SAFETY DATA SHEET

STAINARC 316L-16

Version No.: 1

Section 1. IDENTIFICATION OF THE HAZARDOUS CHEMICAL AND OF SUPPLIER

1.1 Product identifier

Trade name : STAINARC 316L-16
Article-no : -

1.2 Other means of identification

: -

1.3 Recommended use of the chemical and restriction on use

Use : Electric arc welding

1.4 Details of principal suppliers (including name, address, phone number, etc.)

Supplier : Leeden Powerweld Sdn. Bhd.
Street address : 168, Kawasan Perindustrian Ayer Keroh,
75450 Melaka
Telephone : +606 – 232 3288
Fax : +606 – 232 3200
Email : info@power-weld.com
Website : www.power-weld.com

1.5 Emergency phone number

Emergency phone number : +606 – 232 3288

Section 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance / mixture and any nation or regional information
Classification according to Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

2.2 Label elements

Pictogram : Not applicable

Signal word : Not applicable
Hazard Statement(s) : Not classified

Precautionary Statement(s) : P261 Avoid breathing fume/gas
P280 Wear protective gloves/protective clothing/eye protection/face protection
P304 + P340 IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing
P337 + P313 If eye irritation persists: Get medical advice/attention
P233 + P403 Keep container tightly closed. Store in a well-ventilated place

2.3 Other hazards which do not result in classification or are not covered by the Regulations

: During welding process : Overexposure to welding fumes can be dangerous to health
Watch out for splatter, hot metal and slag. It may cause skin burn and cause fire
Arc rays can injure eyes and burn skin. Electric shock can kill. Avoid touching live electrical parts

Section 3. COMPOSITION AND INFORMATION OF THE INGREDIENTS OF THE HAZARDOUS CHEMICAL

3.1 Substances

This product is a mixture and please refer to Section 3.2

3.2 Mixtures

Nickel Alloy Core Wire **7440-02-0**

Ingredients	Percentage	CAS No
Manganese	<3%	7439-96-5
Carbon	<0.04%	7440-44-0
Silicone	<1%	7440-21-3
Potassium	<0.04%	7440-09-7
Sulphur	<0.3%	7704-34-9
Copper	<0.05%	7440-50-8
Chromium	17-20%	7440-47-3
Molybdenum	2-3%	7439-98-7
Calcium Carbonate	1-5%	471-34-1

Section 4. FIRST-AID MEASURES

4.1 Description of first aid measures

Inhalation : IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms occur

Skin contact : IF SKIN BURN. Affected area to be treated by a doctor.

Eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion : IF SWALLOWED. Call a physician.

4.2 Most important symptoms and effects, acute and delayed

Inhalation : Inhalation of vapour may cause irritation of the respiratory system in susceptible persons.

4.3 Indication of any immediate medical attention and special treatment needed, if necessary

: Not applicable

Section 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO_2), powder or diffuse jet of water. In case of major fire: Extinguish fire with diffuse jet of water or foam

5.2 Specific hazards arising from the chemical

: Not applicable

5.3 Special protective equipment and precautions for fire-fighters

: Wear self-contained breathing apparatus

Section 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

: Mechanical ventilation and local exhaust ventilation must be adequate to keep fume concentrations within safe limits. Use respiratory equipment when welding in a confined space. Wear eye and skin protection plus protective clothing appropriate to welding.

6.2 Environmental precautions

: Try to prevent the material from entering drains or water courses

6.3 Methods and material for containment and cleaning

: Sweep up the floor

Section 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Preventive handling precautions : Ensure adequate ventilation for the welder and others. Use respiratory equipment when welding in a confined space. Wear eye and skin protection plus protective clothing appropriate to welding. Remove all flammable materials and liquids before welding

General hygiene : Wash hands before breaks.

7.2 Conditions for safe storage, including any incompatibilities

: Store welding consumables inside a room without humidity. Do not store welding consumables directly on the ground. Store away from chemical substances like acids which could cause chemical reactions.

Section 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

Welding Fumes (NOC) : PEL - 8hr TWA = 5 mg/m^3

8.2 Appropriate engineering controls

: Mechanical ventilation and local exhaust ventilation must be adequate to keep fume concentrations within safe limits

8.3 Individual protection measures, such as personal protective equipment

Eye / face protection : Wear welding shield

Skin protection : Wear welding glove

Respiratory protection : Use respiratory equipment when welding in a confined space, for example N95 Dust Mask or half face respirator with filter

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	Rod
Form	:	Metal wire with flux coating
Odour	:	Odourless
Odour threshold	:	Not applicable
pH	:	Not applicable
Melting point / Freezing point	:	> 1500 ^oC
Initial boiling point and boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid gas)	:	Not applicable
Upper / lower flammability or explosive limits	:	Not applicable

Vapour pressure	:	Not applicable
Vapour density	:	Not applicable
Relative density	:	Not applicable
Solubility(ies)	:	Immiscible
Partition coefficient: n-octanol / water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not applicable
Viscosity	:	Not applicable
Specific Gravity	:	> 5 g/cm^3

Section 10. STABILITY AND REACTIVITY

10.1 Reactivity
: Not applicable

10.2 Chemical stability
: Stable at normal conditions.

10.3 Possibility of hazardous reactions
: Not applicable

10.4 Conditions to avoid
: None under normal conditions

10.5 Incompatible materials
: Not applicable

10.6 Hazardous decomposition products
: Welding fumes and gases

Section 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Conditions to avoid: none in the form supplied
Overexposure to welding fumes can be dangerous to health, can cause dizziness, nausea and irritation to nose, throat or eyes

Acute Toxicity	:	Not classified
Skin Corrosion / Irritation	:	Not classified
Serious Eye Damage or Eye Irritation	:	Not classified
Respiratory Sensitization	:	Not classified
Skin Sensitization	:	Not classified
Germ Cell Mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive Toxicity	:	Not classified
Specific Target Organ Toxicity - Single Exposure	:	Not classified

Specific Target Organ Toxicity - Repeated Exposure	:	Overexposure to welding fumes can be dangerous to health, can cause dizziness, nausea and irritation to nose, throat or eyes
Aspiration Hazard	:	Not classified

Section 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

: The welding process can affect the environment if welding fume is released directly into the atmosphere. Residues from welding consumables could degrade and accumulate into soils and ground water.

12.2 Persistence and degradability

: Not applicable

12.3 Bio accumulative potential

: Not applicable

12.4 Mobility in Soil

: Not applicable

12.5 Other adverse effects

: Not applicable

Section 13. DISPOSAL INFORMATION

Disposal Information : Dispose of any product, residue, filter or packing material according to national and local regulations.

Section 14. TRANSPORTATION INFORMATION

14.1 UN number

: Not applicable

14.2 UN proper shipping name

: Not applicable

14.3 Transport hazard class (es)

: Not applicable

14.4 Packing group, if applicable

: Not applicable

14.5 Environmental hazards

: Not applicable

14.6 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

: Not applicable

14.7 Special precautions

: Not applicable

Section 15. REGULATORY INFORMATION

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

: Classification according to Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

Section 16. OTHER INFORMATION

16.1 Date of preparation of the SDS : 29 July 2020
16.2 Date of revision of the SDS : 29 July 2020
16.3 Version : 1
16.4 Key literature reference and sources for data used to compile the SDS

: MS ISO 4850: 2003: Personal Eye-protectors for Welding & Related Techniques – Filters – Utilisation & Transmittance Requirements
: Factories and Machinery Act 1967 (Act 139) Rules and Regulations
: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013
: Industry Code Of Practice on Chemicals Classification and Hazard Communication 2014
: Occupational Safety and Health (Use and Standard of Exposure of Chemicals Hazardous to Health) Regulations 2000
: SDS from Sigma-Aldrich (M) Sdn. Bhd.

16.5 Key / legend to the abbreviations and acronyms used in the SDS

SDS : Safety Data Sheet
PEL : Permissible Exposure Limit
TWA : Time Weighted Average

16.6 Other information deems necessary by a supplier

: The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.