

Material Safety Data Sheet

According to GB/T 16483-2008 & UN GHS 4.0 revision

1. Chemicals and Identification

1.1 products validation

product name SA0005, SA0006, SA0011, SA0012
 descriptions lead-free solder wire
 identifying information unknown

1.2 recommended and restrictions on use

1.2.1 recommended soldering for electronic parts and components
 1.2.2 restrictions unknown

1.3 Supplier information

Manufacturer 2direct GmbH
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1.4 Emergency calls +49 235166887-0 Only available during office hours.

2. Hazards summarizing

2.1 classification of substances and mixture

2.1.1 GHS hazards classification

physical hazards Unclassified
 health hazards Inhalation hazard category 1
 Respiratory sensitization category 1B
 environmental hazards Unclassified

2.2 Label element

pictogram



Warning words

Danger

hazard statement

Inhalation and if swallowed
 May cause sensitization by skin contact
 Vapours may cause drowsiness and dizziness

Precautionary statement

precautionary measure Stay away from high temperature
 Far away from strong acid and alkali
 Don't inhale smoke and vapour
 Washing hands thoroughly after handling.

accident response Don't eat and drink when soldering
wear gloves/goggles/face guard.
After swallowing, induce vomiting if person is conscious, seek medical help.
After skin contact, immediately wash with soap and rinse.
After inhalation: supply fresh air, keep breathing smooth.
Of fire, use dry chemical, carbon dioxide, sandy soil .

storage Stored in dry shade

disposal According to local regulations

3. composition information

material or mixture: mixture

Composition:

chemical name	CAS	(%) content
tin	7440-31-5	rest
silver	7440-22-4	0.2-0.4
copper	7440-50-8	0.5-0.9
rosin	65997-06-0	≤2.5

4. first-aid measures

4.1 summarize

inhalation Supply fresh air, keep breathing smooth. If difficult in breath, oxygen; if respiratory arrest, artificial respiration then hospitalize.

skin contact immediately wash with soap and rinse

eye contact opened eye lip, Rinse under running water, see doctor.

ingestion If person is conscious, induce vomiting, see medical help.

4.2 acute and late effects Inhalation may damage respiratory tract

4.3 First-aid personnel protection Let medical staffs know involved matter, to take measures to protect themselves.

4.4 Special tips for doctor Provide general measures, according to the treatment of symptoms

5. fire-fighting measures

5.1 out-fire method and extinguishing agent dry chemical, carbon dioxide, sandy soil
improper Once-through water

5.2 special risk Heated to break down, or under the condition of fire, will release carbon monoxide, carbon dioxide, aliphatic aldehydes.

6. Accidental release measure

6.1 personal precautions Ensure adequate ventilation, Avoiding contact with eye and skin, and inhalation

6.2 environmental precautions Do not allow product to reach sewage or any water course

6.3 Leakage take in and cleaning method No leak

6.4 Secondary hazard prevention measures No special advice.

7. handling and storage

7.1 handling

technical measures	No special advice.
partial or full ventilation	Adequate ventilation
precautionary measures	Develop healthy habit, avoid contact with skin and eyes. Washing after handling, equipped personal protection device. Washing hands and avoiding inhalation.
operation instruction	Introduce personal protection from SDS part 8.

7.2 safe storage

technical measures	Far away from fire source, strong acid and alkali
condition	Dry and cool space
should be away	strong acid and alkali
packing materials	no special advice

8. contact controls and personal protection

8.1 contact controls

8.1.1 allowed concentration	unknown
8.1.2 Eng control way	According to good industrial hygiene and safety practice, wash hands after handling or in break.

8.2 personal protection device

respiratory system protection	Avoid inhalation of steam, pls wear mask
eye protection	May flash or contact eyes, pls wear glass
skin and body protection	pls in anti-static overalls
sanitary measures	Before break and after handling washing hands immediately. Operation based on good industrial hygiene and safety practice.

9. physical and chemical properties

9.1 general information

apperance	slivery solid
physical state	solid
shape	solid wire
smell	tasteless
PH value	unknown
melting and freezing point	217/227°C
boiling point, initial boiling point and range	unknown
flash point	unknown
autoignition temperature	unknown
(%) : combustion limits-floor level	unknown
(%) : upper level	unknown
(%) : explosion limits-floor level	unknown
(%) : explosion limits-upper level	unknown
density	7.3g/cm ³ (20°C)
solubleness	insoluble in water

9.2 other dates

solubility	unknown
smell threshold value	unknown
evaporation rate	unknown
ignitability(solid, gas)	unknown
surface tension	unknown
light temperature	unknown
viscosity	unknown
molecular formula	unknown
molecular weight	Unknown

10. stability and reactivity

10.1 stability	Under the condition of normal operation and storage stability
10.2 The possibility of risk response	No hazardous reaction under normal use
10.3 should be avoided	High temperature
10.4 incompatible substances	Strong acid/alkali
10.5 harmful decomposition products	Carbonic oxide, carbon dioxide

11. toxicological information

11.1 Toxicokinetics, metabolism and distribution	unknown
11.2 toxicological information	
acute toxicity	
LD50: per oral, rat	10mg/kg (IUCLID)
LD50: per skin, hare	unknown
LC50: inhalation, rat	40000 ppm 4 hr. (RTECS)
skin irritation or corrosion	unclassified
eye irritation or corrosion	unclassified
respiration or skin sensibility	unclassified
germ cell mutagenicity	unclassified
carcinogenicity	unclassified
reproduction toxicity	unclassified
Specific target organ system toxicity- One-off contact	unclassified
Specific target organ system toxicity- Repeating contact	unclassified
inhalation risk	Unclassified

12. ecology information

12.1 ecotoxicity	
fish	unknown
daphnia	unknown

algae	unknown
12.2 durability and degradability	unknown
12.3 possible biological accumulation	unknown
12.4 mobility in soil	unknown
12.5 other harmful effects	unknown

13. abandon dispose

13.1 residual waste	According to local regulation
13.2 polluted package	unknown
13.local disposal regulation	unknown

14. transport information

	(ADR/RID) road transportation	(IMDG) ocean carriage	(ICAO/IATA) air transportation
UN dangerous cargos No.	unknown	unknown	unknown
UN carriage name	unknown	unknown	unknown
UN perniciousness classify	unknown	unknown	unknown
packing group	unknown	unknown	unknown
marine pollutant	no	no	no
Special precautionary measures	See 2.2	See 2.2	See 2.2

15. regulation information

15.1 special regulation/legislation of safety, health and environmental for materials and mixtures

if recorded by chemical catalogues of other countries

IECSC:	No recorded
EINECS:	No recorded
EPA TSCA:	No recorded
DSL/NDSL:	No recorded
GB12268-2012: hazardous articles list	No recorded

Below laws, regulations and standards, make relevant stipulation for safe handling, storage, transportation, loading and unloading, classification and mark of chemicals.

the production safety law of the people's republic of china

the occupational disease prevention law of the people's republic of china

the environmental protection law of the people's republic of china

Hazardous chemical materials safety management regulation

Safety production license

15.2 Downstream consumption attention

Dispose should be accord with relevant law and regulation

16. other informations

16.1 change explain

According to standard GB/T16483-2008 <the chemical safety data sheet content and project order>, revised the former version SDS

16.2 training suggestion: No

16.3 detailed information

All information based on our current date, the SDS (the chemical safety data sheet) is only for this product.

16.4 reader attention

Owner of enterprise can only be used as beneficial supplement of other information obtained, and should be judged to this data properly. Be sure of moderate use for this product, guarantee health and safety of the workers. This data does not provide a guarantee, if there is any use behavior which violate this SDS or used with other products and programs, the consequence shall be borne by the users themselves.

16.5 abbr.

ADR: About international transport of dangerous goods road European protocol

IMDG: International maritime transport of dangerous goods rules.

EINECS: European Inventory of Existing Chemical Substance

IATA: International Air Transport Association

ICAO-TI: (ICAO) International Civil Aviation Organization

CAS: chemical abstracts No.

LC50: lethal concentration 50%

EC50: effect concentration 50%

LD50: lethal dose of 50%

The materials safety data sheet written based on optimum information of security and proper usage. But, we can't guarantee the timeliness and other express or hint information. To these data, our company do not bear any duty from the employ. The user should confirm the best information for their special usage after own research. Before use this product, every user should read this date carefully. If need more information for correct evaluation, pls contact with our company.