

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

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

1.1 Product identifier

Trade name: SALDA METALLI MIX - Resin cd.57043001

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

Use of the Substance/Mixture: epoxy adhesive

1.3 Details of the supplier of the safety data sheet

Company: SARATOGA INT. SFORZA SPA
Via Edison 76
20090 Trezzano s/Naviglio (MI) ITALY
Telephone: +39 02 445731
Telefax: +39 02 4452742
E-mail address: trading@saratogasforza.com

1.4 Emergency telephone number

Centro Antiveleni Azienda Ospedaliera "S.G.Battista" – TORINO	Tel. 011/6637637
Centro Antiveleni Ospedale Niguarda Ca' Granda – MILANO	Tel. 02/66101029
Cen.Naz.Inform.Tossic.Fond. S.Maugeri – PAVIA	Tel. 0382/24444
Serv. Antiv. Università degli Studi di PADOVA	Tel. 049/8275078
Servizio Antiveleni Istituto Scientifico "G. Gaslini" – GENOVA	Tel. 010/5636245
Centro Antiveleni Azienda Ospedaliera Careggi – FIRENZE	Tel. 055/4277238
Centro Antiveleni Policlinico A.Gemelli - ROMA	Tel. 06/3054343
Centro Antiveleni Università degli Studi "La Sapienza" – ROMA	Tel. 06/49970698
Centro Antiveleni Azienda Ospedaliera A. Cardarelli – NAPOLI	Tel. 081/7472870

2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or 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.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments

Hazard classification and indication:

Eye Irrit. 2	H319
Skin Irrit. 2	H315
Skin Sens. 1	H317
Aquatic Chronic 2	H411

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments

Danger Symbols:
Xi-N

R phrases:
36/38-43-51/53

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

SALDA METALLI MIX - Resin

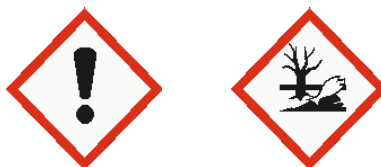
Revision 4

Revision date: 17/10/2013

2.2 Label elements

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

Hazard pictograms :



Signal word : **Warning**

Hazard statements :

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. 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.

Contains : Reaction product Bisphenol F-Epichlorhydrin; epoxy resins (p.m.<700)
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

2.3. Other hazards

Information not available.

3. Composition/information on ingredients

3.1. Substances

Information not relevant.

3.2. Mixtures

Contains:

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
REACTION PRODUCT: BISPHENOL A- (EPICHLORHYDRIN) CAS. 25068-38-6 EC. 500-033-5 INDEX. 603-074-00-8	50 - 75	Xi R36/38, Xi R43, N R51/53	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
Reaction product Bisphenol F- Epichlorhydrin; epoxy resins (p.m.<700) CAS. 28064-14-4 EC. - INDEX. -	20 - 25	Xi R36/38, Xi R43, N R51/53	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

Note: Upper limit is not included into the range.

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

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T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

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

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.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing equipment: chemical powder.

Unsuitable extinguishing equipment: do not use water.

5.2. Special hazards arising from the substance or mixture.

Hazards caused by exposure in the event of fire: no information available.

5.3. Advice for firefighters

General information: flammable gases develop in contact with water or moisture.

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).

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For liquid products: block the leakage if there is no hazard.

For solid products: if there are no contraindications, spray powder with water to prevent the formation of dust. Avoid breathing vapours/mists/gases.

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

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

For liquid products: collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

For solid products: use spark-proof mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. 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.

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Avoid leakage of the product into the environment. Work in adequately ventilated areas. Avoid flames and sparks. 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. Keep the product in clearly labelled containers. Keep containers well sealed. Avoid contact with water or that may absorb moisture at all costs. Avoid violent blows. Avoid overheating. Store in a ventilated and dry place, far away from sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available.

8. Exposure controls/personal protection

8.1. Control parameters

Information not available.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration.

Hand protection: protect hands with category I (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in latex, PVC or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves` limit depends on the duration of exposure.

Skin protection: wear category I professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

Respiratory protection: if the threshold value (if available) for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an B or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited. If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

Eye protection: use of protective airtight goggles (ref. standard EN 166) recommended.

Environmental exposure controls: the emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	pasty
Colour	aluminium
Odour	mild
Odour threshold	not available
pH	N.A.
Melting or freezing point	not available
Initial boiling point	not available
Boiling range	>250
Flash point	> 150 °C.
Evaporation Rate	not available
Flammability of solids and gases	not available
Lower flammability limit	not available
Upper flammability limit	not available
Lower explosive limit	not available
Upper explosive limit	not available
Vapour pressure	not available
Vapour density	not available
Specific gravity	1 Kg/l
Solubility	insoluble
Partition coefficient: n-octanol/water	not available
Ignition temperature	not available
Decomposition temperature	not available
Viscosity	not available
Explosive properties	not available
Oxidising properties	not available

9.2. Other information

Solid content:	10,00 %
VOC (Directive 1999/13/EC):	0
VOC (volatile carbon):	0

10. Stability and reactivity

10.1. Reactivity

Information not available.

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

10.2. Chemical stability

Information not available.

10.3. Possibility of hazardous reactions

The product may react violently with water.

10.4. Conditions to avoid

Avoid overheating. Prevent moisture or water from penetrating inside the containers.

10.5. Incompatible materials

Information not available.

10.6. Hazardous decomposition products

Information not available.

11. Toxicological information

11.1. Information on toxicological effects

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

Vapour inhalation may moderately irritate the upper respiratory tract. Contact with skin may cause slight irritation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper

respiratory tract. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurves, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

This product contains epoxy resins. Producer's specifications are as follows:

Because of epoxy-product properties and according to the toxicological data available for similar products, this preparation may sensitize and irritate the skin and the respiratory system.

It contains epoxy components at low molecular weights, which may irritate eyes, mucosae and skin. Frequent contact with skin may cause irritation and sensitization phenomena. Sensitization reactions may also be caused by other epoxy components (cross-sensitization).

Avoid contact with skin and exposure to vapours and aerosols.

12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

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

12.1. Toxicity

Information not available.

12.2. Persistence and degradability

Information not available.

12.3. Bioaccumulative potential

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

Information not available.

12.4. Mobility in soil

Information not available.

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.

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.

14. Transport information

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:



ADR/RID Class: 9 UN: 3082

Packing Group: III

Label: 9

Nr. Kemler: 90

Limited Quantity: 5 L

Tunnel restriction code: (E)



Proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); Reaction product Bisphenol F-Epichlorhydrin; epoxy resins (p.m.<700))

Carriage by sea (shipping):



IMO Class: 9 UN: 3082

Packing Group: III

Label: 9

EMS: 90F-A, S-F

Marine Pollutant: YES

Proper Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); Reaction product Bisphenol F-Epichlorhydrin; epoxy resins (p.m.<700))

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

Trasporto by air:



IATA:	9	UN:	3082
Packing Group:	III		
Label:	9		
Cargo:			
Packaging instructions:	964	Maximum quantity:	450 L
Pass.:			
Packaging instructions:	964	Maximum quantity:	450 L
Special instructions:	A97, A158		
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); Reaction product Bisphenol F-Epichlorhydrin; epoxy resins (p.m.<700))		

15. Regulatory information

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

Seveso category: 9ii

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): none.

Substances subject to authorisation (Annex XIV REACH): none.

Substances subject to exportation reporting pursuant to (EC) Reg. 689/2008: 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.

15.2. Chemical safety assessment

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

16. Other information

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

Eye Irrit. 2 Eye irritation, category 2

Skin Irrit. 2 Skin irritation, category 2

Skin Sens. 1 Respiratory / skin sensitization, category 1

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

R36/38 IRRITATING TO EYES AND SKIN.

R43 MAY CAUSE SENSITISATION BY SKIN CONTACT.

R51/53 TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

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
- 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.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
8. The Merck Index. - 10th Edition
9. Handling Chemical Safety
10. Niosh - Registry of Toxic Effects of Chemical Substances
11. INRS - Fiche Toxicologique (toxicological sheet)
12. Patty - Industrial Hygiene and Toxicology
13. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
14. 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.

SALDA METALLI MIX - Resin

Revision 4

Revision date: 17/10/2013

Changes to previous review

The following sections were modified: 02 / 07 / 08 / 11 / 12 / 16.