

! 1. Identification of the substance/preparation

Name of product**F 352 Sn62 - 90.5 M 30****Manufacturer/distributor**

W. C. Heraeus GmbH & Co. KG
Heraeusstr. 12 - 14, D-63450 Hanau
Postbox 15 13, D-63405 Hanau
Phone : + 49 6181 35 4233, Fax : + 49 6181 35 7860
E-Mail : joachim.schmidt@heraeus.com
Internet : <http://www.4cmd.com>

Advice

Circuit Materials Division
Phone : + 49 6181 35 5303
Fax : + 49 6181 35 5977

Emergency advice

Werkssicherheit : + 49 6181 35 213
Phone (USA) : + 1 800 255 3924

2. Composition/information on ingredients

Chemical characterization

Colored paste, perceptible odor, immiscible with water, heavier than water.

Hazardous ingredients

CAS-No.	Name	[% weight]	Classification
007439-92-1	Lead	30-40	
007440-22-4	Silver	1-2	
007440-31-5	Tin	55 - 65	
008050-09-7	Resin	3-6	Xi R43

3. Special hazards information for man and environment

R-phrases

43 May cause sensitisation by skin contact.

4. First aid measures

General information

Seek medical treatment when anyone has symptoms apparently due to inhalation, swallowing or contact with skin or eyes.

In case of inhalation

In case of inhalation remove the casualty into fresh air and seek medical advice. Apply artificial respiration only if patient is not breathing or under medical supervision.

In case of skin contact

After contact with skin, wash immediately with plenty of water. Take off immediately all contaminated clothing.

In case of eye contact

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of ingestion

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

5. Fire-fighting measures

Suitable extinguishing material

Water spray, powder, C O2, foam.

Extinguishing material that may not be used for safety reasons

Direct jet of water.

Special exposure hazards arising from the substance, combustible products or resulting gases

Look up chapter 10

Special protective equipment for firefighters

Self-contained breathing apparatus and protective clothing should be worn by firefighters.

Additional information

Cool exposed containers with water and remove from fire area if without risk. Do not breathe fumes.

6. Accidental release measures

Personal precautions

Wear suitable protective clothing, gloves and eye / face protection. Keep all sources of ignition away - No smoking. In case of insufficient ventilation, wear suitable respiratory equipment.

Methods for cleaning up/taking up

Absorb in inert material such as sand or oil dry and collect in closed sheet metal barrels.

Additional Information

Informations for safe handling look up chapter 7.

Informations for personal protective equipment look up chapter 8.

Informations for disposal look up chapter 13.

7. Handling and storage

Advice on safe handling

Good industrial safety practice should be followed which includes preventing eye contact, minimizing skin contact, and minimizing inhalation of mist or vapor.

Advice on protection against fire and explosion

Pay attention to general rules of internal fire prevention. Keep away from sources of ignition - No smoking.

Further information on storage conditions

Keep container tightly closed and store at cool and aired place. Protect from direct solar radiation. Keep locked up, out of reach of children.

8. Exposure controls / personal protection

Additional advice on system design

look up chapter 7.1

Ingredients with occupational exposure limits to be monitored

CAS-No.	Name	Code	[mg/m ³]	[ml/m ³]	Remark
007439-92-1	Lead	MAK	0,1 E		25
007440-22-4	Silver	MAK, EU	0,1 E		
007440-31-5	Tin	MAK	2 E		

Respiratory protection

No special respiratory protection equipment is recommended under anticipated conditions of normal use with adequate ventilation.

Hand protection

Impermeable gloves

Eye protection

safety goggles / face protection

Skin protection

protective clothing

General protective measures

Avoid contact with eyes and skin. Work in rooms with good ventilation. Do not inhale smoke. It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.

Hygiene measures

At work do not eat, drink and smoke. Remove soiled or soaked clothing immediately. Keep divorced from food and feed. Wash hands and skin before breaks and after work.

9. Physical and chemical properties

Form
pasty

Colour
grey

Odour
aromatic

Data relevant for safety

	Value	Temperature	at	Method	Remark
Vapour pressure	< 1 hPa	20 °C			
Density	4,4 g/cm ³	20 °C			

10. Stability and reactivity**Conditions to avoid**

no

Materials to avoid

Reactions with strong acids, oxidising agents and alkalies.

Hazardous decomposition products

Carbon monoxide, carbon dioxide, aldehydes, carbon acid

11. Toxicological information**Experiences made from practice**

Sensitization through skin contact possible. Irritates eyes and skin.

12. Ecological information**General regulation**

Ecological dates are not available. In case of influence of acids there may occur water soluble metall compounds that are harmful to aquatic environment analogous to EC-water pollution control directive.

13. Disposal considerations**Waste code No.**

17 04 06

Name of waste

tin

Recommendations for the product

Collect waste separated in suitable, labeled and lockable containers. Remove in accordance with local official regulations. For recycling consult waste disposal centres.

Recommendations for packaging

Untamminated packaging may be treated as household waste. Packaging that cannot be cleaned should be disposed of like the product.

14. Transport information**Transport/further informations**

No hazardous material as defined by the prescriptions.

! 15. Regulatory information

Remarks for classification

The product is classified and labelled in accordance with EC directives. Classification happened on the basis of calculation methods of preparation directive (88 / 379 / EEC).

Classification

Xi Irritant

R-phrases

43 May cause sensitisation by skin contact.

S-phrases

24 Avoid contact with skin.

37 Wear suitable gloves.

! Hazardous ingredients for labeling

Resin

Special labelling for certain preparations

Contains lead. Do not use for painting articles that can be chewed or sucked by children.

16. Other information

Further information

Prepared by W.C. Heraeus GmbH & Co. KG from the best knowledge available; no responsibility is accepted that the information is sufficient or correct in all cases.