

Name of the product: GRAPHITE MOULD KLK-weld

Date of Issue: 25 February 2016

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Name of the product: GRAPHITE MOULD KLK-weld

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

Aluminothermic welding material for Welding Procedures.

Uses advised against:

Uses other than those identified.

1.3 Details of the supplier of the safety data sheet.

Company: KLK Electro Materiales, S.L.U.
Address: Camino de la Peñona 38B - Apdo 333

Town: 33211 Gijón Province: Asturias

Telephone: +34 985 321850 Fax: +34 985 309307 E-mail: comercial@klk.es

1.4 Emergency telephone number: +34 985 321850 (Only available during office hours - Monday to Friday - 08:00 to 18:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

The product has not been classified as hazardous in accordance to Regulations (EU) No. 1272/2008.

2.2 Label elements.

The product has not been classified as hazardous in accordance with Regulations (EU) No. 1272/2008 on the classification, labelling and packing of substances and mixtures and their subsequent modifications.

Additional hazard indications:

EUH210 Request safety data sheet.

2.3 Other hazards.

Under normal conditions of use and in its original form, the product does not present any other negative health or environmental effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Name: Artificial graphite.
General name: Graphite
Formula: C

Composition: C: 99.9% min.

Al, Si, Fe and other: 0.1% max.

N CAS: 7782-42-5 N CE: 231-955-3

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and typology of the substances present in the mixture, no particular warnings are required.



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Inhalation.

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Take the affected person to a place where there is fresh air, keep him warm and at rest; if breathing becomes irregular or stops, apply CPR. Do not administer anything via the mouth. If the person is awake, place him in a suitable position and seek medical assistance.

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Contact with eves.

If the person is wearing contact lenses, remove them. Wash eyes abundantly with clean, fresh water for at least 10 minutes while pulling the eyelids up. Seek medical assistance.

Contact with skin.

Remove any contaminated clothing. Wash the skin thoroughly using soap and water or a suitable skin cleaning agent. **DO NOT** use solvents or thinners.

Ingestion.

If the person has ingested the product, seek medical assistance immediately. Keep the person at rest. DO NOT induce vomiting.

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

No acute or delayed effects are known caused by exposure to the product.

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

If in doubt, or if symptoms of discomfort persist, seek medical assistance. Do not administer anything via the mouth to people who are unconscious.

SECTION 5: FIRE-FIGHTING MEASURES.

The product is NOT classified as flammable. In the event of fire, apply the measures indicated below:

5.1 Extinguishing media.

Suitable extinguishing media.

Extinguish using water, dry powder, CO₂, nitrogen or foam.

5.2 Precautions:

The combustion of graphite releases CO₂ and CO. It is essential to take measures against hypoxia and CO poisoning.

5.3 Advice for fire-fighters.

Cool any tanks, cisterns or containers near the source of heat or fire with water. Take the direction of the wind into account. Prevent the products used during fire-fighting operations from entering sewers, drains or water courses.

Fire protection equipment.

If the fire occurs in an enclosed area, use self-contained breathing devices.

Based on the size of the fire, the use of heat resistant garments, gloves, goggles or face masks, and boots may be required.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

Given its solid nature, there is no danger of spillage.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

The product does not require special handling measures. We recommend complying with current Occupational Health & Safety legislation.

7.2 Conditions for safe storage, including any incompatibilities.

The product does not require special storage measures.

Regarding general storage conditions, avoid heat sources and brusque changes in temperature, radiation, electricity and contact with water. Keep away from oxidizing agents and from highly acid or alkaline materials.

Store at a temperature between 5 and 35 °C, in a dry and well-ventilated place.

Store according to local legislation. Comply with the instructions on the label.

The product does not come under Directive 2012/18/UE (SEVESO III).

7.3 Specific end use(s).

Aluminothermic welding material for Welding Procedures.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters.

The product does NOT contain substances with Occupational Exposure Limit Values.

The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Measures of a technical nature:



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Provide suitable ventilation. This can be achieved by appropriate local extraction-ventilation and a good general extraction system.

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100 % **Concentration:** Aluminothermic welding material for Welding Procedures. **Breathing protection:** If all the recommended technical measures are met, no personal protective equipment is required. Hand protection: If the product is handled correctly, no personal protective equipment is required. Eye protection: If the product is handled correctly, no personal protective equipment is required. Skin protection: Working footwear Features: «CE» Marking, Category II. **CEN Standards:** EN ISO 13287, EN 20347 These items adapt to the shape of the foot of the first user. For this reason, and for matters of hygiene, they should Maintenance: not be used by another person. Working footwear for professional use features protective elements designed to protect the user from injuries Comments:

caused by possible accidents. Review for which workers this type of footwear is suitable.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance: Solid Colour: N.A./N.Av. Odour: N.A./N.Av.

Odour threshold: N.A./N.Av.

pH: N.A./N.Av.

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Melting point: N.A./N.Av. Boiling point/range: N.A./N.Av.

Flash point: N.A./N.Av.

Flammability (solid, gas): N.A./N.Av. Lower explosive limit: N.A./N.Av. Upper explosive limit: N.A./N.Av. Vapour pressure: 10⁻¹⁰ atm (2000°C) Relative density: 2.2 (Water=1) Solubility: N.A./N.Av. Lipid solubility: N.A./N.Av.

Partition coefficient (n-octanol/water): N.A./N.Av.

Auto-ignition temperature: N.A./N.Av. Decomposition temperature: N.A./N.Av.

Viscosity: N.A./N.Av.

Water solubility: N.A./N.Av.

Explosive properties: N.A./N.Av. Oxidizing properties: N.A./N.Av.

N.A./N.Av. = Not applicable / Not available due to the nature of the product.

9.2. Other information. COV content (p/p): 0 %

COV content: 0 g/l

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present any hazard due to its reactivity.

10.2 Chemical stability.

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

10.3 Possibility of hazardous reactions.

The product presents no possibility of a dangerous reaction.

10.4 Conditions to avoid.

Avoid any type of incorrect handling.

10.5 Incompatible materials.



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Keep away from oxidizing agents and strong alkaline or acid materials, in order to avoid exothermic reactions.

10.6 Hazardous decomposition products.

The product does not decompose if used as intended.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There is no relevant information.

a) acute toxicity;

inconclusive data for the classification.

- b) skin corrosion or irritation; In the light of available data, it does not meet the criteria for classification.
- c) serious eye damage or irritation; In the light of available data, it does not meet the criteria for classification.
- d) respiratory or skin sensitisation;

Inconclusive data for the classification.

- e) germ cell mutagenicity; Inconclusive data for the classification.
- f) carcinogenicity;

inconclusive data for the classification.

g) reproductive toxicity;

Inconclusive data for the classification.

- h) specific target organ toxicity (STOT) single exposure; In the light of available data, it does not meet the criteria for classification.
- i) specific target organ toxicity (STOT) repeated exposure

Inconclusive data for the classification.

j) aspiration hazard; Inconclusive data for the classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

There is no data regarding the Ecotoxicity of these substances.

12.2 Persistence and degradability.

Graphite is not biodegradable.

12.3 Bioaccumulative potential.

There is no data regarding the Bioaccumulative potential of these substances.

12.4 Mobility in soil.

There is no data available on mobility in soil.

The product must not be allowed to contaminate sewers or water courses.

Avoid penetration in the ground.

12.5 Results of PBT and vPvB assessment.

There is no data available on the PBT and vPvB assessment of the product.

12.6 Other adverse effects.

There is no data available on other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

The product may not be discharged into sewers or water courses. Waste and empty containers must be handled and disposed of in accordance with current local/national legislation.

Follow Directive 2008/98/EC provisions regarding waste management.



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Classify waste in accordance with the European Waste Catalogue:

10 WASTE FROM THERMAL PROCESSES

10 08 Waste from other non-ferrous thermal metallurgy

10 08 04 Particulates and dust

Treatment method in accordance with Directive 2008/98/EC:

Assessment

Web: www.klk.es

R5 Recycling or recovery of other inorganic materials.

SECTION 14: TRANSPORT INFORMATION.

Not hazardous to transport. In the event of an accident and spillage of the product, proceed as indicated in section 6.

14.1 UN Number.

Not hazardous to transport.

14.2 UN proper shipping name.

Not hazardous to transport.

14.3 Transport hazard class(es).

Not hazardous to transport.

14.4 Packing group.

Not hazardous to transport.

14.5 Environmental hazards.

Not hazardous to transport.

14.6 Special precautions for user.

Not hazardous to transport.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

Not hazardous to transport.

SECTION 15: REGULATORY INFORMATION.

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

The product does not come under Regulation (EC) No 1005/2009 of the European Parliament and of the Council, of 16th September 2009, concerning substances that deplete the ozone layer.

The product does not come under Directive 2012/18/EU (SEVESO III).

The product does not come under Regulation (EC) No. 528/2012 concerning the making available on the market and use of biocidal products. The product does not come under the procedure set out in Regulation (EC) No. 649/2012, concerning the export and import of hazardous chemicals.

15.2 Chemical safety assessment.

No chemical safety assessment has been performed regarding this product.

SECTION 16: OTHER INFORMATION.

Complete text of H Statements that appear in section 3:

H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Classification codes:

Eye Irrit. 2: Eye irritant, Category 2 Skin Irrit. 2: Skin irritant, Category 2

STOT SE 3: Specific target organ toxicity after a single exposure, Category 3.

We recommend using the product only for the purposes contemplated.

Other statements:

Safety data sheet at the disposal of professional users that require it.



Name of the product: GRAPHITE MOULD KLK-weld

Information on the TSCA Inventory (Toxic Substances Control Act) USA:

CAS No.	Name	Status
1344-09-8	Sodium Silicate	Registered

e-mail: comercial@klk.es

NFPA 704 hazard classification system:

Web: www.klk.es



Hazard - Health: 0 (Standard material)

Flammability: 0 (It does not burn)

Reactivity: 0 (Stable)

Abbreviations and acronyms used:

CEN: European Committee for Standardisation.

DMEL: Derived Minimal Effect Level, exposure level that corresponds to a low risk that should be considered a minimal tolerable risk.

DNEL: Derived No Effect Level, exposure level below which no adverse effects are anticipated.

PPE: Personal protective equipment.

Key bibliographic references and data source:

http://eur-lex.europa.eu/homepage.html

http://echa.europa.eu/

Regulation (EC) No. 2015/830 Regulation (EC) No. 1907/2006 Regulation (EC) No. 1272/2008

The information provided in this Safety Data Sheet has been prepared in accordance with REGULATION (EU) 2015/830 OF THE COMMISSION, of 28 May 2015, amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorisation and restriction of chemicals (REACH) and establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Regulation (EEC) No 793/93 of the Council and Regulation (EC) No 1488/94 of the Commission as well as the Council Directive 76/769/EEC and Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC of the Commission.

The information contained in this product Safety Data Sheet is based on current knowledge and on national laws and those in force in the EC, as the working conditions of the users are beyond our knowledge and control. The product should not be used for purposes other than those specified, without first preparing written instructions regarding its handling. It is always the responsibility of the user to take appropriate measures in order to comply with legal requirements.