



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

1.1. Product identifier

Name of product Hartmetall auf Basis Wolframcarbid mit Bindemetall Kobalt

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

Identified uses

Product categories [PC]

PC38 - Welding and soldering products (with flux coatings or flux cores), flux products

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor

joke Technology GmbH
Asselborner Weg 14-16, D-51249 Bergisch Gladbach
Phone +49 (0) 22 04 / 8 39-0, Fax +49 (0) 22 04 / 8 39-60
E-Mail info@joke.de
Internet www.joke.de

Advice

Phone +49 (0) 22 04 / 8 39-0
Fax +49 (0) 22 04 / 8 39-60
E-mail (competent person):
safety-data-sheet@joke.de

1.4. Emergency telephone number

Emergency advice

Vergiftungs-I-Z. Freiburg
Phone Telefon: +49 (0) 761 / 1 92 40
REACH and CLP UK CA Help Desk; Telephone: +44
171 635 9191

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Additional hints

Compact metal/alloy without hazards for human health or environment.

When working or processing (eg welding, cutting, grinding) dusts and smoke may occur, which may cause health hazards when inhaled (see section 8.2).

2.2. Label elements

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

No information available.

2.3. Other hazards

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
7440-48-4	231-158-0	cobalt	3 - 30	Resp. Sens. 1, H334 / Skin Sens. 1, H317 / Aquatic Chronic 4, H413
12070-12-1	235-123-0	Wolframcarbid	40 - 97	
12070-08-5	235-120-4	Titancarbid	0 - 15	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No special actions required.

In case of inhalation

Leave the danger area after inhalation of dust and smoke.

In case of skin contact

No special measure necessary.

In case of eye contact

not applicable

In case of ingestion

not applicable

4.2. Most important symptoms and effects, both acute and delayed

Physician's information / possible symptoms

No information available.

Physician's information / possible dangers

No data available

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

Treatment (Advice to doctor)

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry fire-extinguishing substance

Unsuitable extinguishing media

Full water jet



5.2. Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolyse products.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Wear full protective clothing.

Additional information

not applicable

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

Avoid dust formation.

Use personal protective clothing.

6.2. Environmental precautions

no

6.3. Methods and material for containment and cleaning up

Take up mechanically and send for disposal.

Additional Information

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

Informations for disposal see chapter 13.

6.4. Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid the formation of dust.

During thermal processing and / or machining extraction at processing machines is necessary.

General protective measures

Do not inhale dust/fumes/aerosols.

Hygiene measures

Remove soiled or soaked clothing immediately.

Keep away from food and drink.

Wash hands and skin before breaks and after work.

Advice on protection against fire and explosion

No special measures necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

No special measures required.



Advice on storage compatibility

Do not store with oxidizing agents.

Further information on storage conditions

Protect from wetness.

Information on storage stability

Unlimited stability.

7.3. Specific end use(s)

Recommendation(s) for intended use

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Respiratory protection

In case of dust formation wear micro dust mask.

Hand protection

no

Eye protection

safety goggles

Other protection measures

no

Limitation and surveillance of the environment

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

solid

Colour

grey

Odour

odourless

Odour threshold

No data available

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable				
not applicable	not determined				
melting range	1495 °C				
Flash point	not applicable				
Vapourisation rate	not applicable				

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	Value	Temperature	at	Method	Remark
Flammable (solid)	not applicable				
Flammability (gas)	not applicable				
Ignition temperature	not applicable				
Self ignition temperature	not applicable				
Lower explosion limit	no				
Upper explosion limit	no				
Vapour pressure	not applicable				
Relative density	13,5 - 15,7 g/ cm ³				
Bulk density	no				
Vapour density	not applicable				
Solubility in water	not applicable				
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not applicable				
Decomposition temperature	not applicable				
Viscosity not applicable	not determined				
Solvent separation test	not applicable				
Solvent content	no				
Oxidising properties	no				
Explosive properties	no				
9.2. Other information	No information available.				



SECTION 10: Stability and reactivity

10.1. Reactivity

no

10.2. Chemical stability

stable

10.3. Possibility of hazardous reactions

no

10.4. Conditions to avoid

no

10.5. Incompatible materials

Substances to avoid

Oxidising agent, strong

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
Skin irritation	non-irritant			
Eye irritation	non-irritant			
Skin sensitization	non-sensitizing			
Sensitization respiratory system	No information available.			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Subacute Toxicity				No information available.
Subchronic Toxicity				No information available.
Chronic Toxicity				No information available.
Mutagenicity				No information available.
Reproduction- Toxicity				No information available.



Value	Species	Method	Validation
Carcinogenicity			No information available.
Specific target organ toxicity (single exposure) No information available.			
Specific target organ toxicity (repeated exposure) No information available.			
Aspiration hazard not applicable			
Toxicity test (Additional information) No information available.			
Experiences made from practice Dust or formation of smoke irritates mucous membranes of respiratory tract.			
Additional information no			

SECTION 12: Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability			not applicable
Biological degradability			not degradable
Degradability			not degradable

12.3. Bioaccumulative potential

Because of its consistency the product cannot be dispersed in the environment. Adverse ecological effects are therefore unlikely on the basis of current knowledge.

12.4. Mobility in soil

not applicable

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

Additional ecological information

Value	Method	Remark
OC		not applicable
COD		not applicable
BOD		not applicable



SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.

12 01 03

Name of waste

non-ferrous metal filings and turnings

Recommendations for the product

Can be disposed of together with household refuse in accordance with the regulations and on consultation with the disposal agency and the relevant authorities.

In accordance with regulations for special waste, must be taken, after pretreatment, to an authorised special waste disposal site.

Recommendations for packaging

Totally emptied packaging may be taken for recycling.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	-	-	-
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
14.4. Packing group	-	-	-
14.5. Environmental hazards	-	-	-

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

Land and inland navigation transport ADR/RID

No dangerous goods as defined by these transport regulations.

Marine transport IMDG

No dangerous goods as defined by these transport regulations.

Air transport ICAO/IATA-DGR

No dangerous goods as defined by these transport regulations.

SECTION 15: Regulatory information

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

Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

Revision 27.03.2019 (GB) Version 1.6

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No information available.

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 1.5

H317 May cause an allergic skin reaction.

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

H413 May cause long lasting harmful effects to aquatic life.