

Safety Data Sheet

NST Gouging Electrodes

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of issue: 09/06/2006 Revision date: 02/12/2019 Supersedes: 27/04/2017 Version: 4.0

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

1.1. Product identifier

Product name : NST Gouging Electrodes

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 - 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

According to EC directives or the corresponding national regulations there is no labelling obligation for this product.

2.3. Other hazards

Other hazards not contributing to the classification : In the smoke emitted by use, there will be an additional risk if inhaled. Intensive exposure to welding fumes may cause lung disease, bronchitis, or worsen already existing inhalation 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

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Graphite	(CAS-No.) 7782-42-5 (EC-No.) 231-955-3 (REACH-no) 01-2119486977-12	75	Not classified
Bitumen substance with national workplace exposure limit(s) (GB)	(CAS-No.) 8052-42-4 (EC-No.) 232-490-9 (REACH-no) 01-2119480172-44	15	Not classified
Copper substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (GB)	(CAS-No.) 7440-50-8 (EC-No.) 231-159-6	5	Not classified

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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.
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.
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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: copper.

5.3. Advice for firefighters

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

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ensure adequate ventilation, especially in confined areas. Avoid contact with skin and eyes. Do not breathe fumes.
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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. Collect all waste in suitable and labelled containers and dispose according to local legislation.
Methods for cleaning up	: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8.

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.
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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.
Incompatible materials : Acids. Moisture.
Storage temperature : 17 - 25 °C

7.3. Specific end use(s)

No additional data.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Copper (7440-50-8)		
United Kingdom	Local name	Copper
United Kingdom	WEL TWA (mg/m ³)	0.2 mg/m ³ fume (as Cu) 1 mg/m ³ and compounds, dusts and mists (as Cu)
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³ and compounds, dusts and mists (as Cu)
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

Bitumen (8052-42-4)		
United Kingdom	Local name	Asphalt
United Kingdom	WEL TWA (mg/m ³)	5 mg/m ³ petroleum fumes
United Kingdom	WEL STEL (mg/m ³)	10 mg/m ³ petroleum fumes
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

8.2. Exposure 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.

Materials for protective clothing:

Heatproof clothing

Hand protection:

Gloves made of insulating material. Heat-resistant gloves. EN 388. Chemical resistant gloves required for prolonged or repeated contact. STANDARD EN 374.

Eye protection:

Use approved safety goggles or face shield. Wear safety glasses with high protection against UV radiation. STANDARD EN 166.

Skin and body protection:

Wear thermal insulated gloves, shoes and other safety equipment designed for welding

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. STANDARD EN 149. EN 405. EN 139

Other information:

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Wire.
Colour : Metal.
Odour : Odourless or no characteristic odour.
Odour threshold : Not determined.

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pH	: Not relevant.
Relative evaporation rate (butylacetate=1)	: Not relevant.
Melting point	: > 600 °C (CAS#7782-42-5)
Freezing point	: Not determined.
Boiling point	: Not determined.
Flash point	: Not determined.
Auto-ignition temperature	: Not determined.
Decomposition temperature	: Not determined.
Flammability (solid, gas)	: Not applicable
Vapour pressure	: Not determined.
Relative vapour density at 20 °C	: Not determined.
Relative density	: 2.162 g/cm ³ (25 °C,CAS#7782-42-5)
Solubility	: Not soluble in water. Water: < 0.45 mg/l (20°C,CAS#7782-42-5)
Log Pow	: Not determined.
Viscosity, kinematic	: Not relevant.
Viscosity, dynamic	: Not relevant.
Explosive properties	: Not explosive.
Oxidising properties	: Non flammable.
Explosive limits	: Not relevant.

9.2. Other information

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: Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Bitumen (8052-42-4)	
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	> 94.4 mg/l/4h

Skin corrosion/irritation	: Not classified pH: Not relevant.
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified pH: Not relevant.

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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	: 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	: Inhalation of fumes or vapours may cause respiratory irritation In the smoke emitted by 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. Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

NST Gouging Electrodes	
Persistence and degradability	The product is not biodegradable.

Bitumen (8052-42-4)

Persistence and degradability	Not easily biodegradable.
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12.3. Bioaccumulative potential

NST Gouging Electrodes	
Log Pow	Not determined.
Bioaccumulative potential	No data available on bioaccumulation.

Copper (7440-50-8)

Bioconcentration factor (BCF REACH)	29
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Bitumen (8052-42-4)

BCF fish 1	> 100 mg/kg
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12.4. Mobility in soil

NST Gouging Electrodes	
Ecology - soil	The product is insoluble in water.

Bitumen (8052-42-4)

Ecology - soil	The product is immiscible with water and will sediment in water systems.
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12.5. Results of PBT and vPvB assessment

NST Gouging Electrodes	
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	

12.6. Other adverse effects

Other adverse effects : None to our knowledge.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste treatment methods : Do not discharge into drains.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW) code : 12 01 13 - welding wastes

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
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

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

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Contains no REACH Annex XIV substances

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

: EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

National regulations

No additional information available

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
1.1	Name	Modified	
3	Composition/information on ingredients	Modified	
4.2	Symptoms/effects after inhalation	Modified	
6.1	General measures	Modified	
6.3	Methods for cleaning up	Added	
9.1	Solubility in water	Added	
9.1	Relative density	Modified	
9.1	Melting point	Modified	

SDS ID : 302921

Data sources : EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

Full text of H- and EUH-statements:	
EUH210	Safety data sheet available on request.