

Trade name: EOS NickelAlloy IN718

Product no.: 9011-0020 / 9111-0020

Current version : 7.0.0, issued: 07.02.2024

Replaced version: 6.1.0., issued: 27.07.2023

Region: GB

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

1.1 Product identifier

Trade name

EOS NickelAlloy IN718

UFI:

74K9-VPTW-SC8S-UYXD

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

Relevant identified uses of the substance or mixture

Industrial use

Heat resistant nickel alloy for DMLS processes in EOS M systems

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Electro Optical Systems Finland Oy

Lemminkäisenkatu 36

20520 Turku

FINLAND

Telephone no. +358 (0) 20 765 9144 / 9147

Information provided by / telephone

+49 (0) 89 / 893 36 – 0 or +358 (0) 20 765 9144 / 9140

Advice on Safety Data Sheet

MSDSInfo@eos.info

1.4 Emergency telephone number

EU:

+49 (0) 89 / 893 36 - 0 (8 am - 5 pm)

+49 (0) 89 / 893 36 - 151 (Mo - Thu: 9 am - 12 pm & 1 - 6 pm; Fr: 1 - 4 pm) (CET)

USA:

+1 877 388 7916 (GMT -4)

Asia:

+65 6430 0463 (GMT +8)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Aquatic Chronic 3; H412

Carc. 1B; H350

Skin Sens. 1; H317

STOT RE 1; H372

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms

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GHS07



GHS08

Signal word

Danger

Hazardous component(s) to be indicated on label:nickel powder; [particle diameter < 1 mm]
cobalt**Hazard statement(s)**

H317	May cause an allergic skin reaction.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P202	Do not handle until all safety precautions have been read and understood.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P308+P313	IF exposed or concerned: Get medical advice/attention.

UFI:

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Supplemental label elements

"Restricted to professional users"

2.3 Other hazards

Dust can form an explosive mixture with air. This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Hazardous ingredients**

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	nickel powder; [particle diameter < 1 mm]			
	7440-02-0 231-111-4 028-002-01-4 01-2119438727-29	Aquatic Chronic 3; H412 Carc. 2; H351 Skin Sens. 1; H317 STOT RE 1; H372**	50.00 - 55.00	wt%
2	chromium			

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	7440-47-3 231-157-5 - 01-2119485652-31	-	17.00 - 21.00	wt%
3	copper			
	7440-50-8 231-159-6 - 01-2119480154-42	Aquatic Acute 1; H400 Aquatic Chronic 2; H411	< 0.24	wt%
4	cobalt			
	7440-48-4 231-158-0 027-001-00-9 01-2119517392-44	Acute Tox. 4; H302 Skin Sens. 1; H317 Resp. Sens. 1; H334 Eye Irrit. 2; H319 Muta. 2; H341 Carc. 1B; H350 Repr. 1B; H360F Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 0.24	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(*, **, ***, ****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
3	-	-	M = 1	-
4	-	-	M = 10	M = 1

Acute toxicity estimate (ATE) values			
No	oral	dermal	inhalative
4	550 mg/kg bodyweight		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off with water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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Dry chemical extinguisher; Sand

Unsuitable extinguishing media

Water; Foam; Carbon dioxide

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO); nickel monoxide; chrome oxides

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Run-off water from fire fighting must not be discharged into drains or enter surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations". Avoid raising dust.

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Avoid dust formation.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale dust. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion

Dust can form an explosive mixture with air. Keep away from sources of ignition and flames.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original. Protect from heat and direct sunlight.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

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8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
List of approved workplace exposure limits (WELs) / EH40			
Nickel & its inorganic compounds (except nickel tetracarbonyl): water soluble nickel compounds (as Ni)			
	WEL long-term (8-hr TWA reference period)	0.1	mg/m ³
	Comments	Sk, Carc (nickel oxides and sulphides) Sen (nickel sulphate)	
List of approved workplace exposure limits (WELs) / EH40			
Nickel & water insoluble compounds nickel compounds (as Ni)			
	WEL long-term (8-hr TWA reference period)	0.5	mg/m ³
	Comments	Sk, Carc (nickel oxides and sulphides) Sen (nickel sulphate)	
2	chromium	7440-47-3	231-157-5
List of approved workplace exposure limits (WELs) / EH40			
Chromium			
	WEL long-term (8-hr TWA reference period)	0.5	mg/m ³
2006/15/EC			
Chromium Metal, Inorganic Chromium (II) Compounds and Inorganic Chromium (III) Compounds (insoluble)			
	WEL long-term (8-hr TWA reference period)	2	mg/m ³
3	copper	7440-50-8	231-159-6
List of approved workplace exposure limits (WELs) / EH40			
Copper			
	fume		
	WEL long-term (8-hr TWA reference period)	0.2	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
Copper			
	dusts and mists		
	Cu		
	WEL short-term (15 min reference period)	2	mg/m ³
	WEL long-term (8-hr TWA reference period)	1	mg/m ³
4	cobalt	7440-48-4	231-158-0
List of approved workplace exposure limits (WELs) / EH40			
Cobalt & cobalt compounds (as Co)			
	WEL long-term (8-hr TWA reference period)	0.1	mg/m ³
	Comments	Carc (cobalt dichloride and sulphate), Sen	

DNEL, DMEL and PNEC values**DNEL values (worker)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	nickel powder; [particle diameter < 1 mm]			7440-02-0 231-111-4	
	dermal	Long term (chronic)	local	0.035	mg/cm ²
	inhalative	Long term (chronic)	systemic	0.05	mg/m ³
	inhalative	Long term (chronic)	local	0.05	mg/m ³
	inhalative	Short term (acut)	local	11.9	mg/m ³
2	copper			7440-50-8 231-159-6	
	dermal	Short term (acut)	systemic	273	mg/kg/day
	dermal	Long term (chronic)	systemic	137	mg/kg/day
	inhalative	Long term (chronic)	local	1	mg/m ³
	inhalative	Short term (acut)	local	1	mg/m ³
3	cobalt			7440-48-4 231-158-0	
	dermal	Long term (chronic)	systemic	7.23	mg/kg bw/day

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	inhalative	Long term (chronic)	systemic	54.1	µg/m ³
	inhalative	Long term (chronic)	local	40	µg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	nickel powder; [particle diameter < 1 mm]			7440-02-0 231-111-4	
	oral	Long term (chronic)	systemic	0.011	mg/kg/day
	oral	Short term (acut)	systemic	0.37	mg/kg/day
	dermal	Long term (chronic)	local	0.035	mg/cm ²
	inhalative	Long term (chronic)	systemic	60	ng/m ³
	inhalative	Long term (chronic)	local	60	ng/m ³
	inhalative	Short term (acut)	local	0.8	mg/m ³
2	copper			7440-50-8 231-159-6	
	oral	Long term (chronic)	systemic	0.041	mg/kg/day
	dermal	Short term (acut)	systemic	273	mg/kg/day
	dermal	Long term (chronic)	systemic	137	mg/kg/day
	inhalative	Short term (acut)	local	1	mg/m ³
	inhalative	Long term (chronic)	local	1	mg/m ³
3	cobalt			7440-48-4 231-158-0	
	oral	Long term (chronic)	systemic	8.9	mg/kg bw/day
	dermal	Long term (chronic)	systemic	3.27	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	8.1	µg/m ³
	inhalative	Long term (chronic)	local	6.3	µg/m ³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	nickel powder; [particle diameter < 1 mm]		7440-02-0 231-111-4	
	water	fresh water	7.1	µg/L
	water	marine water	8.6	µg/L
	water	fresh water sediment	109	mg/kg dry weight
	water	marine water sediment	109	mg/kg dry weight
	soil	-	29.9	mg/kg dry weight
	sewage treatment plant	-	0.33	mg/L
	secondary poisoning	-	0.12	mg/kg food
2	copper		7440-50-8 231-159-6	
	water	fresh water	6.3	µg/L
	water	marine water	5.2	µg/L
	water	fresh water sediment	87	mg/kg
	water	marine water sediment	676	mg/kg
	soil	-	65	mg/kg
	sewage treatment plant	-	230	µg/L
3	cobalt		7440-48-4 231-158-0	
	water	fresh water	1.06	µg/L
	water	marine water	2.36	µg/L
	water	fresh water sediment	53.8	mg/kg dry weight
	water	marine water sediment	69.8	mg/kg dry weight
	soil	-	10.9	mg/kg dry weight

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sewage treatment plant	-	0.37	mg/L
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8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. Respirator with particulate filter

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material Nitrile rubber, butyl rubber

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation	
solid	
Form	
Powder	
Colour	
grey	
Odour	
odourless	
pH value	
No data available	
Boiling point / boiling range	
No data available	
Melting point/freezing point	
Value	1350 - 1450 °C
Decomposition temperature	
No data available	
Flash point	
Comments	non-flammable
Ignition temperature	
No data available	
Oxidising properties	
not oxidizing	

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Explosive properties	
not explosive	
Flammability	
No data available	
Lower explosion limit	
No data available	
Upper explosion limit	
No data available	
Vapour pressure	
No data available	
Relative vapour density	
No data available	
Relative density	
No data available	
Density	
Value	3.8 - 4.5 g/cm ³
Reference temperature	20 °C
Solubility	
No data available	
Partition coefficient n-octanol/water (log value)	
No data available	
Kinematic viscosity	
No data available	
Particle characteristics	
Comments	10-53 µm

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Hydrogen gas is released upon contact with mineral acids and may form explosive compounds with air. May form toxic gaseous nickel carbonyl under certain conditions (high pressure, high carbon monoxide concentration).

10.5 Incompatible materials

strong oxidizing agents; Mineral acids; strong bases; strong acids

10.6 Hazardous decomposition products

None if stored, handled and transported properly. In case of fire: see section 5.

SECTION 11: Toxicological information

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

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Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
LD50	>	9000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
2	cobalt	7440-48-4	231-158-0
LD50	appr.	550	mg/kg bodyweight
Species	rat		
Method	OECD 425		
Source	ECHA		

Acute dermal toxicity			
No data available			

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	copper	7440-50-8	231-159-6
LC50	>	5.11	mg/l
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Method	OECD 436		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
2	cobalt	7440-48-4	231-158-0
Method	OECD 439		
Source	ECHA		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		
2	cobalt	7440-48-4	231-158-0
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
Route of exposure	Skin		
Species	Human		
Source	manufacturer		
Evaluation	sensitizing		
Evaluation/classification	Based on available data, the classification criteria are met.		

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.

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1	copper	7440-50-8	231-159-6
Type of examination	in vitro gene mutation study in bacteria		
Species	Salmonella typhimurium TA98, TA100, TA102, TA1535, TA1537		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	oral		
Type of examination	In vivo mammalian somatic cell study: cytogenicity / erythrocyte micronucleus		
Species	mouse		
Method	EU Method B.12		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	copper	7440-50-8	231-159-6
Route of exposure	oral		
Type of examination	Two-Generation Reproduction Toxicity Study		
Species	rat		
Method	OECD 416		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	cobalt	7440-48-4	231-158-0
Route of exposure	oral		
NOAEL		30	mg/kg bw/d
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are met.		

Carcinogenicity			
No data available			

STOT - single exposure			
No data available			

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
Route of exposure	oral		
NOAEL		2.2	mg/kg
Species	rat		
Method	OECD 451		
Source	manufacturer		
Evaluation/classification	Based on available data, the classification criteria are met.		

Aspiration hazard			
No data available			

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.

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1	copper	7440-50-8	231-159-6
LC50		0.035	mg/l
Duration of exposure		96	h
Species	Danio rerio		
Method	ISO TC 147/SC 5/WG3 (secretariat 6)		
Source	ECHA / Read across		

Toxicity to fish (chronic)			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
NOEC		21.7	mg/l
Duration of exposure		28	day(s)
Species	Cyprinodon variegatus		
Method	ASTM 2004, APHA 1998		
Source	ECHA		
2	copper	7440-50-8	231-159-6
NOEC		0.023	mg/l
Duration of exposure		7	day(s)
Species	Pimephales promelas		
Method	OECD 204		
Source	ECHA		

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	copper	7440-50-8	231-159-6
EC50		0.034	mg/l
Duration of exposure		0.792	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
NOEC		152.6	µg/l
Duration of exposure		48	h
Species	Dendraster excentricus		
Method	ASTM E1563-95		
Source	ECHA		
2	copper	7440-50-8	231-159-6
NOEC		0.032	mg/l
Duration of exposure		7	day(s)
Species	Daphnia magna		
Method	OECD 211		

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4
EC50		>	µg/l
Duration of exposure		81.5	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		
2	cobalt	7440-48-4	231-158-0
EC50		144	µg/l
Duration of exposure		72	h
Species	Raphidocelis subcapitata		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)			
No	Substance name	CAS no.	EC no.

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1	cobalt	7440-48-4	231-158-0
NOEC		32.2	µg/l
Duration of exposure		72	h
Species	Raphidocelis subcapitata		
Method	OECD 201		
Source	ECHA		

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment**Results of PBT and vPvB assessment**

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information**Other information**

Do not discharge product unmonitored into the environment.

Do not discharge into drains or waters and do not dispose of in public landfills.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 UN number or ID number**

Not classified as dangerous in the meaning of transport regulations.

14.2 UN proper shipping name

Not classified as dangerous in the meaning of transport regulations.

14.3 Transport hazard class(es)

Not classified as dangerous in the meaning of transport regulations.

14.4 Packing group

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Not classified as dangerous in the meaning of transport regulations.

14.5 Environmental hazards

Not classified as dangerous in the meaning of transport regulations.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	chromium	7440-47-3	231-157-5	75
2	cobalt	7440-48-4	231-158-0	28, 30, 75
3	copper	7440-50-8	231-159-6	75
4	nickel powder; [particle diameter < 1 mm]	7440-02-0	231-111-4	27, 75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer.
H360F	May damage fertility.

EU safety data sheet



Trade name: EOS NickelAlloy IN718

Product no.: 9011-0020 / 9111-0020

Region: GB

H400

Very toxic to aquatic life.

H410

Very toxic to aquatic life with long lasting effects.

H411

Toxic to aquatic life with long lasting effects.