



## Security data sheet of 26/02/2015, revision 2

### SECTION 1: substance or blend identification and company identification

#### 1.1. Product identification

Blend identification:

Commercial name: FONDOR

Commercial code: FONDOR

#### 1.2. Correct/pertinent identified usages of the substance or blend and advised against utilizations

**Flux** for precious metal melting.

#### 1.3. Information about the security data sheet supplier

Supplier:

**F.I.M.O. SNC DI REINA M. E LONGHETTI S.G.**

Via L. Biagi, 55

20099 SESTO SAN GIOVANNI – MI – ITALY

tel. + 39 02 2485793 – fax + 39 02 24416852

[www.fornilonghetti.it](http://www.fornilonghetti.it) – e-mail: [info@fornilonghetti.it](mailto:info@fornilonghetti.it)

Person competent and in charge of the security data sheet:

LONGHETTI SERGIO

#### 1.4. Emergency phone number

+ 39 02 2485793

### SECTION 2: Identification of dangers

#### 2.1. Substance or blend classification

Directive standard 67/548/CE, 99/45/CE e following amendments:

Property / Symbols:

Toxic for category 2 reproduction

Xi Irritating

R sentences:

R36 Eyes irritating.

R60 Can reduce fertility.

R61 Can harm children still not born.

Physical-chemical effects dangerous to human health and to the environment:

No other danger

#### 2.2. Label elements



Symbols:

T Toxic

R sentences:

R36 Eyes irritating.

R60 Can reduce fertility.

R61 Can harm children still not born.

S sentences:

S25 Avoid eye contact.

S26 in case of eye contact wash immediately with water abundantly with water and consult a doctor.

S41 In case of fire and/or explosion do not inhale the fumes.

S45 In case of accident or malaise consult immediately a doctor (if possible, show the doctor the label).

S53 Avoid exposition – ensure to have special instruction before usage

Contains:

**sodium tetraborate pentahydrate**

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Special dispositions:

For professional use only.

Special disposition according to attachment XVII of REACH and following updates:

None

2.3. Other dangers

vPvB substances: None – PBT substances: None

Other dangers:

None

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**SECTION 3: Composition/information about ingredients**

3.1. Substances

N.A.

3.2. Blends

Dangerous components according to Directive CEE 67/548 and CLP Regulation and related classification:

**sodium tetraborate pentahydrate** from 75 to 80%

Index Number: 005-011-02-9, CAS: 12179-04-3, EC: 215-540-4

**Repr.** Cat. 2; R60-61

 3.7/1B **Repr.** 1B H360

**sodium carbonate** from 15 to 20%

Index number: 011-005-00-2, CAS: 497-19-8, EC: 207-838-8

Xi; R36

 3.3/2 Eye Irritating. 2 H319

**sodium nitrate** from 5 to 10 %

CAS: 7631-99-4, Number Index: ==, EC: 231-554-3



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**SEZIONE 4: First aid measures**

4.1. Description of first aid measures

In case of contact with skin:

Take off immediately the contaminated clothes

Wash immediately with abundant water, and in case with soap, all the body zones got into contact with the product, even if they are only suspected of contamination.

Wash completely the body (shower or bath).

Take off immediately the contaminated clothing and eliminate them safely.

In case of contact with the skin, wash immediately with abundant water and soap.

In case of contact with eyes:

In case of contact with eyes rinse more times with abundant water with eyes open and consult an ophthalmologist.

Protect the uninjured eye.

In case of ingestion:

Absolutely do not induce vomit. GO IMMEDIATELY TO THE DOCTOR.

In case of inhaling:

Take the injured person to open air, protect him from cold and let him rest to recover.

4.2. Main symptoms and effects, acute and delayed

None

4.3. Indication of the potential necessity to consult immediately a doctor for special treatments

In case of accident or malaise consult immediately a doctor (if possible, show the doctor the usage instruction and/or the label).

Treatment: None

## SECTION 5: Fire prevention measures

- 5.1. Fire extinguishing means  
Suitable extinguishing means:  
Water.  
**Carbon dioxide (CO<sub>2</sub>).**  
Fire extinguishing means not to use for safety reasons:  
None in particular.
  - 5.2. Special dangers due to the substance or blend  
Do not inhale explosion or combustion fumes.  
The combustion produces heavy fumes.
  - 5.3. Recommendations for people in charge to extinguish the fire  
Use adequate respiratory instruments.  
Collect separately the contaminated water used to extinguish the fire. Do not discharge this water into the sewer drainage system.  
If safety acceptable, move from the hazardous area the not damaged containers.
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## SECTION 6: Measure in case of accidental release

- 6.1. Personal precaution, protection devices and procedure in case of emergency  
Wear personal protection devices.  
Move people in a safe area.  
Check the protection measures exposed in points 7 and 8 of this document.
  - 6.2. Environmental precautions  
Prevent the penetration into the soil/subsoil.  
Prevent the outflow into the surface waters or into the sewer drainage system.  
Hold the contaminated cleaning water and remove it.  
In case of gas leakage or penetration in water streams, soil or sewer system, inform the authority in charge.  
Suitable material for collecting: absorbent material, organic, sand
  - 6.3. Methods and materials for containment and recovery  
Wash with abundant water.
  - 6.4. Reference to other sections  
See also paragraph 8 and 13
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## SECTION 7: Handling and warehousing

- 7.1. Precautions for safe handling.  
Avoid the contact with skin and eyes and avoid fumes and fogs inhaling  
Do not use empty containers before accurate cleaning.  
Before transfer operations ensure that incompatible materials are not present in the containers.  
Contaminated clothing must be substituted before accessing refreshment areas (bar, canteen)  
Do not drink or eat during operations.  
Refer to paragraph 8 for recommended protection devices.
  - 7.2. Conditions for safe warehousing, included possible incompatibilities  
Keep away from food, drinks and animal feed.  
Incompatible materials:  
None in particular. See also next paragraph 10.  
Recommendation for the indoor spaces:  
Spaces adequately ventilated.
  - 7.3. Specific final usages  
No specific use in particular.
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## SECTION 8: Exposition/protection individual control

- 8.1. Control parameters  
N.A.  
DNEL exposition limit value

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N.A.  
PNEC exposition limit value  
N.A.  
8.2. Exposition check  
Eye protection:  
Use closed safety visor, do not use ocular lenses  
Skin protection:  
Wear clothes that guarantee a full skin protection, as cotton, ribbon, PVC o Viton  
Hands protection:  
Wear protective gloves that guarantee a full protection as PVC, neoprene or ribbon.  
Respiratory protection:  
Not needed for normal usage.  
Thermic risks:  
None  
Environmental exposure checks:  
None

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**SECTION 9: Physical and chemical properties**

9.1. Information about the physical and chemical properties

|  |           |      |
|--|-----------|------|
| Aspect and colour:                           | grey dust |      |
| Smell:                                       | odourless |      |
| Smell threshold:                             | N.A.      |      |
| pH:  | N.A.      |      |
| Fusion/freezing point:                       | N.A.      |      |
| Initial boiling point and boiling interval:  |           | N.A. |
| Solids/gas flammability:                     | N.A.      |      |
| Flammability or explosion upper/lower limit: |           | N.A. |
| Gas density:                                 | N.A.      |      |
| Flammability point:                          | N.A.      |      |
| Evaporation speed:                           | N.A.      |      |
| Gas pressure:                                | N.A.      |      |
| Relative density:                            | N.A.      |      |
| Hydro solubility:                            | N.A.      |      |
| Solubility in oil:                           | N.A.      |      |
| Distribution coefficient (n-octanol/water):  |           | N.A. |
| Ignition temperature:                        | N.A.      |      |
| Decomposition temperature:                   | N.A.      |      |
| Viscosity:                                   | N.A.      |      |
| Explosive properties:                        | N.A.      |      |
| Combustion property:                         | N.A.      |      |

9.2. Other information

|   |      |      |
|---|------|------|
| Miscibility:                                    | N.A. |      |
| Lipid soluble:                                  | N.A. |      |
| Conductivity:                                   | N.A. |      |
| Characteristic property of groups or substances |      | N.A. |

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**SECTION 10: Stability and reactivity**

10.1. Reactivity  
Stable in normal condition  
10.2. Chemical stability  
Stable in normal condition  
10.3. Dangerous reaction possibility  
None  
10.4. Conditions to avoid  
Stable in normal condition.  
10.5. Conflicting materials  
None in particular.

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- 10.6. Dangerous decomposition products  
None.

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**SECTION 11: Toxicology information**

11.1. Information on toxicological effects

Toxicological information regarding the blend:

N.A.

Toxicological information regarding the main substances included in the blend:

Sodium carbonate - CAS: 497-19-8

LD50 oral rat: > 2000 mg/kg

LC50 2h rat inhaling: 2.3 mg/l

Sodium Nitrate - CAS: 7631-99-4

Skin: erosion and ulceration.

Eyes: irritating.

Ingestion: nausea, headache, dizziness, vomit, collapse, risk of transformation in nitrate (toxic).



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**Tetraborate disodium pentahydrate**

Index number: 005-011-02-9, CAS: 12179-04-3, EC: 215-540-4

**Repr.** Cat. 2; R60-61

 3.7/1B **Repr.** 1B H360

Can reduce the fertility.

Can harm children not already born.

Toxic for the reproduction category 2

If not differently specified, the data requested following from Regulation 453/2010/CE are to be understood as N.A:

- a) acute toxicity;
- b) cutaneous corrosion/irritation;
- c) severe ocular injuries/irritation;
- d) respiratory or cutaneous sensibility increase;
- e) mutagenicity of germinal cells;
- f) cancer-causing;
- g) toxic for reproduction;
- h) specific toxicity for target organs (STOT) — single exposition;
- i) specific toxicity for target organs (STOT) — repeated exposition;
- j) danger in case of inhaling.

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**SECTION 12: Ecologic information**

12.1. Toxicity

Use according to the good working practice, avoiding to disperse the product in the environment.

N.A.

12.2. Persistence and degradability

None

N.A.

12.3. Potential bioaccumulation

N.A.

12.4. Mobility in the soil

N.A.

12.5. Evaluation results PBT e vPvB

vPvB substances: None – PBT substances: None

12.6. Other unfavorable effect

None

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**SECTION 13: Considerations about disposal**

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- 13.1. Method of waste treatment  
Recovery the waste if possible. Deliver it to authorized disposal plant or operating in controlled conditions incinerations. Always operate according to the local and national laws and dispositions.

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**SECTION 14: Carriage information**

- 14.1. ONU number  
14.2. ONU carriage name  
N.A.  
14.3. Dangerous classes related to the transport  
N.A.  
14.4. Packaging group  
N.A.  
14.5. Dangers for the environment  
N.A.  
14.6. Special precautions for the users  
N.A.  
14.7. **not packaged items** transportation according to the Attachment II of MARPOL 73/78 and IBC code  
No

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**SECTION 15: Information about regulations**

- 15.1. Regulations e legislation about health, safety, environment related to the substance or blend  
ITA D.Lgs. 3/2/1997 n. 52 (Classification, packaging and labelling dangerous substances)  
ITA D.Lgs 14/3/2003 n. 65 (Classification, packaging and labelling dangerous preparation)  
ITA D.Lgs. 2/2/2002 n. 25 (Risks deriving from chemical agents during the work)  
ITA D.M. Lavoro 26/02/2004 (Limits of professional exposition)  
ITA D.M. 03/04/2007 (Implementation of directive 2006/8/CE)  
Regulation (CE) n. 1907/2006 (REACH)  
Regulation (CE) n. 1272/2008 (CLP)  
Regulation (CE) n. 790/2009 (ATP 1 CLP)  
Regulation (UE) n. 453/2010 (Attachment I)  
Regulation (UE) n. 286/2011 (ATP 2 CLP)  
Restrictions related to the product or substances contained according to the Attachment XVII of Regulation (CE) 1907/2006 (REACH) and following updates:  
Restriction 3  
Where applicable, refer to the following regulations:  
Circular ministerial 46 e 61 ( **aromatic amines**).  
D.Lgs. 21 September 2005 n. 238 (Seveso Ter Directive)  
Regulation CE n. 648/2004 (cleanser).  
D.L. 3/4/2006 n. 152 Environmental Regulations
- 15.2. Chemical safety evaluation  
No

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**SECTION 16: Other information**

- Text of the sentences used in paragraph 3:  
R20/22 Noxious by inhaling or ingestion  
R36 Eyes irritation  
R60 Can reduce fertility  
R61 Can harm children not already born  
H360 Can harm fertility or the fetus  
H319 Cause severe ocular irritation  
H302 Noxious if ingested  
H332 Noxious if inhaled  
This document has been written by a properly trained competent technician in SDS

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Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

CCNL - Attachment 1

Italian National Health Institute (Istituto Superiore di Sanità) – Chemical Substances National  
Inventory (Inventario Nazionale Sostanze Chimiche)

The included information are based on our knowledge at the above reported date. They are referred only to the specified product and they are not to be considered as a warranty certificate of some particular quality. The user must make sure of the suitability and completeness of these information according to the specified use he has to do of the specified product.

The present document annul and substitute every its former release and/or version .

|             |   |
|-------------|---|
| ADR:        | European agreement concerning the international carriage of dangerous goods by road |
| CAS:        | Chemical Abstract Service (American Chemical Society division).                     |
| CLP:        | Classification, Labeling, Packaging.  |
| DNEL:       | Derived no-effect level.  |
| EINECS:     | European Inventory of Existing Commercial Chemical Substances.                      |
| GefStoffVO: | Hazardous Substances Ordinance, Germany.  |
| GHS:        | Globally Harmonized System of Classification and Labeling of Chemicals.             |
| IATA:       | International Air Transport Association.  |
| IATA-DGR:   | IATA Dangerous Goods Regulations.   |
| ICAO:       | International Civil Aviation Organization.  |
| ICAO-TI:    | ICAO Technical Instructions.  |
| IMDG:       | International Maritime Dangerous Goods Code.  |
| INCI:       | International Nomenclature of Cosmetic Ingredients.                                 |
| KSt:        | Explosion index.  |
| LC50:       | Lethal concentration for the 50% of the population put under test                   |
| LD50:       | Lethal dose for the 50% of the population put under test.                           |
| LTE:        | Long term exposition.   |
| PNEC:       | Foreseen concentration without effect .   |
| RID:        | Regulations concerning the international carriage of dangerous goods by rail.       |
| STE:        | Short term exposition.  |
| STEL:       | Short term exposition limit.  |
| STOT:       | Target organ specific toxicity.   |
| TLV:        | Threshold limit value.  |
| TWATLV:     | Threshold limit value for a weighted mean of 8 hours per day. (standard ACGIH).     |
| WGK:        | German class of danger for the waters.  |
| N.A.:       | N.A.  |
| N.D.:       |   |