

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 1 of 10

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

JK7184 powder

**Further trade names**

KSPN1046-1

UFI:

24YW-V06V-F00D-NXK5

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

Welding powder. For industrial purposes only.

**Uses advised against**

The product is only to be used for the intended application.

**1.3. Details of the supplier of the safety data sheet**

Company name:	Deloro Wear Solutions GmbH
Street:	Zur Bergpflege 51 - 53
Place:	D-56070 Koblenz
Telephone:	+49 (261) 80880
E-mail:	wearsolutions@deloro.com
Contact person:	Frau Melanie Arens
E-mail:	wearsolutions@deloro.com
Internet:	http://www.deloro.com

**1.4. Emergency telephone number:**

Poison Control Center (Mayence, GER): +49 (0)6131 - 19240 (24h) This safety data sheet is an English translation of the EU safety data sheet and is not suitable for the distribution in a specific country.

**Further Information**

according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Skin Sens. 1; H317  
 Carc. 2; H351  
 STOT RE 1; H372  
 Aquatic Chronic 3; H412

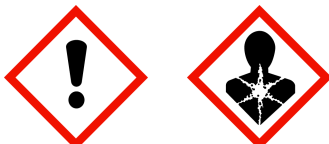
Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard components for labelling**

nickel powder

**Signal word:**

Danger

**Pictograms:****Hazard statements**

H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 2 of 10

H372 Causes damage to organs through prolonged or repeated exposure.  
 H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing and eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P501 Dispose of contents/container to an appropriate recycling or disposal facility.

**2.3. Other hazards**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
 This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.  
 This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7440-02-0	nickel powder			> 50 %
	231-111-4	028-002-01-4		
	Carc. 2, Skin Sens. 1, STOT RE 1, Aquatic Chronic 3; H351 H317 H372 H412			
7440-47-3	Chromium			10 - 25 %
	231-157-5			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

In case of persistent symptoms, consult a doctor/physician. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid dust generation. First aider: Pay attention to self-protection!

**After inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Where appropriate artificial ventilation. Seek medical help.

**After contact with skin**

Rinse skin with water. Change contaminated clothing. Consult a doctor if symptoms persist.  
 The melted product can cause severe burns. After skin contact with melted product: 1. quickly cool with water (not ice), 2. do not pull off melted product from skin, 3. burns caused by the melted product must be treated medically.

**After contact with eyes**

In case of contact with eyes, rinse immediately (and under protection of the uninjured eye) with plenty of flowing water for 10 minutes, holding eyelids wide apart. Remove contact lenses. Consult an ophthalmologist.  
 The melted product can cause severe burns. Rinse immediately carefully and thoroughly with eye-bath or

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 3 of 10

water. Call a physician immediately.

**After ingestion**

Rinse mouth immediately and drink plenty of water. Seek medical advice. Do NOT induce vomiting. Call a physician immediately.

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

May cause an allergic skin reaction. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure.

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

Treat symptomatically.  
Respiratory or skin sensitisation.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

Chromium: Carbon dioxide (CO<sub>2</sub>).

**5.2. Special hazards arising from the substance or mixture**

The product is non-flammable. Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Carbon oxides

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Wear personal protection equipment. Do not inhale explosion and combustion gases.

**Additional information**

Contaminated fire-fighting water must be collected separately. Dispose of waste according to applicable legislation.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Avoid dust generation. Provide adequate ventilation. Avoid contact with skin and eyes. Wear personal protection equipment. Use appropriate respiratory protection.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**6.3. Methods and material for containment and cleaning up****For containment**

Avoid generation of dust.

**For cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

**6.4. Reference to other sections**

Personal protection equipment: see section 8

Handling and storage: see section 7

For waste disposal see section 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

When using do not eat, drink or smoke. Use personal protection equipment. Avoid contact with eyes and skin. Take off contaminated clothing and wash it before reuse. Do not breathe dust.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 4 of 10

**Advice on protection against fire and explosion**

Contaminated fire-fighting water must be collected separately.

**Advice on general occupational hygiene**

Wash hands before breaks and after work. Do not eat, drink, smoke or sneeze at the workplace. Keep away from food, drink and animal feedingstuffs.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep only in the original container in a cool, well-ventilated place.

**Hints on joint storage**

Store separately from foodstuff.

**7.3. Specific end use(s)**

Welding powder. For industrial purposes only.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
7429-90-5	Aluminium metal (Respirable Fraction)	-	1		TWA (8 h)	
7440-47-3	Chromium metal	-	2		TWA (8 h)	
7440-02-0	Nickel	-	0.5		TWA (8 h)	
7440-25-7	Tantalum	-	5		TWA (8 h)	
		-	10		STEL (15 min)	

**Biological limit values**

CAS No	Substance	Parameter	Value	Test material	Sampling time
7440-02-0	Nickel	Ni	3 µg/L	Urine	After several consecutive working shifts
7440-47-3	Chromium	Total chromium	25 µg/L	Urine	End of shift at end of workweek

**8.2. Exposure controls****Appropriate engineering controls**

Ensure adequate ventilation. In case of application in interior spaces proper ventilation/exhaustion must be provided.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tightly fitting safety glasses with side shields.

**Hand protection**

Tested protective gloves are to be worn: For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The glove material has to be impermeable and resistant to the product / the substance / the mixture. When selecting the glove material, observe breakthrough times, permeation rates and degradation.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 5 of 10

Suitable material: NBR (Nitrile rubber).  
 Coating thickness: 0,11 mm  
 penetration time (maximum wearing period): 480 min

**Skin protection**

Full cover clothing covering arms and legs.

**Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Use suitable breathing apparatus.

Full-/half-/quarter-face masks (EN 136/140), P2, P3, FFP2, FFP3

**Environmental exposure controls**

Do not allow to enter into soil/subsoil. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	solid (Powder)
Colour:	metallic
Odour:	odourless
Melting point/freezing point:	965 - 1040 °C
Boiling point or initial boiling point and boiling range:	no data available
Flammability:	no data available
Lower explosion limits:	no data available
Upper explosion limits:	no data available
Flash point:	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
pH-Value:	no data available
Viscosity / kinematic:	no data available
Water solubility:	insoluble
Dissolution rate:	no data available
Partition coefficient n-octanol/water:	no data available
Dispersion stability:	no data available
Vapour pressure:	no data available
Density:	8,44 g/cm <sup>3</sup>
Relative density:	no data available
Bulk density:	no data available
Relative vapour density:	no data available
Particle characteristics:	no data available

**9.2. Other information****Information with regard to physical hazard classes**

Explosive properties

not explosive.

Self-ignition temperature

Solid:

no data available

Gas:

no data available

Oxidizing properties

Not oxidising.

**Other safety characteristics**

Sublimation point:

no data available

Softening point:

no data available

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 6 of 10

Pour point: no data available

Viscosity / dynamic: no data available

**Further Information**

no data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No dangerous reactivity under regular conditions.

**10.2. Chemical stability**

The product is stable when stored and handled appropriately.

**10.3. Possibility of hazardous reactions**

No dangerous reactions to be expected if used properly.

**10.4. Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5. Incompatible materials**

Oxidizing agents, strong. Acids.

**10.6. Hazardous decomposition products**

When used properly no hazardous products of decomposition are expected. Thermal decomposition can lead to the escape of irritating gases and vapours.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

May cause an allergic skin reaction. (nickel powder)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing cancer. (nickel powder)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Causes damage to organs through prolonged or repeated exposure. (nickel powder)

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

**SECTION 12: Ecological information**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 7 of 10

**12.1. Toxicity**

Harmful to aquatic life with long lasting effects.

**12.2. Persistence and degradability**

No further data available.

**12.3. Bioaccumulative potential**

No further data available.

**12.4. Mobility in soil**

No further data available.

**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. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Dispose of waste according to applicable legislation.

**Contaminated packaging**

Dispose of waste according to applicable legislation.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 8 of 10

No special precautions known.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Information according to Directive

Not subject to 2012/18/EU (SEVESO III)

2012/18/EU (SEVESO III):

**Additional information**

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer: not applicable

Regulation (EC) No. 648/2004 [Detergents regulation]: not applicable

Regulation (EC) No 2019/1021 on persistent organic pollutants: not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council concerning the export and import of dangerous chemicals: This mix contains no chemicals that are subject to the export notification procedures (annex 1).

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

Water hazard class (D):

1 - slightly hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 1,16.

Version 1,00 - 07.03.2024 - first creation

Version 1,01 - 26.03.2024 - Adjustments in sections 1



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 9 of 10

**Abbreviations and acronyms**

Water-react: Substance and mixture which, in contact with water, emits flammable gas  
 Flam. Sol: Flammable solid  
 Skin Sens: Skin sensitisation  
 Carc: Carcinogenicity  
 STOT RE: Specific target organ toxicity - repeated exposure  
 Aquatic Chronic: Chronic aquatic hazard  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 BImSchV (Fed.Imm.Prot.Act): Directive on the Implementation of the Federal Immission Protection Act  
 CAS: Chemical Abstracts Service  
 DIN: Norm of the Deutsche Institut für Normung (German Institute for Standardization)  
 EC: Effective Concentration  
 EG: European Community (Europäische Gemeinschaft)  
 EN: European Norm  
 IATA: International Air Transport Association  
 IBC Code: International Code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk  
 ICAO: International Civil Aviation Organization  
 IMDG: International Maritime Code for Dangerous Goods  
 ISO: Norm of the International Standards Organization  
 CLP: Classification, Labeling, Packaging  
 IUCLID: International Uniform Chemical Information Database  
 LC: Lethal concentration  
 LD: Lethal dose  
 log Kow: Octanol/water partition coefficient  
 MARPOL: Maritime Pollution Convention = Convention for the Prevention of Maritime Pollution from Ships  
 OECD: Organisation for Economic Co-operation and Development  
 PBT: Persistent, bio-cumulative, toxic  
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail  
 TRGS: Technische Regeln für Gefahrstoffe  
 UN: United Nations  
 VOC: Volatile Organic Compounds  
 vPvB: very persistent and very bio-cumulative  
 VwVwS: Administrative Regulation for Water Pollutants  
 WGK: German Water Hazard Class  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 DNEL: Derived No Effect Level  
 PNEC: Predicted No Effect Concentration  
 TLV: Threshold Limiting Value  
 STOT: Specific Target Organ Toxicity  
 AwSV: Ordinance on Installations for Handling Substances Hazardous to Water

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

Classification	Classification procedure
Skin Sens. 1; H317	Calculation method
Carc. 2; H351	Calculation method
STOT RE 1; H372	Calculation method
Aquatic Chronic 3; H412	Calculation method

**Relevant H and EUH statements (number and full text)**

H317 May cause an allergic skin reaction.  
 H351 Suspected of causing cancer.  
 H372 Causes damage to organs through prolonged or repeated exposure.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**JK7184 powder**

Revision date: 26.03.2024

Product code: DWS-012

Page 10 of 10

H412 Harmful to aquatic life with long lasting effects.

**Further Information**

The information given in this safety data sheet is to describe the product's safety regulations. It is not for guaranteeing certain characteristics and is based on today's knowledge. The safety data sheet was generated upon information of pre-suppliers by:

assesio AG, Ottostraße 1, 63741, Aschaffenburg, Germany

Phone: +49 (0)6021 - 1 50 86-0, Fax: +49 (0)6021 - 1 50 86-77, E-Mail: eu-sds@assesio.eu, www.assesio.eu

---

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*