



# CEWELD Powder HVOF DUR 12 (45-15)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 14-10-2025 Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : CEWELD Powder HVOF DUR 12 (45-15)  
Other means of identification : EN ISO 14232-1 Co-Cr-W 54/30/8

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

##### Relevant identified uses

Main use category : Professional use, Industrial use  
Use of the substance/mixture : Hardfacing, Wear-Resistance, Corrosion-Resistance

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

Certilas Nederland B.V.  
Gloxinialaan 2  
NL 6851 TG Huissen  
Nederland  
[info@certilas.com](mailto:info@certilas.com), <https://certilas.com/>

#### 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Brussels	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)
Netherlands	Nationaal Vergiftigingen Informatie Centrum (NVIC)	Huispostnummer Q03.2.315 Postbus 85500 3508 GA Utrecht	+31 88 755 80 00	Only for the purpose of informing medical personnel in cases of acute intoxications (24 hours a day, 7 days a week)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Respiratory sensitisation, Category 1 H334  
Skin sensitisation, Category 1 H317  
Germ cell mutagenicity, Category 2 H341  
Carcinogenicity, Category 1B H350  
Reproductive toxicity, Category 1B H360F  
Specific target organ toxicity – Repeated exposure, Category 2 H373  
Hazardous to the aquatic environment – Chronic Hazard, H413  
Category 4  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

May cause cancer. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause long lasting harmful effects to aquatic life.

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### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

Signal word (CLP)

: Danger

Contains

: nickel; cobalt

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.
- H360F - May damage fertility.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H413 - May cause long lasting harmful effects to aquatic life.

Precautionary statements (CLP)

- : P201 - Obtain special instructions before use.
- P261 - Avoid breathing fume, dust.
- P280 - Wear respiratory protection, protective gloves, protective clothing, eye protection.
- P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308+P313 - IF exposed or concerned: Get medical advice/attention. medical advice.
- P342+P311 - If experiencing respiratory symptoms: Call doctor, a POISON CENTER.

Extra phrases

: Restricted to professional users.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Tungsten (7440-33-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Tungsten (7440-33-7)

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	Tungsten (7440-33-7)

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### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
cobalt substance with national workplace exposure limit(s) (BE, NL)	CAS-No.: 7440-48-4 EC-No.: 231-158-0 EC Index-No.: 027-001-00-9 REACH-no: 01-2119517392-44	50 – 60	Carc. 1B, H350 Muta. 2, H341 Repr. 1B, H360F Resp. Sens. 1, H334 Skin Sens. 1, H317 Aquatic Chronic 4, H413
Chromium substance with national workplace exposure limit(s) (BE, NL); substance with a Community workplace exposure limit	CAS-No.: 7440-47-3 EC-No.: 231-157-5	30 – 40	Not classified
Tungsten substance with national workplace exposure limit(s) (BE)	CAS-No.: 7440-33-7 EC-No.: 231-143-9	5 – 10	Flam. Sol. 1, H228 Self-heat. 2, H252
nickel substance with national workplace exposure limit(s) (BE); substance with a Community workplace exposure limit (Note S)(Note 7)	CAS-No.: 7440-02-0 EC-No.: 231-111-4 EC Index-No.: 028-002-00-7	2 – 3	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Chronic 3, H412
Silicon substance with national workplace exposure limit(s) (BE)	CAS-No.: 7440-21-3 EC-No.: 231-130-8	1 – 2	Not classified

Note 7: Alloys containing nickel are classified for skin sensitisation when the release rate of 0,5 µg Ni/cm<sup>2</sup>/week, as measured by the European Standard reference test method EN 1811, is exceeded.

Note S: This substance may not require a label according to Article 17 (see Section 1.3 of Annex I) (Table 3).

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.
Chronic symptoms	: May damage fertility or the unborn child.

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

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.  
Unsuitable extinguishing media : Do not use a heavy water stream.

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

Fire hazard : Presents no particular fire or explosion hazard.  
Explosion hazard : No direct explosion hazard.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Absorb spillage to prevent material damage.

##### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.

##### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Evacuate unnecessary personnel.

#### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.  
Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.  
Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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Hygiene measures	: Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
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### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store locked up.
Heat and ignition sources	: Keep away from heat and direct sunlight.
Packaging materials	: Store always product in container of same material as original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### National occupational exposure and biological limit values

Chromium (7440-47-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Chromium metal
IOEL TWA	2 mg/m <sup>3</sup>
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Belgium - Occupational Exposure Limits	
Local name	Chrome métal et composés inorganiques (à l'exception des composés Cr VI) # Chroom (metaal) en anorganische verbindingen (met uitzondering van Cr VI verbindingen )
OEL TWA	0,5 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Netherlands - Occupational Exposure Limits	
Local name	Chroom
Grenswaarde TGG 8H (mg/m <sup>3</sup> )	0,5 mg/m <sup>3</sup> (metallic)
Regulatory reference	Arbeidsomstandighedenregeling 2024
Tungsten (7440-33-7)	
Belgium - Occupational Exposure Limits	
Local name	Tungstène (composés insolubles) (en W) # Wolfraam (onoplosb. verb. als W)
OEL TWA	5 mg/m <sup>3</sup> 1 mg/m <sup>3</sup>
OEL STEL	10 mg/m <sup>3</sup> 3 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Silicon (7440-21-3)	
Belgium - Occupational Exposure Limits	
Local name	Silicium # Silicium
OEL TWA	10 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023

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### nickel (7440-02-0)

#### EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Nickel metal
IOEL TWA	0,005 mg/m <sup>3</sup> (respirable fraction)
Remark	(Year of adoption 2011)
Regulatory reference	SCOEL Recommendations

#### EU - Biological Limit Value (BLV)

Local name	Nickel and nickel compounds
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs

#### Belgium - Occupational Exposure Limits

Local name	Nickel (métal) # Nikkel (metaal)
OEL TWA	0,01 mg/m <sup>3</sup> (fraction alvéolaire) (à partir du 18 janvier 2025) # (inadembare fractie) (vanaf 18 januari 2025) 0,05 mg/m <sup>3</sup> (fraction inhalable) (à partir du 18 janvier 2025) # (inhaleerbare fractie) (vanaf 18 januari 2025)
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023

### cobalt (7440-48-4)

#### Belgium - Occupational Exposure Limits

Local name	Cobalt métal (fumées et poussières) (en Co) # Kobaltmetaal (stof en rook) als Co
OEL TWA	0,02 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023

#### Netherlands - Occupational Exposure Limits

Local name	Kobalt
Grenswaarde TGG 8H (mg/m <sup>3</sup> )	0,02 mg/m <sup>3</sup> (stof en rook) (als Co)
Regulatory reference	Arbeidsomstandighedenregeling 2024

## 8.2. Exposure controls

### Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment. Gloves.

#### Personal protective equipment symbol(s):



### Eye and face protection

#### Eye protection:

Safety glasses. DIN EN 166

### Skin protection

#### Skin and body protection:

Wear suitable protective clothing. ISO 13688

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### Hand protection:

Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF ISO 374-1 or equivalent)

### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

### Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: According to product specification.
Appearance	: Powder.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: > 1300 °C
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non flammable.
Explosive properties	: The product is not explosive, but the formation of explosive dust/air mixtures is possible.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 8 – 9
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

#### Tungsten (7440-33-7)

LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	5,4 mg/l/4h

#### Silicon (7440-21-3)

LD50 oral rat	3160 mg/kg (Source: NLM_CIP)
LD50 oral	3160 mg/kg

#### nickel (7440-02-0)

LD50 oral rat	> 9000 mg/kg (Source: EU_RAR)
LC50 Inhalation - Rat	> 10,2 mg/l (Exposure time: 1 h Source: EU_RAR)

#### cobalt (7440-48-4)

LD50 oral rat	6171 mg/kg (Source: NLM_CIP)
LC50 Inhalation - Rat	< 0,05 mg/l/4h

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.

#### Chromium (7440-47-3)

IARC group	3 - Not classifiable
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#### nickel (7440-02-0)

IARC group	2B - Possibly carcinogenic to humans
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#### cobalt (7440-48-4)

IARC group	2B - Possibly carcinogenic to humans, 2A - Probably carcinogenic to humans
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Reproductive toxicity : May damage fertility.  
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)  
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

#### nickel (7440-02-0)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

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### CEWELD Powder HVOF DUR 12 (45-15)

Viscosity, kinematic	Not applicable
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### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: May cause long lasting harmful effects to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: May cause long lasting harmful effects to aquatic life.

### nickel (7440-02-0)

LC50 - Fish [1]	> 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio Source: IUCLID)
LC50 - Fish [2]	1,3 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static] Source: EPA)
EC50 - Crustacea [1]	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 - Crustacea [2]	1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 72h - Algae [1]	0,18 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 96h - Algae [1]	0,174 – 0,311 mg/l (Species: Pseudokirchneriella subcapitata [static])

### cobalt (7440-48-4)

LC50 - Fish [1]	> 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static] Source: IUCLID)
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### 12.2. Persistence and degradability

### CEWELD Powder HVOF DUR 12 (45-15)

Persistence and degradability	Biodegradability in water: no data available.
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### Chromium (7440-47-3)

Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
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### Tungsten (7440-33-7)

Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
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### Silicon (7440-21-3)

Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
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### nickel (7440-02-0)

Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
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### cobalt (7440-48-4)

Persistence and degradability	Rapidly degradable
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### 12.3. Bioaccumulative potential

### Tungsten (7440-33-7)

Bioaccumulative potential	Not established.
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### cobalt (7440-48-4)

BCF - Fish [1]	(no bioaccumulation)
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### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Tungsten (7440-33-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Tungsten (7440-33-7)

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

#### Tungsten (7440-33-7)

Other information	Avoid release to the environment.
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.
HP Code	: HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence HP11 - "Mutagenic:" waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell. HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
<b>14.1. UN number or ID number</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>			
Not applicable	Not applicable	Not applicable	Not applicable

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ADR	IMDG	IATA	RID
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

## 14.6. Special precautions for user

### Overland transport

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

### Rail transport

Not applicable

## 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-Regulations

#### REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
27.	nickel	Nickel and its compounds
28.	cobalt	Substances which are classified as carcinogen category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 1 or Appendix 2, respectively.
30.	cobalt	Substances which are classified as reproductive toxicant category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 5 or Appendix 6, respectively.

#### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

#### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

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### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

### Council Regulation (EC) for the control of dual-use items

Contains substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items: Tungsten powder (7440-33-7), Nickel powder (7440-02-0).

### Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### National regulations

#### Netherlands

ABM category	: Not determined
SZW-lijst van kankerverwekkende stoffen	: cobalt is listed
SZW-lijst van mutagene stoffen	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: None of the components are listed
SZW-lijst van reprotoxische stoffen –	: cobalt is listed
Vruchtbbaarheid	
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: None of the components are listed

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration

# CEWELD Powder HVOF DUR 12 (45-15)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Data sources

: ECHA (European Chemicals Agency).

Other information

: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. REACH Disclaimer:

This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number).

Full text of H- and EUH-statements:	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Flam. Sol. 1	Flammable solids, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Resp. Sens. 1	Respiratory sensitisation, Category 1
Self-heat. 2	Self-Heating Substances and Mixtures, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
H228	Flammable solid.

# CEWELD Powder HVOF DUR 12 (45-15)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
H252	Self-heating in large quantities; may catch fire.
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.
H351	Suspected of causing cancer.
H360F	May damage fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
Muta. 2	H341	Calculation method
Carc. 1B	H350	Calculation method
Repr. 1B	H360F	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Chronic 4	H413	Calculation method

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