

## Safety data sheet

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

#### 1.1. Product identifier.

Code: 57043001  
Product name: SALDA METALLI MIX - Catalyzer  
Chemical name and synonym:

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

Intended use: HARDENER

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

Name: SARATOGA INT. SFORZA SPA  
Full address: Via Edison 76  
District and Country: 20090 Trezzano s/Navoglio (MI)  
ITALIA  
Tel. +39-02 445731  
Fax. +39-02 4452742

e-mail address of the competent person.

responsible for the Safety Data Sheet. trading@saratogasforza.com  
Product distribution by: SARATOGA INT. SFORZA SPA

#### 1.4. Emergency telephone number.

For urgent inquiries refer to.

Centro Antiveleni di Milano 02 66101029 (CAV Osp. Niguarda Ca` Granda -Milano) (24h)  
Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia) (24h)  
Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo)  
Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze)  
Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma)  
Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma)  
Centro Antiveleni di Roma 06 68593726 (CAV Ospedale Bambin Gesù" - Roma)  
Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli)  
Centro Antiveleni di Foggia 0881 732326 (CAV Ospedale Univ. - Foggia)

### SECTION 2. Hazards identification.

#### 2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication: -

## 2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: –

Hazard statements:

**EUH210** Safety data sheet available on request  
**EUH208** Contains:  
HYDROQUINONE  
May produce an allergic reaction.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P501 Dispose of contents / container in accordance with local regulation.

## 2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients.

### 3.1. Substances.

Information not relevant.

### 3.2. Mixtures.

Contains:

The full wording of hazard (H) phrases is given in section 16 of the sheet.

#### Identification.

**2,4,6-TRIS(DIMETHYLAMINOMETHYL) PHENOL**

**Classification 1272/2008  
(CLP).**

CAS. 90-72-2

 $1 \leq x < 5$ Acute Tox. 4 H302, Eye Irrit.  
2 H319, Skin Irrit. 2 H315

EC. 202-013-9

INDEX. 603-069-00-0

**HYDROQUINONE**

CAS. 123-31-9

 $0 \leq x < 1$ Carc. 2 H351, Muta. 2 H341,  
Acute Tox. 4 H302, Eye Dam.  
1 H318, Skin Sens. 1 H317,  
Aquatic Chronic 1 H410 M=1

EC. 204-617-8

INDEX. 604-005-00-4

Reg. no. 01-2119524016-51

**SECTION 4. First aid measures.****4.1. Description of first aid measures.**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

**4.2. Most important symptoms and effects, both acute and delayed.**

Specific information on symptoms and effects caused by the product are unknown.

For symptoms and effects caused by the contained substances, see chap. 11.

**4.3. Indication of any immediate medical attention and special treatment needed.**

Information not available.

**SECTION 5. Firefighting measures.****5.1. Extinguishing media.**

## SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

## UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

**5.2. Special hazards arising from the substance or mixture.**

## HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

**5.3. Advice for firefighters.****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures.****6.1. Personal precautions, protective equipment and emergency procedures.**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

**6.2. Environmental precautions.**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up.**

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections.**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage.****7.1. Precautions for safe handling.**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):

10

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

Information not available.

**SECTION 8. Exposure controls/personal protection.****8.1. Control parameters.**

Regulatory References:

ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
	TLV-ACGIH	ACGIH 2016

**HYDROQUINONE****Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VLA	ESP	2			
VLEP	FRA	2			
WEL	GBR	0,5			
TLV	GRC	2		4	
NDS	POL	1		2	
TLV-ACGIH		1			

**Predicted no-effect concentration - PNEC.**

Normal value in fresh water	0,00114	mg/l
Normal value in marine water	0,000114	mg/l
Normal value for fresh water sediment	0,00098	mg/kg/d
Normal value for marine water sediment	0,000097	mg/kg/d
Normal value for water, intermittent release	0,00134	mg/l
Normal value of STP microorganisms	71	mg/l
Normal value for the terrestrial compartment	0,000129	mg/kg/d

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers.			Effects on workers			Chronic systemic
	Acute local	Acute systemic	Chronic local	Acute local	Acute systemic	Chronic local	
Inhalation.			0.5 mg/m3			1 mg/m3	7 mg/m3
Skin.							128 mg/kg bw/d

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

**8.2. Exposure controls.**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

**EYE PROTECTION**

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS.**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

**SECTION 9. Physical and chemical properties.****9.1. Information on basic physical and chemical properties.**

Appearance	pasty
Colour	white
Odour	characteristic
Odour threshold.	Not available.
pH.	N.A.
Melting point / freezing point.	Not available.
Initial boiling point.	> 250 °C.
Boiling range.	Not available.
Flash point.	250 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1,05
Solubility	insoluble
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.

Decomposition temperature.	Not available.
Viscosity	>20,5 mm <sup>2</sup> /sec (40°C)
Explosive properties	Not available.
Oxidising properties	Not available.

#### 9.2. Other information.

Total solids (250°C / 482°F)	95,32 %
VOC (Directive 2010/75/EC) :	4,44 % - 46,62 g/litre.
VOC (volatile carbon) :	3,01 % - 31,62 g/litre.

## SECTION 10. Stability and reactivity.

### 10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

### 10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

### 10.5. Incompatible materials.

Information not available.

### 10.6. Hazardous decomposition products.

Information not available.

## SECTION 11. Toxicological information.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.  
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

### 11.1. Information on toxicological effects.

#### ACUTE TOXICITY.

LC50 (Inhalation - vapours) of the mixture: Not classified (no significant component).  
LC50 (Inhalation - mists / powders) of the mixture: Not classified (no significant component).  
LD50 (Oral) of the mixture: Not classified (no significant component).  
LD50 (Dermal) of the mixture: Not classified (no significant component).

#### HYDROQUINONE

LD50 (Oral). 302 mg/kg Rat  
LD50 (Dermal). > 900 mg/kg Rat

#### SKIN CORROSION / IRRITATION.

Causes skin irritation.

#### SERIOUS EYE DAMAGE / IRRITATION.

Causes serious eye damage.

#### RESPIRATORY OR SKIN SENSITISATION.

Sensitising for the skin.

#### GERM CELL MUTAGENICITY.

Does not meet the classification criteria for this hazard class.

#### CARCINOGENICITY.

Does not meet the classification criteria for this hazard class.

#### REPRODUCTIVE TOXICITY.

Does not meet the classification criteria for this hazard class.

#### STOT - SINGLE EXPOSURE.

Does not meet the classification criteria for this hazard class.

#### STOT - REPEATED EXPOSURE.

Does not meet the classification criteria for this hazard class.

#### ASPIRATION HAZARD.

Does not meet the classification criteria for this hazard class Viscosity: >20,5 mm<sup>2</sup>/sec (40°C) **SECTION 12. Ecological information.**

This product is dangerous for the environment and the aquatic organisms. In the long term, it has negative effects on the aquatic environment.

### 12.1. Toxicity.

#### HYDROQUINONE

LC50 - for Fish.	0,044 mg/l/96h Danio rerio
EC50 - for Crustacea.	0,13 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants.	17 mg/l/72h Chlorococcales

### 12.2. Persistence and degradability.

2,4,6-TRIS(DIMETHYLAMINOMETHYL) PHENOL	
Solubility in water.	> 10000 mg/l

NOT rapidly biodegradable.



## HYDROQUINONE

Solubility in water. > 10000 mg/l

Rapidly biodegradable.

**12.3. Bioaccumulative potential.**2,4,6-  
TRIS(DIMETHYLAMINOMET  
HYL) PHENOL

Partition coefficient: n-  
octanol/water. -0,66

## HYDROQUINONE

Partition coefficient: n-  
octanol/water. 0,59

BCF. 3,162

**12.4. Mobility in soil.**

## HYDROQUINONE

Partition coefficient:  
soil/water. 1,585

**12.5. Results of PBT and vPvB assessment.**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects.**

Information not available.

**SECTION 13. Disposal considerations.****13.1. Waste treatment methods.**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information.**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.1. UN number.**

Not applicable.

**14.2. UN proper shipping name.**

Not applicable.

**14.3. Transport hazard class(es).**

Not applicable.

**14.4. Packing group.**

Not applicable.

**14.5. Environmental hazards.**

Not applicable.

**14.6. Special precautions for user.**

Not applicable.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code.**

Information not relevant.

**SECTION 15. Regulatory information.****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**

Seveso Category - Directive 2012/18/EC:

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product

Point.

3

Substances in Candidate List (Art. 59 REACH).

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

WGK 2: Hazard to waters

**15.2. Chemical safety assessment.**

No chemical safety assessment has been processed for the mixture and the substances it contains.

**SECTION 16. Other information.**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Carc. 2</b>	Carcinogenicity, category 2
<b>Muta. 2</b>	Germ cell mutagenicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Dam. 2</b>	Serious eye damage, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>H351</b>	Suspected of causing cancer.
<b>H341</b>	Suspected of causing genetic defects.
<b>H302</b>	Harmful if swallowed.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.

**H400**

Very toxic to aquatic life.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - ECHA website

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**Changes to previous review:**

The following sections were modified:

01 / 02 / 09 / 11 / 14.