according to Regulation (EU) 2020/878

Date of issue: 03.04.2013

Date of revision: 15.01.2024 Version/replaced Version 7.0/6.0

V-Allov II

SILADENT
Page 1 of 7

Printing date: 02.02.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Mixture Tradename: V-Alloy II

Product description: Non precious alloy based on cobalt

UFI:

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

Relevant identified uses: Manufacturing of dental prosthesis in dental laboratories

1.3. Details of the supplier of the safety data sheet

Manufacturer: Mesa Italia S.r.l.

Street / mailbox: Via dell' Artigianato, 35/37
Country code. / postal code / city: IT - 25039 Travagliato / Brescia

Phone: +39 (0) 30 6863251 Fax: +39 (0) 30 6863252

E-mail / Website: info@mesaitalia.it / www.mesaitalia.it / <a href="mailto:www.mesaitalia.it / <a href="mailto:www.mesaitalia.it / <a href="mailto:www.mesaitalia.it / <a href="mailto:ww

Contact e-mail: quality@mesaitalia.it

Supplier: SILADENT Dr. Böhme & Schöps GmbH

Street / mailbox: Im Klei 26

Country code. / postal code / city: DE - 38644 Goslar Phone: +49 (0) 53 21 / 37 79 - 0 Fax: +49 (0) 53 21 / 38 96 32

E-mail / Website: info@siladent.de / www.siladent.de

1.4. Emergency telephone number: +39 (0)30 6863251 (8:00 – 17:00 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]: Skin Sens. 1 H317 May cause an allergic skin reaction.

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1B H350 May cause cancer. Repr. 1B H360F May damage fertility.

Aquatic Chronic 4 H413 May cause long lasting harmful effects to aquatic life.

Special hazards information for human and No information available.

environment:

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]:

In the form in which it is marketed, the product causes no danger to health for humans through inhalation, swallowing or contact with the skin. There is therefore no obligation to label the product in accordance with: Regulation 1272/2008 (CLP: annex I; 1.3.4.: "Metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers").

If the product form in the as-supplied state is changed through further processing (e.g. through grinding, polishing, electrical discharge machining, welding or melting) and dust or vapours are produced, there may be danger from hazardous components in product.

Hazard pictograms (CLP):

GHS08

Signal word (CLP): Danger Hazard-determining components of labelling: Cobalt

according to Regulation (EU) 2020/878

Date of issue: 03.04.2013

Date of revision: 15.01.2024 Version/replaced Version 7.0/6.0

V-Allov II

Hazard statements (CLP):

H317: May cause an allergic skin reaction.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341: Suspected of causing genetic defects.

H350: May cause cancer. May damage fertility. H360F:

May cause long lasting harmful effects to aquatic life. H413:

Precautionary statements (CLP):

Avoid release to the environment. P273:

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P308+P313: IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. P304 + P340:

If experiencing respiratory symptoms: Call a doctor. P342 + P311: Take off contaminated clothing and wash it before reuse. P362 + P364:

2.3. Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable. vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances: Not applicable

3.2. Mixtures

> Description: alloy

Dangerous components:

(CAS No) 7440-48-4	Cobalt (Co)	64 %
(EC No) 231-158-0	H302 acute tox 4, H334 resp sens 1B, H317 skin sens 1,	
	H350i carc 1b, H361f repr 2, H413 aquatic chronic 4	
(CAS No) 7440-47-3	Chromium (Cr)	29 %
(EC No) 231-157-5	Not classified	
(CAS No) 7439-98-7	Molybdenum (Mo)	6 %
(EC No) 231-107-2	Not classified	

SECTION 4: First aid measures

Description of first aid measures

General information: Instantly remove any clothing soiled by the product.

Take affected persons into the open air. IF exposed or

SILAD

Printing date: 02.02.2024

concerned: Get medical advice/attention.

After inhalation: In case of unconsciousness bring patient into stable side

position for transport. Supply fresh air. If experiencing

respiratory symptoms: Call a doctor.

After skin contact: Instantly wash with water and soap and rinse thoroughly.

If skin irritation or rash occurs: Get medical

advice/attention.

After eye contact: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue

rinsing. If eye irritation persists: Get medical

advice/attention.

Rinse mouth. Drink plenty of water as a precaution. Get After swallowing:

medical advice/attention.

4.2. Most important symptoms and effects, both

acute and delayed:

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Suspected of causing genetic defects. May cause cancer.

May damage fertility.

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

Treat symptomatically.

according to Regulation (EU) 2020/878

Date of issue: 03.04.2013

Date of revision: 15.01.2024 Version/replaced Version 7.0/6.0

V-Allov II

SILAD

Printing date: 02.02.2024

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Unsuitable extinguishing agents:

5.2. Special hazards arising from the substance

or mixture:

Advice for firefighters: 5.3.

Protection during firefighting:

Additional information:

Metal fire powders, sand

Water, foam, CO₂

No additional information available.

Do not inhale explosion gases or combustion gases.

Wear self-contained breathing apparatus.

Dispose of fire debris and contaminated firefighting water

in accordance with official regulations. Collect

contaminated firefighting water separately. It must not

enter drains.

SECTION 6: Accidental release measures

Personal precautions, protective equipment

and emergency procedures:

Ensure adequate ventilation. Evacuate unnecessary personnel. Use personal protective equipment as

required. Avoid dust formation. Use breathing protection

against the effects of dust.

6.2. Environmental precautions: Do not allow to enter drainage system, surface or ground

water. Inform respective authorities in case product

reaches water or sewage system.

6.3. Methods and material for containment and

cleaning up:

Take up mechanically and collect in suitable container for

disposal. Send for recovery or disposal in suitable

containers.

6.4. Reference to other sections:

See Section 7 for information on safe handling See Section 8 for information on personal protection

equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

Precautions for safe handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. In case of insufficient ventilation, use respiratory protection. Do not inhale dust. Wear personal protective equipment.

Dust can form an explosive mixture with air. Avoid formation of dust.

Information about protection against

explosions and fires:

Hygiene measures:

When handling the product, ensure good industrial hygiene and adequate safety precautions. Do not eat,

drink or smoke at work. Before eating, drinking, smoking and leaving the workplace, wash hands and other bares

areas with mild soap and water. Do not wear contaminated clothing outside the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:

Store cool and dry in tightly closed containers. Store

Keep away from food, drinks and feedingstuff. Do not Storage incompatibility:

store together with explosive substances.

LGK 10-13 Storage class:

Specific end use(s): No further relevant information available. 7.3.

SECTION 8: Exposure controls/personal protection

Control parameters

(ACGIH/14	CAS No.	Name	TLV - TWA	TLV - STEL	Critical
- AIDII/14)					effects

according to Regulation (EU) 2020/878

Date of issue: 03.04.2013

Date of revision: 15.01.2024 Version/replaced Version 7.0/6.0

V-Allov II

	7440-48-4	Cobalt	0.1 mg/m3 OSHA USA	-	-
			0.05 mg/m3 NIOSH USA		
	7439-98-7	Molybdenum	10 mg/m3 (inhalable fraction)	-	-
		-	3 mg/m3 (respirable fraction)		
	7440-47-3	Chromium	0.5 mg/m3	-	-

8.2. Exposure controls

> Appropriate engineering controls: Ensure adequate ventilation so that concentrations do not

> > exceed the applicable standard values.

Personal protective equipment:

Protection of hands: Wear suitable gloves. The glove material has to be

impermeable and resistant to the product/ the substance/

SILAD

Printing date: 02.02.2024

the preparation.

No data available

Material of gloves: Latex, Nitrile rubber (> 0.1 mm)

Penetration time of glove material: The exact break through time has to be found out by the

manufacturer of the protective gloves and has to be

observed.

Eye protection: Tightly sealed safety glasses (EN 166).

Breathing equipment: In case of dust formation or inadequate ventilation wear

respiratory protection. Breathing apparatus with filter P.

Not necessary if room is well-ventilated.

Body protection: Protective work clothing.

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Solid Colour: Metallic

Odour: No data available

Melting point/Freezing point: 1460 °C

Boiling point or initial boiling point and boiling

range:

Flammability: No data available Lower and upper explosion limit: Not applicable Not applicable Flash point:

Auto-ignition temperature: Product is not self-igniting.

Decomposition temperature: No data available No data available pH: Kinematic viscosity: Not applicable

Solubility: Water: Not miscible. Partition coefficient n-octanol/water (log Not applicable

value):

Vapour pressure: No data available Density and/or relative density: 8.4 g/cm³ (20 °C) Relative vapour density: Not applicable Particle characteristics: No data available

9.2. Other information

> Explosive properties: Product is not explosive. However, during processing

formation of explosive dusts is possible.

SECTION 10: Stability and reactivity

Under normal conditions of use no dangerous reactions 10.1. Reactivity: known.

10.2. Chemical stability:

according to Regulation (EU) 2020/878

Date of issue: 03.04.2013

Date of revision: 15.01.2024 Version/replaced Version 7.0/6.0

V-Allov II

Printing date: 02.02.2024

SILADE

Thermal decomposition / conditions to be

avoided:

Stable under recommended storage and application conditions according to section 7. No decomposition if

used according to specifications.

10.3. Possibility of hazardous reactions: Possible hydrogen formation upon contact with acids.

10.4. Conditions to avoid:

None, if handled according to intended use.

10.5. Incompatible materials: Acids. Strong oxidising agents.

10.6. Hazardous decomposition products: Metal oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity: Not classified

Based on available data, the classification criteria are not

met.

Skin corrosion/irritation: Not classified

Based on available data, the classification criteria are not

met.

Serious eye damage/irritation: Not classified

Based on available data, the classification criteria are not

met.

Respiratory or skin sensitisation: May cause allergy or asthma symptoms or breathing

difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity: Suspected of causing genetic defects.

Carcinogenicity: May cause cancer. Reproductive toxicity: May damage fertility.

Specific target organ toxicity (single Not classified

exposure): Based on available data, the classification criteria are not

met.

Specific target organ toxicity (repeated Not classified

exposure):

Based on available data, the classification criteria are not

met.

Aspiration hazard: Not classified

Based on available data, the classification criteria are not

met.

11.2. Information on other hazards

Potential adverse human health effects and

symptoms:

Inhalation of vapours in high concentration may cause metal fume fever and may cause damage of the central

nervous system in case repeated and prolonged

exposure. Repeated and prolonged exposure to high dust concentrations may lead to irritation of the respiratory tract. Inhalation of metal-containing dusts may cause acute poisoning, leading to nausea, vomiting and

abdominal pain.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity: Not classified

Chronic aquatic toxicity: May cause long lasting harmful effects to aquatic life.

12.2. Persistence and degradability: No further information available.
12.3. Bioaccumulative potential: No further information available.
12.4. Mobility in soil: No further information available.

12.5. Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

12.6. Endocrine disrupting properties: No further information available.12.7. Other adverse effects: No further information available.

according to Regulation (EU) 2020/878

Date of issue: 03.04.2013

Date of revision: 15.01.2024 Version/replaced Version 7.0/6.0

V-Alloy II

SILADENT
Page 6 of 7

Printing date: 02.02.2024

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendation:

Disposal must be made according to official regulations.

Do not dispose of with domestic waste. Do not allow

Do not dispose of with domestic waste. Do not allow

product to reach sewage system.

European w	opean waste catalogue		
18 00 00	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care		
18 01 00	Wastes from natal care, diagnosis, treatment or prevention of disease in humans		
18 01 06*	Chemicals consisting of or containing dangerous substances		

Waste code number: The waste code number according to the Regulation of

the European Waste Catalogue (EWC) is dependent on the waste producer and can therefore be different for a product. The waste code number must therefore be determined separately by each waste producer.

SECTION 14:Transport information

14.1. UN number or ID number

ADR, IMDG, IATA: This product is not subject to transport regulations.

14.2. UN proper shipping name

ADR, IMDG, IATA: Not applicable

14.3. Transport hazard class(es)

ADR, IMDG, IATA: Not applicable

14.4. Packing group

ADR, IMDG, IATA: Not applicable

14.5. Environmental hazards

Dangerous for the environment: No Marine pollutant: No

Special marking: No supplementary information available

14.6. Special precautions for user: Not applicable14.7. Maritime transport in bulk according to IMO Not applicable

instruments:

SECTION 15: Regulatory information

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

Contains no substance on the REACH candidate list. Contains no substance on the REACH Annex XIV List.

National regulations:

No additional information available.

15.2. Chemical safety assessment: Chemical safety assessments for substances in this

mixture were not carried out by the supplier.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.

Adjustments compared to earlier versions:

General revision, adaptation to Regulation (EU) 2020/878

Full text of H- and EUH-phrases:

H317: May cause an allergic skin reaction.

according to Regulation (EU) 2020/878

Date of issue: 03.04.2013

Date of revision: 15.01.2024 Version/replaced Version 7.0/6.0

Page 7 of 7
Printing date: 02.02.2024

SILADE

V-Alloy II

H334: May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

H341: Suspected of causing genetic defects.

H350: May cause cancer. H360F: May damage fertility.

H413: May cause long lasting harmful effects to aquatic life.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road

CLP: Regulation (EC) No 1272/2008 on classification, labelling and

packaging of substances and mixtures

DMEL: Derived Minimal Effect Level DNEL: Derived No-Effect Level

EC50: The effective concentration of substance that causes 50% of the

maximum response (Median Effective Concentration)

IATA: International Air Transport Association

IMDG: "International Maritime Dangerous Goods Code" for the transport of

dangerous goods by sea

LC50: Lethal Concentration to 50 % of a test population (Median Lethal

Concentration)

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose)

LOAEL: Lowest Observed Adverse Effect Level

NOAEC/L: No Observed Adverse Effect Concentration/Level

NOEC/L: No Observed Effect Concentration/Level

OECD: Organisation for Economic Cooperation and Development

PBT: Persistent, Bioaccumulative and Toxic substance

PNEC: Predicted No-Effect Concentration

REACH: Regulation (EC) No 1907/2006 concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals

SDS: Safety Data Sheet
STP: Sewage Treatment Plant
UFI: Unique Formula Identifier

vPvB: Very Persistent and Very Bioaccumulative

Aquatic Chronic 4: Hazardous to the aquatic environment — Chronic Hazard, Category

4

Carc. 1B: Carcinogenicity, Category 1B

Muta. 2: Germ cell mutagenicity, Category 2

Repr. 1B: Reproductive toxicity, Category 1B

Resp. Sens. 1: Sensitisation — Respiratory, category 1

Skin Sens. 1: Sensitisation — Skin, category 1