
| <b>Flash point :</b>           |              |   | inapplicable            |
| <b>Vapour pressure :</b>       | ( 50 °C )    | < | 1000 hPa                |
| <b>Density :</b>               | ( 20 °C )    |   | 1 - 2 g/cm <sup>3</sup> |

### 9.2 Other information

None.

## 10. Stability and reactivity

### 10.1 Reactivity

There are no data available on the product itself.

### 10.2 Chemical stability

There are no data available on the product itself.

### 10.3 Possibility of hazardous reactions

There are no data available on the product itself.

### 10.4 Conditions to avoid

Stable under recommended storage and handling conditions(See section 7).

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## 10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

## 10.6 Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

## 11. Toxicological information

### 11.1 Information on toxicological effects

There are no data available on the product itself.

### 11.2 Experience on practice

Inhalation/eye contact: in high concentrations irritating to the mucous membranes, narcotic effect and influence on power of reaction and loss of coordination possible. Prolonged inhalation of vapours in high concentrations may lead to headache, giddiness and nausea. In case of contact with the product: danger of resorption through the skin, irritation of skin/mucous membranes. Eye contact: irritation.

### 11.3 Additional toxicological information

The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (1999/45/EC).

## 12. Ecological information

### 12.1 Toxicity

There are no data available on the product itself.

### 12.2 Persistence and degradability

There are no data available on the product itself.

### 12.3 Bioaccumulative potential

There are no data available on the product itself.

### 12.4 Mobility in soil

There are no data available on the product itself.

### 12.5 Results of PBT and vPvB assessment

There are no data available on the product itself.

### 12.6 Other adverse effects

There are no data available on the product itself.

### 12.7 Additional information

Do not empty into waters or drains.

## 13. Disposal considerations

Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner as the medium.

### 13.1 Waste treatment methods

There are no data available on the product itself.

## 14. Transport information

### 14.1 UN number

2922



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## 14.2 UN proper shipping name

### ADR/RID

CORROSIVE LIQUID, TOXIC, N.O.S. ( HYDROFLUORIC ACID · NITRIC ACID )

### IMDG-Code

CORROSIVE LIQUID, TOXIC, N.O.S. ( HYDROFLUORIC ACID · NITRIC ACID )

### ICAO-TI / IATA-DGR

CORROSIVE LIQUID, TOXIC, N.O.S. ( HYDROFLUORIC ACID · NITRIC ACID )

## 14.3 Transport hazard class(es)

### ADR/RID

**Class :** 8  
**Classification-Code :** CT1  
**Kemlercode :** 86  
**Tunnel restriction code :** E  
**Special provisions :** LQ22 · E 2  
**Label :** 8 / 6.1

### IMDG-Code

**Class :** 8  
**EmS number :** F-A / S-B  
**Special provisions :** LQ 1 I · E 2 · +  
**Label :** 8 / 6.1

### ICAO-TI / IATA-DGR

**UN number :** 8 / 6.1  
**Special provisions :** E 2  
**Label :** 8 / 6.1

## 14.4 Packing group

II

## 14.5 Environmental hazards

**ADR/RID :** -

**IMDG-Code :** -

**ICAO-TI / IATA-DGR :** -

## 14.6 Special precautions for user

None.

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulatory information

##### Water pollution classification

Class : 2 according VwVwS

### 15.2 Chemical safety assessment

There are no data available on the product itself.

## 16. Other information

### Further information

The details in this material safety data sheet satisfy national and EC legislation. We have no knowledge or control over the user's working conditions however. The product may not be used for any purpose other than that specified in chapter 1 unless written consent has been obtained. The user is responsible for the observance of all required statutory provisions.

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## R-Phrases of components

|          |                                                                  |
|----------|------------------------------------------------------------------|
| 26/27/28 | Very toxic by inhalation, in contact with skin and if swallowed. |
| 35       | Causes severe burns.                                             |
| 37       | Irritating to respiratory system.                                |
| 8        | Contact with combustible material may cause fire.                |

## GHS Hazard statements of components

|      |                                          |
|------|------------------------------------------|
| H272 | May intensify fire; oxidiser.            |
| H300 | Fatal if swallowed.                      |
| H310 | Fatal in contact with skin.              |
| H314 | Causes severe skin burns and eye damage. |
| H330 | Fatal if inhaled.                        |
| H335 | May cause respiratory irritation.        |

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These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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