

# Safety Data Sheet

## NST MIG/TIG non/low alloyed consumables

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878  
Issue date: 01/04/2014 Revision date: 31/08/2022 Supersedes version of: 22/11/2019 Version: 4.0

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

#### 1.1. Product identifier

Product form : Article  
Product name : NST MIG/TIG non/low alloyed consumables  
Synonyms : NST Carbomig2, NST Carbotig2, NST MIG ER70S 6-P, NST Carbomig 2N, NST Carbomig 3N, NST Carbotig 2F

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

##### Relevant identified uses

Main use category : Professional use  
Use of the substance/mixture : Welding wire

##### Uses advised against

No additional information available

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

Norsk Sveiseteknikk AS  
Postboks 109, 3301 Hokksund  
T + 47 99 27 80 00 - F + 47 32 82 90 19  
[Thomas@nst.no](mailto:Thomas@nst.no) - [nst.no](http://nst.no)

#### 1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182 +44 191 2606180	Hours of operation: 24hrs

### SECTION 2: Hazards identification

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

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

Not classified

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

No additional information available

#### 2.2. Label elements

Alloys in massive form do not need to be labeled acc. CLP Regulation (1272/2008), art. 23 (d) and Annex I 1.3.4.  
No labelling applicable

#### 2.3. Other hazards

Other hazards which do not result in classification : In the smoke emitted during use, there will be an additional risks if inhaled. Intensive exposure to welding fumes may cause lung disease, bronchitis, or worsen already existing inhalation problems. Intensified exposure to manganese (Mn) can damage the central nervous system or worsen existing health problems.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Iron	(CAS-No.) 7439-89-6 (EC-No.) 231-096-4	60 – 100	Not classified
Manganese	(CAS-No.) 7439-96-5 (EC-No.) 231-105-1 (REACH-no) 01-2119449803-34	< 5	Not classified
silicon	(CAS-No.) 7440-21-3 (EC-No.) 231-130-8 (REACH-no) 01-2119480401-47	< 5	Not classified
aluminium (Note T)	(CAS-No.) 7429-90-5 (EC-No.) 231-072-3 (REACH-no) 01-2119529243-45	< 1	Flam. Sol. 1, H228 Water-react. 2, H261
zirkonium powder, pyrophoric (Note T)	(CAS-No.) 7440-67-7 (EC-No.) 231-176-9 (REACH-no) 01-2119490102-49	< 1	Water-react. 1, H260 Pyr. Sol. 1, H250
titanium	(CAS-No.) 7440-32-6 (EC-No.) 231-142-3 (REACH-no) 01-2119484878-14	< 1	Not classified
Carbon	(CAS-No.) 7440-44-0 (EC-No.) 231-153-3 (REACH-no) 01-2119966900-32	< 1	Not classified
Chromium	(CAS-No.) 7440-47-3 (EC-No.) 231-157-5	< 1	Not classified
Nickel (Note S)(Note 7)	(CAS-No.) 7440-02-0 (EC-No.) 231-111-4 (EC Index-No.) 028-002-00-7	< 1	Carc. 2, H351 STOT RE 1, H372 Skin Sens. 1, H317
Molybdenum	(CAS-No.) 7439-98-7 (EC-No.) 231-107-2 (REACH-no) 01-2119472304-43	< 1	Not classified
Copper	(CAS-No.) 7440-50-8 (EC-No.) 231-159-6 (EC Index-No.) 029-024-00-X	< 0.5	Aquatic Chronic 2, H411
phosphorus	(CAS-No.) 7723-14-0 (EC-No.) 231-768-7 (REACH-no) 01-2119448009-39	< 0.1	Flam. Sol. 1, H228 Aquatic Chronic 3, H412
sulfur	(CAS-No.) 7704-34-9 (EC-No.) 231-722-6 (EC Index-No.) 016-094-00-1 (REACH-no) 01-2119487295-27	< 0.1	Skin Irrit. 2, H315
vanadium	(CAS-No.) 7440-62-2 (EC-No.) 231-171-1 (REACH-no) 01-2119537418-34	< 0.1	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).

Note T : This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.

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

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: General first aid, rest, warmth and fresh air. Move to fresh air. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Move to fresh air. Call a POISON CENTER/doctor if you feel unwell. Artificial respiration if indicated.
First-aid measures after skin contact	: Wash skin with soap and water. Get medical attention if irritation persists after washing. If burned, cool skin with ice or cold water.
First-aid measures after eye contact	: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.
First-aid measures after ingestion	: Rinse nose, mouth and throat with water.

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

Symptoms/effects after inhalation	: Overexposure to welding fumes may affect pulmonary function. Strong exposure to manganese may affect the nervous system. Inhalation of vapours may cause respiratory irritation.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after ingestion	: Ingestion is unlikely due to product's physical state.

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

Electric shock: Disconnect and turn off the power. If the victim is conscious or has partial loss of consciousness, open the airways. If the breathing has stopped, give artificial respiration. If cardiac arrest, provide heart massage and artificial respiration.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire. Foam, carbon dioxide or dry powder.
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#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Non flammable.
Hazardous decomposition products in case of fire	: Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Oxides of: Iron. Manganese. Chromium. aluminium. copper. Zirconium (Zr).

#### 5.3. Advice for firefighters

Protection during firefighting	: Do not enter fire area without proper personal protective equipment, including respiratory protection (EN137).
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### SECTION 6: Accidental release measures

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

General measures	: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). Avoid contact with skin and eyes. Provide good ventilation.
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##### 6.1.1. For non-emergency personnel

Protective equipment	: Wear appropriate personal protective equipment - see Section 8.
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##### 6.1.2. 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".
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#### 6.2. Environmental precautions

Do not discharge into drains.

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

For containment	: Collect spillage. Limit spread of spilled material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
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#### 6.4. Reference to other sections

For further information refer to section 13. See Section 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Mechanical ventilation or local exhaust ventilation is required. Do not breathe dust, fume, vapours. Avoid contact with skin and eyes. Do not touch electrical parts, such as welding wire and welding machine terminals. Wear appropriate personal protective equipment - see Section 8.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a dry place. Store in a well-ventilated place. Keep container tightly closed.
Incompatible materials	: Acids. Moisture.

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

No additional data.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

Manganese (7439-96-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Manganese and its inorganic compounds
WEL TWA (OEL TWA) [1]	0.2 mg/m <sup>3</sup> Inhalable fraction (as Mn) 0.05 mg/m <sup>3</sup> Respirable fraction (as Mn)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Iron (7439-89-6)	
United Kingdom - Occupational Exposure Limits	
Local name	Iron salts
WEL TWA (OEL TWA) [1]	1 mg/m <sup>3</sup> (as Fe)
WEL STEL (OEL STEL)	2 mg/m <sup>3</sup> (as Fe)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

silicon (7440-21-3)	
United Kingdom - Occupational Exposure Limits	
Local name	Silicon
WEL TWA (OEL TWA) [1]	10 mg/m <sup>3</sup> inhalable dust 4 mg/m <sup>3</sup> respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

aluminium (7429-90-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Aluminium
WEL TWA (OEL TWA) [1]	2 mg/m <sup>3</sup> alkyl compounds 2 mg/m <sup>3</sup> salts, soluble 10 mg/m <sup>3</sup> metal, inhalable dust 4 mg/m <sup>3</sup> metal, respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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<b>zirkonium powder, pyrophoric (7440-67-7)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Zirconium
WEL TWA (OEL TWA) [1]	5 mg/m <sup>3</sup> compounds (as Zr)
WEL STEL (OEL STEL)	10 mg/m <sup>3</sup> compounds (as Zr)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

  

<b>Carbon (7440-44-0)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Graphite
WEL TWA (OEL TWA) [1]	10 mg/m <sup>3</sup> inhalable dust 4 mg/m <sup>3</sup> respirable
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

  

<b>phosphorus (7723-14-0)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Phosphorus, yellow
WEL TWA (OEL TWA) [1]	0.1 mg/m <sup>3</sup>
WEL STEL (OEL STEL)	0.3 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

  

<b>Chromium (7440-47-3)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Chromium
WEL TWA (OEL TWA) [1]	0.5 mg/m <sup>3</sup> 0.5 mg/m <sup>3</sup> Chromium (II) compounds (as Cr) 0.5 mg/m <sup>3</sup> Chromium (III) compounds (as Cr)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>United Kingdom - Biological limit values</b>	
Local name	Chromium VI
BMGV	10 µmol/mol creatinine Parameter: chromium - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

  

<b>Nickel (7440-02-0)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Nickel
WEL TWA (OEL TWA) [1]	0.1 mg/m <sup>3</sup> and its inorganic compounds (except nickel tetracarbonyl): water-soluble nickel compounds (as Ni) 0.5 mg/m <sup>3</sup> and its inorganic compounds (except nickel tetracarbonyl): nickel and water insoluble nickel compounds (as Ni)
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), Carc (Capable of causing cancer and/or heritable genetic damage (nickel oxides and sulphides)), Sen (Capable of causing occupational asthma (nickel sulphate))
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

  

<b>Molybdenum (7439-98-7)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Molybdenum

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WEL TWA (OEL TWA) [1]	10 mg/m <sup>3</sup> insoluble compounds (as Mo) 5 mg/m <sup>3</sup> soluble compounds (as Mo)
WEL STEL (OEL STEL)	20 mg/m <sup>3</sup> insoluble compounds (as Mo) 10 mg/m <sup>3</sup> soluble compounds (as Mo)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Copper (7440-50-8)	
United Kingdom - Occupational Exposure Limits	
Local name	Copper
WEL TWA (OEL TWA) [1]	0.2 mg/m <sup>3</sup> fume (as Cu) 1 mg/m <sup>3</sup> and compounds, dusts and mists (as Cu)
WEL STEL (OEL STEL)	2 mg/m <sup>3</sup> and compounds, dusts and mists (as Cu)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

### Exposure limit values for the other components

ironoxide (1309-37-1)	
United Kingdom - Occupational Exposure Limits	
Local name	Iron oxide
WEL TWA (OEL TWA) [1]	5 mg/m <sup>3</sup> fume (as Fe)
WEL STEL (OEL STEL)	10 mg/m <sup>3</sup> fume (as Fe)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Aluminium sveiserøyk	
United Kingdom - Occupational Exposure Limits	
Local name	Aluminium
WEL TWA (OEL TWA) [1]	2 mg/m <sup>3</sup> alkyl compounds 2 mg/m <sup>3</sup> salts, soluble 10 mg/m <sup>3</sup> metal, inhalable dust 4 mg/m <sup>3</sup> metal, respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station. Provide eyewash station. Working operations which cause formation of high volumes of vapour should take place in ventilation hood or with local exhaust ventilation. It is forbidden to weld in rooms where there are halogenated solvents in the working atmosphere.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Gloves.



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### 8.2.2.1. Eye and face protection

#### Eye protection:

Wear safety glasses with high protection against UV radiation. Chemical goggles or face shield. STANDARD EN 166:2001

### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing. Wear thermal insulated gloves, shoes and other safety equipment designed for welding

#### Hand protection:

Wear suitable gloves. Heat-resistant gloves. STANDARD EN ISO 374-1:2016/A1:2018, EN ISO 374-2:2019, EN ISO 374-4:2019

#### Other skin protection

#### Materials for protective clothing:

Heatproof clothing

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

During welding supplied-air respirator or motor assisted respirators with P2 or P3-filter should be used in combination with brown, yellow and gray gas filter. Respiratory protection should be used in conjunction with welding hood. Standard EN 143:2021. STANDARD EN 149. EN 405. EN 139

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Other information:

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.

## SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Colour	: According to product specification.
Appearance	: Wire.
Odour	: Odourless or no characteristic odour.
Odour threshold	: Not relevant.
Melting point	: ≈ 1500 °C
Freezing point	: Not determined.
Boiling point	: Not determined.
Flammability	: Not applicable
Explosive properties	: Not explosive.
Oxidising properties	: Non flammable.
Explosive limits	: Not relevant.
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Not relevant.
Auto-ignition temperature	: Not determined.
Decomposition temperature	: Not determined.
pH	: Not relevant.
pH solution	: Not available
Viscosity, kinematic	: Not relevant.
Viscosity, dynamic	: Not relevant.
Solubility	: Not soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: Not determined.
Vapour pressure	: Not relevant.
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not determined.
Relative vapour density at 20 °C	: Not relevant.
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available

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Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1)	: Not relevant.
Additional information	: None to our knowledge.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No incompatible groups noted.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

Will not polymerise.

### 10.4. Conditions to avoid

Water, humidity.

### 10.5. Incompatible materials

Acids. Oxidizing materials.

### 10.6. Hazardous decomposition products

The most ordinary chimney gases include: Oxides of: Aluminium. copper. Iron. Manganese. Zirconium (Zr). Titanium.

## SECTION 11: Toxicological information

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

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

Manganese (7439-96-5)	
LD50 oral rat	9000 mg/kg

Iron (7439-89-6)	
LD50 oral rat	30000 mg/kg

silicon (7440-21-3)	
LD50 oral rat	3160 mg/kg

Carbon (7440-44-0)	
LD50 oral rat	> 10000 mg/kg
LC50 Inhalation - Rat	> 64.4 mg/l

sulfur (7704-34-9)	
LD50 oral rat	> 3000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

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Skin corrosion/irritation	: Not classified pH: Not relevant.
Additional information	: Prolonged or repeated contact may cause skin to become dry or cracked Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified pH: Not relevant.
Additional information	: Dust from this product may cause eye irritation Vapor may irritate eyes Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Prolonged and repeated inhalation of welding fumes may cause an increased risk of developing lung-related cancers. Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: In the smoke emitted during use, there will be an additional risks if inhaled. Intensive exposure to welding fumes may cause lung disease, bronchitis, or worsen already existing inhalation problems. Intensified exposure to manganese (Mn) can damage the central nervous system or worsen existing health problems. Inhalation of fumes or vapours may cause respiratory irritation
STOT-repeated exposure	: Not classified

Nickel (7440-02-0)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

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Viscosity, kinematic	Not relevant.

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: 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 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 at a concentration equal to or greater than 0,1 %
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#### 11.2.2 Other information

Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met
Other information	: No additional data

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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)	: Not classified (Based on available data, the classification criteria are not met)

Manganese (7439-96-5)	
LC50 - Fish [1]	2.91 mg/l (96 hours)
EC50 - Crustacea [1]	5.2 mg/l 48 hours
EC50 72h - Algae [1]	0.55 mg/l

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<b>Iron (7439-89-6)</b>	
LC50 - Fish [1]	13.6 mg/l 96h (FeCl <sub>2</sub> ) Morone saxatilis
EC50 - Crustacea [1]	5.2 mg/l 48h

<b>aluminium (7429-90-5)</b>	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 100 mg/l

<b>zirkonium powder, pyrophoric (7440-67-7)</b>	
LC50 - Fish [1]	1.08 mg/l (96 hours)

<b>titanium (7440-32-6)</b>	
LC50 - Fish [1]	7.31 mg/l

<b>sulfur (7704-34-9)</b>	
LC50 - Fish [1]	866 mg/l (96 hours - Brachydanio rerio, zebra-fish)
EC50 - Crustacea [1]	> 5000 mg/l (48 hours - Daphnia magna)

<b>Molybdenum (7439-98-7)</b>	
LC50 - Fish [1]	2600 mg/l LC50 96 h - fish [mg/l]

### 12.2. Persistence and degradability

<b>NST MIG/TIG non/low alloyed consumables</b>	
Persistence and degradability	The product is not biodegradable.

<b>Iron (7439-89-6)</b>	
Persistence and degradability	There are no data on the degradability of this product.

### 12.3. Bioaccumulative potential

<b>NST MIG/TIG non/low alloyed consumables</b>	
Partition coefficient n-octanol/water (Log Pow)	Not determined.
Bioaccumulative potential	No data available on bioaccumulation.

<b>Manganese (7439-96-5)</b>	
Bioconcentration factor (BCF REACH)	59052

<b>Iron (7439-89-6)</b>	
Bioconcentration factor (BCF REACH)	140000

<b>aluminium (7429-90-5)</b>	
Bioconcentration factor (BCF REACH)	18
Partition coefficient n-octanol/water (Log Pow)	< 3

<b>Carbon (7440-44-0)</b>	
Bioconcentration factor (BCF REACH)	0.14

<b>Copper (7440-50-8)</b>	
Bioconcentration factor (BCF REACH)	29

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### 12.4. Mobility in soil

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Ecology - soil	The product is insoluble in water.
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### 12.5. Results of PBT and vPvB assessment

#### NST MIG/TIG non/low alloyed consumables

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### Component

Iron (7439-89-6)	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Based on available data, the classification criteria are not met

### 12.7. Other adverse effects

Other adverse effects : None to our knowledge.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Product is not hazardous waste.  
Waste treatment methods : Do not discharge into drains.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a hazardous or special waste collection point.  
European List of Waste (LoW) code : 12 01 13 - welding wastes

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID /

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

# Safety Data Sheet

## NST MIG/TIG non/low alloyed consumables

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### Rail transport

Not regulated

### 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

#### 15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

#### 15.1.2. National regulations

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
3.2	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	Harmonised classification of Copper (CAS-No.) 7440-50-8

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

### Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Carc. 2	Carcinogenicity, Category 2
Flam. Sol. 1	Flammable solids, Category 1
H228	Flammable solid.
H250	Catches fire spontaneously if exposed to air.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H261	In contact with water releases flammable gases.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Pyr. Sol. 1	Pyrophoric Solids, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
Water-react. 1	Substances and Mixtures which, in contact with water, emit flammable gases, Category 1
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.