

# MATERIAL SAFETY DATA SHEET

in accordance with Directive 2001/58/EC

Issued: 10/2008

Issue 0

## 1. Product and Company Identification

Product: BOHLER L718

Manufacturer: BÖHLER EDELSTAHL GmbH & Co KG  
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## 2. Composition / Component information

Alloys in solid condition.

Chemical composition	C	Cr	Mo	Co	Ti	Al	Nb	Fe	B
(Average values in %):	0.02	18.0	3.0	≤0.8	0.95	0.5	5.3	18.5	0.003
Remainder:	Nickel								

## 3. Hazards identification

### Risks to persons or Environment

Nickel

Hazard category: Xn, low toxic



R40 Limited evidence of a carcinogenic effect. Irreversible damage possible.

R43 May cause sensitisation by skin contact.

S22 Do not breathe dust.

S36 Wear suitable protective clothing.

## 4. First aid measures

Ingestion: If swallowed, seek medical advice.

Inhalation: not applicable (no inhalation possible)

Eyes: not applicable

Skin: not applicable

Wounds: Clean carefully and remove all remaining alloy particles.

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## 5. Fire fighting measures

not applicable (material is not flammable)

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## 6. Accidental release measures

Person related precautions: not applicable

Environmental precautions: not applicable

Cleaning/absorption

procedures: not applicable

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## 7. Handling and storage

Handling: No protective measures required in the delivered condition.  
Perform dust creating processes only with preventive measures.  
(Personal/ Environmental protection.)

Storage: No protective measures required in the delivered condition.

Check local rules and regulations especially for Nickel.

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## 8. Exposure controls / Personal protection

During dust creating processes adequate ventilation should be provided.

Respiratory protection: Use respiratory protection against breathable dust.  
Respirators (if limit is exceeded.)

Hand protection: Avoid repeated and continuous skin contact,  
use suitable gloves or skin protection, to avoid sensitization.

Eye protection: not applicable. Use safety goggles when performing grinding  
operations.

Personal hygiene: Wash skin thoroughly.

Components with workplace related limits:

Nickel	CAS-Nr. 7440-02-0	TRK-value: 0.5 mg/m <sup>3</sup>
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## 9. Physical and chemical properties

Shape: solid

Color: metallic

Density at 20°C (approx.): 8.6 g/cm<sup>3</sup>

Smell: odourless

Explosivity: not applicable

Solubility in water: insoluble

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## 10. Stability and reactivity

Thermal decomposition: No decomposition at specified use.

Hazardous reactions: On contact with acids, hydrogen can be generated and form explosive gas mixtures.

During welding operations and also during treatment with oxidizing acids or oxidizing salt melts, hexavalent Chromium can be generated. Hexavalent Chromium has the classification Carc.Cat.2; R49, R43, N; R50-53.

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## 11. Toxicological information

### Acute hazards

Ingestion: Vomiting and diarrhoea, digestive tract irritation.

Inhalation: Breathable dusts can cause respiratory irritation.

Skin contact: No toxic hazard.

### Chronic hazards

Inhalation: Nickel in form of breathable dusts is classified as causing cancer. That means that this substance is a cause for concern due to possible cancerous effects for humans.

Skin contact: Repeated and continuous skin contact with metallic Nickel can cause sensitisation and allergic reactions.

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## 12. Ecological information

No special measurements required.

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## 13. Disposal considerations

Alloy residues normally should be recycled.

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## 14. Transport information

ADR/RID and

GGVS/GGVE : No dangerous goods in the sense of the mentioned regulations.

IMDG/GGVSee: No dangerous goods in the sense of the mentioned regulations.

ICAO/TI und IATA-DRG: No dangerous goods in the sense of the mentioned regulations.

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## 15. Regulatory information

### Classification in accordance with EU- regulations:

Nickel: Xn, low toxic

### Risk phrases:

R40 Limited evidence of a carcinogenic effect. Irreversible damage possible.

R43 May cause sensitisation by skin contact.

### Safety phrases:

S22 Do not breathe dust.

S36 Wear suitable protective clothing.

**Identification:** No identification required.

No obligation for identification exists for these alloys, because there is no acute health hazard for humans in the delivered condition and at specified use.

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## 16. Other information

The information and data in this safety data sheet are based upon our current knowledge. They shall not be binding and shall, in case of contract conclusion, not be regarded as warranted.

These data shall merely constitute average values that become binding only if explicitly specified in a contract concluded with us.

The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.

Our company has certificates according to ISO 9001 and ISO 14001.

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