

Safety Data Sheet acc. to OSHA HCS

Printing date 05/07/2017

Reviewed on 05/07/2017

1 Identification

- . Product identifier
- . Trade name: GRIFFON SILVERHARDSOLDER 23-S 2MM CRT 100G*1 L2
- . Application of the substance / the mixture Brazing alloy
- . Details of the supplier of the safety data sheet
- . Manufacturer/Supplier:

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2 Hazard(s) identification

. Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

- . Label elements
- GHS label elements Void
- . Hazard pictograms Void
- . Signal word Void
- . Hazard statements Void
- . Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with national regulations.

- Classification system:
- . NFPA ratings (scale 0-4)



Health = 0 Fire = 0 Reactivity = 0

- . Other hazards
- . Results of PBT and vPvB assessment
- . **PBT:** Not applicable. . **vPvB:** Not applicable.

3 Composition/information on ingredients

. Chemical characterization: Mixtures

. Description: Brazing alloy

. Dangerous component

7440-50-8	copper	10-25%	
7440-31-5	tin	1.0-2.5%	

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. Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- . Description of first aid measures
- . **General information:** No special measures required.
- . After inhalation: Supply fresh air; consult doctor in case of complaints.
- . **After skin contact:** Generally the product does not irritate the skin.
- . After eye contact: Rinse opened eye for several minutes under running water.
- . After swallowing: If symptoms persist consult doctor.
- . Information for doctor:
- . Most important symptoms and effects, both acute and delayed

No further relevant information available.

. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- . Extinguishing media
- . Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- . Special hazards arising from the substance or mixture

No further relevant information available.

- . Advice for firefighters
- . Protective equipment: No special measures required.

6 Accidental release measures

- . Personal precautions, protective equipment and emergency procedures Not required.
- **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- . Methods and material for containment and cleaning up: Pick up mechanically.
- . Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

. PAC-1:		
7440-50-8	copper	3 mg/m3
7440-31-5	tin	6 mg/m3
. PAC-2:		
7440-50-8	copper	33 mg/m3
7440-31-5	tin	67 mg/m3
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. PAC-3:		(contactor page 2)
7440-50-8	copper	200 mg/m3
7440-31-5	tin	400 mg/m3

7 Handling and storage

- . Handling:
- . Precautions for safe handling No special measures required.
- . Information about protection against explosions and fires: No special measures required.
- . Conditions for safe storage, including any incompatibilities
- . Storage:
- . Requirements to be met by storerooms and receptacles: No special requirements.
- . Information about storage in one common storage facility: Not required.
- . Further information about storage conditions: None.
- . Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- . Additional information about design of technical systems: No further data; see item 7.
- . Control parameters

. Com	ponents with limit values that require monitoring at the workplace:
7440	-50-8 copper
PEL	Long-term value: 1* 0.1** mg/m³ as Cu *dusts and mists **fume
REL	Long-term value: 1* 0.1** mg/m³ as Cu *dusts and mists **fume
TLV	Long-term value: 1* 0.2** mg/m³ *dusts and mists; **fume; as Cu
7440	-31-5 tin
PEL	Long-term value: 2 mg/m³ metal
REL	Long-term value: 2 mg/m³
TLV	Long-term value: 2 mg/m³ metal

- . Additional information: The lists that were valid during the creation were used as basis.
- . Exposure controls
- Personal protective equipment:
- . General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- . Breathing equipment: Not required.
- . Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

. Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

. **Eye protection:** Not required.

9 Physical and chemical properties

Information on basic physical and	chemical properties
General Information	
Appearance: Form:	Solid
Color:	
Odor:	According to product specification Characteristic
Odor threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	765 °C (1409 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.
Density at 20 °C (68 °F):	9.148 g/cm³ (76.34 lbs/gal)
Relative density \	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Insoluble.

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. Partition coefficient (n-octanol/water): Not determined.

. Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

Organic solvents: 0.0 % Solids content: 100.0 %

mixture. All non determined data are not measurably or

not relevant for the characterization of the mixture.

10 Stability and reactivity

- . Reactivity No further relevant information available.
- . Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- . Possibility of hazardous reactions No dangerous reactions known.
- . Conditions to avoid No further relevant information available.
- . Incompatible materials: No further relevant information available.
- . Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- . Information on toxicological effects
- . Acute toxicity:
- Primary irritant effect:
- . on the skin: No irritant effect.
- . **on the eye:** No irritating effect.
- . **Sensitization:** No sensitizing effects known.
- . Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

. Carcinogenic categories

. IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

. NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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12 Ecological information

- . Toxicity
- . Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- . Behavior in environmental systems:
- . Bioaccumulative potential No further relevant information available.
- . Mobility in soil No further relevant information available.
- . Additional ecological information:
- . General notes:

Water danger class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- . Results of PBT and vPvB assessment
- . PBT: Not applicable.
- . vPvB: Not applicable.
- . Other adverse effects No further relevant information available.

13 Disposal considerations

- . Waste treatment methods
- . Recommendation: Smaller quantities can be disposed of with household waste.
- . Uncleaned packagings:
- Recommendation:

Disposal must be made according to official regulations.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

UN-Number DOT, ADN, IMDG, IATA	Void	
· · · ·	VOIG	
UN proper shipping name DOT, ADR/ADN, ADN, IMDG, IATA	Void	
Transport hazard class(es)		
DOT, ADR/ADN, ADN, IMDG, IATA		
Class	Void	
Packing group		
DOT, IMDG, IATA	Void	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	

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Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

IMDG
Remarks: Under certain conditions substances in Class 3 (flammable liquids) can be classified in packinggroup III.
See IMDG, Part 2, Chapter 2.3, Paragraph 2.3.2.2

UN "Model Regulation": Void

15 Regulatory information

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

. SARA Section 355 (extremely hazardous substances)			
None of the	None of the ingredients is listed.		
. SARA Sec	tion 313 (specific toxic chemical listings)		
7440-22-4	silver		
7440-50-8	copper		
. TSCA (To	. TSCA (Toxic Substances Control Act)		
7440-50-8	copper		
7440-31-5	tin		
. Prop 65 - 0	. Prop 65 - Chemicals known to cause cancer		

None of the ingredients is listed.

. Cancerogenity categories

. EPA (Environmental Protection Agency)		
7440-22-4	silver	D
7440-50-8	copper	D

. TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

. MAK (German Maximum Workplace Concentration)
7440-31-5 | tin

. NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- . GHS label elements Void
- . Hazard pictograms Void
- . Signal word Void
- . Hazard statements Void
- . Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with national regulations.

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. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- . Department issuing SDS: Bison QESH
- . Contact: Reach coördinator
- . Date of preparation / last revision 05/07/2017 / 19

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