

## Safety Data Sheet

### METAL FILL

Safety Data Sheet dated 9/2/2015, version 1

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: METAL FILL

Trade code: 3002

1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:

Filler for metals

1.3. Details of the supplier of the safety data sheet

Supplier:

IMPA Spa - Via Crevada 9/E - 31020 SAN PIETRO DI FELETTO (TV) - ITALY

Competent person responsible for the safety data sheet:

msdsref@impa.it

1.4. Emergency telephone number

IMPA Spa - Phone ++39-0438-4548 - Fax ++39-0438-454915 ( 8.30 - 17.30 )


#### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/EEC, 1999/45/EC and following amendments thereof:

Properties / Symbols:

 Xn Harmful

 Xi Irritant

R Phrases:


R10 Flammable.


R20 Harmful by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R48 Danger of serious damage to health by prolonged exposure.


EC regulation criteria 1272/2008 (CLP):

 Warning, Flam. Liq. 3, Flammable liquid and vapour.

 Warning, Skin Irrit. 2, Causes skin irritation.

 Warning, Eye Irrit. 2, Causes serious eye irritation.

 Warning, Repr. 2, Suspected of damaging the unborn child.

 Danger, STOT RE 1, Causes damage to organs through prolonged or repeated exposure (hearing organs).

2.2. Label elements

Symbols:



Danger

Hazard statements:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure (hearing organs).

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

## Safety Data Sheet

### METAL FILL

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P314 Get medical advice/attention if you feel unwell.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P405 Store locked up.

#### Special Provisions:

PACK1 The packing must be featured by a safety lock for children.  
PACK2 The packing must have tactile indications of danger for blind people.

#### Contains:

styrene

#### 2.3. Other hazards

These products contain between 0.3 and 3 percent of respirable crystalline silica. Depending on the type of handling and use (e.g. grinding, drying, etc), airborne respirable crystalline silica (quartz - cristobalite) may be generated. Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.  
vPvB Substances: None - PBT Substances: None

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

N.A.

#### 3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

>= 15% - < 20% styrene

REACH No.: 01-2119457861-32, Index number: 601-026-00-0, CAS: 100-42-5, EC: 202-851-5

Repr. Cat. 3,Xn,Xi; R10-20-36/38-48/20-63

- ⚠ 2.6/3 Flam. Liq. 3 H226
- ⚠ 3.7/2 Repr. 2 H361d
- ⚠ 3.9/1 STOT RE 1 H372
- ⚠ 3.3/2 Eye Irrit. 2 H319
- ⚠ 3.2/2 Skin Irrit. 2 H315
- ⚠ 3.1/4/Inhal Acute Tox. 4 H332

>= 1% - < 3% Hydrocarbons, C9, aromatics

REACH No.: 01-2119455851-35, EC: 918-668-5

Xn,Xi,N; R10-37-51/53-65-66-67

- ⚠ 2.6/3 Flam. Liq. 3 H226
- ⚠ 3.10/1 Asp. Tox. 1 H304
- ⚠ 3.8/3 STOT SE 3 H335
- ⚠ 3.8/3 STOT SE 3 H336
- ⚠ 4.1/C2 Aquatic Chronic 2 H411

EUH066

DECLP\*

\*DECLP: Substance classified accordingly to Note P of the Annex I of directive 67/548/EEC. The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0.1% weight/weight of benzene

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### In case of skin contact:

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

##### In case of eyes contact:

## Safety Data Sheet

### METAL FILL

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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#### SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO<sub>2</sub>, powder extinguisher, foam, water spray.

Extinguishing media which must not be used for safety reasons:

Water jet.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

Do not inhale explosion and/or combustion gases (carbon monoxide, carbon dioxide, oxides of nitrogen).

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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#### SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition.

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Suitable material for collection: inert absorbent material (e.g. sand, vermiculite)

After the product has been recovered, rinse the area and materials involved.

6.4. Reference to other sections

See also section 8 and 13

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#### SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

## Safety Data Sheet

### METAL FILL

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

See chapter 10.5

Instructions as regards storage premises:

Keep container tightly closed in a cool, well-ventilated place, away from heat.

#### 7.3. Specific end use(s)

See chapter 1.2

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

styrene - CAS: 100-42-5

ACGIH, 20 ppm, 40 ppm - Notes: A4, BEI - CNS impair, URT irr, peripheral neuropathy  
WEL -- Country: UNITED KINGDOM - LTE: 430 mg/m<sup>3</sup>, 100 ppm - STE: 1080 mg/m<sup>3</sup>,  
250 ppm

Hydrocarbons, C9, aromatics

ACGIH - LTE: 100 mg/m<sup>3</sup>

### DNEL Exposure Limit Values

styrene - CAS: 100-42-5

Worker Professional: 0.289 mg/l - Exposure: Human Inhalation - Frequency: Short Term,  
systemic effects

Worker Professional: 0.085 mg/l - Exposure: Human Inhalation - Frequency: Long Term,  
systemic effects

Worker Professional: 0.306 mg/l - Exposure: Human Inhalation - Frequency: Short Term,  
local effects

Worker Professional: 406 mg/kg - Exposure: Human Dermal - Frequency: Long Term,  
systemic effects

Hydrocarbons, C9, aromatics

Worker Professional: 25 mg/l - Consumer: 11 mg/kg - Exposure: Human Dermal -  
Frequency: Long Term, systemic effects

Worker Professional: 0.150 mg/l - Consumer: 0.032 mg/l - Exposure: Human Inhalation -  
Frequency: Long Term, systemic effects

Consumer: 11 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

### PNEC Exposure Limit Values

styrene - CAS: 100-42-5

Target: Fresh Water - Value: 0.028 mg/l

Target: Marine water - Value: 0.0028 mg/l

Target: Freshwater sediments - Value: 0.614 mg/kg

Target: Marine water sediments - Value: 0.0614 mg/kg

Target: Soil (agricultural) - Value: 0.2 mg/kg

### 8.2. Exposure controls

#### Eye protection:

Use close fitting safety goggles, don't use eye lens.

#### Skin protection:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or  
viton.

#### Hands protection:

Use protective gloves that provides comprehensive protection, e.g. NBR (nitrile rubber), FKM  
(fluoro rubber).

The selection of suitable gloves does not only depend on the material, but also on other quality  
characteristics and varies from manufacturer to another one, and on the manner and times of  
use of the mixture.

#### Respiratory protection:

Combination filtering device (DIN EN 141).

#### Environmental exposure controls:

## Safety Data Sheet

### METAL FILL

See chapter 6.2

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#### SECTION 9: Physical and chemical properties

##### 9.1. Information on basic physical and chemical properties

Appearance and colour:	thick paste aluminium-coloured
Odour:	of styrene
Odour threshold:	nd
pH:	nd
Melting point / freezing point:	nd
Initial boiling point and boiling range:	nd
Solid/gas flammability:	na
Upper/lower flammability or explosive limits:	nd
Vapour density:	nd
Flash point:	40°C ISO 1523:2002-Closed cup equilibrium method
Evaporation rate:	nd
Vapour pressure:	nd
Relative density:	1.48 ± 0.02
Solubility in water:	not soluble
Solubility in oil:	nd
Partition coefficient (n-octanol/water):	nd
Auto-ignition temperature:	nd
Decomposition temperature:	nd
Viscosity:	nd
Explosive properties:	none
Oxidizing properties:	none

##### 9.2. Other information

Miscibility:	nd
Conductivity:	nd

Legend:

na = not applicable - nd = not available

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#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

Stable under normal conditions

##### 10.2. Chemical stability

Stable under normal conditions

##### 10.3. Possibility of hazardous reactions

Contact with Organic Peroxides cause a fast mass thickening with considerable development of heat.

Because of heat or fire the preparation can release carbon oxides and vapours which may be harmful to health.

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

##### 10.4. Conditions to avoid

Avoid to keep near heat sources.

High temperature reduces product shelf-life causing spontaneous thickening.

##### 10.5. Incompatible materials

Avoid contact with oxidizing materials or powerful oxidising agents. The product could catch fire. See chapter 10.3

##### 10.6. Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

See chapter 5.2

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#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

Toxicological information of the main substances found in the mixture:

## Safety Data Sheet

### METAL FILL

styrene - CAS: 100-42-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 5000 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat 11.8 mg/l - Duration: 4h

Hydrocarbons, C9, aromatics

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 3592 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 3160 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 6193 mg/m<sup>3</sup> - Duration: 4h

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

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#### SECTION 12: Ecological information

Adopt sound working practices, so that the product is not released into the environment.

12.1. Toxicity

Ecotoxicological studies of the product are not available.

Hydrocarbons, C9, aromatics

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 3.2 mg/l - Duration h: 48

Endpoint: IC50 - Species: Algae 2.9 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish 9.2 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

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#### SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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#### SECTION 14: Transport information



14.1. UN number

## Safety Data Sheet

### METAL FILL

ADR-UN Number:	3269
IATA-UN Number:	3269
IMDG-UN Number:	3269
14.2. UN proper shipping name	
ADR-Shipping Name:	POLYESTER RESIN KIT
IATA-Shipping Name:	POLYESTER RESIN KIT
IMDG-Shipping Name:	POLYESTER RESIN KIT
14.3. Transport hazard class(es)	
ADR-Class:	3
ADR - Hazard identification number:	-
IATA-Class:	3
IATA-Label:	3
IMDG-Class:	3
14.4. Packing group	
ADR-Packing Group:	III
IATA-Packing group:	III
IMDG-Packing group:	III
14.5. Environmental hazards	
ADR-Environmental Pollutant:	No
IMDG-Marine pollutant:	No
14.6. Special precautions for user	
ADR-Subsidiary risks:	-
ADR-S.P.:	236 340
ADR-Tunnel Restriction Code:	(E)
IATA-Passenger Aircraft:	370
IATA-Subsidiary risks:	-
IATA-Cargo Aircraft:	370
IATA-S.P.:	A66 A163
IATA-ERG:	3L
IMDG-EmS:	F-E , S-D
IMDG-Subsidiary risks:	-
IMDG-Storage category:	Category A
IMDG-Storage notes:	-
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
N.A.	

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#### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
  - Dir. 1999/45/EC (Classification, packaging and labelling of dangerous preparations)
  - Dir. 98/24/EC (Risks related to chemical agents at work)
  - Dir. 2000/39/EC (Occupational exposure limit values)
  - Dir. 2006/8/EC
  - Regulation (EC) n. 1907/2006 (REACH)
  - Regulation (EC) n. 1272/2008 (CLP)
  - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
  - Regulation (EU) n. 453/2010 (Annex I)
  - Regulation (EU) n. 286/2011 (ATP 2 CLP)
  - Regulation (EU) n. 618/2012 (ATP 3 CLP)

Volatile Organic compounds - VOCs = 2.30 %

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Where applicable, refer to the following Italian regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent

## Safety Data Sheet

### METAL FILL

amendments.  
1999/13/EC (VOC directive)

15.2. Chemical safety assessment  
No

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#### SECTION 16: Other information

Text of phrases referred to under heading 3:

R10 Flammable.  
R20 Harmful by inhalation.  
R36/38 Irritating to eyes and skin.  
R37 Irritating to respiratory system.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R63 Possible risk of harm to the unborn child  
R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

H226 Flammable liquid and vapour.  
H361d Suspected of damaging the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure (hearing organs).  
H319 Causes serious eye irritation.  
H315 Causes skin irritation.  
H332 Harmful if inhaled.  
H304 May be fatal if swallowed and enters airways.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.  
EUH066 Repeated exposure may cause skin dryness or cracking.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.  
This document was prepared by a competent person who has received appropriate training.

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 - Appendix 1 "TLV for 1989-90"

Safety data sheets of raw materials suppliers.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.  
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.



## Safety Data Sheet

### METAL FILL

IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.
N.A.	Not Applicable / Not Available