

**Trade name:** TIMREX® KS, SFG, SLP, SLS, T, T-SLC, MX, MB, KC, MK, F, KL, MAA**Current version :** 2.0.4, issued: 18.10.2021**Replaced version:** 2.0.3, issued: 04.05.2020**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****TIMREX® KS, SFG, SLP, SLS, T, T-SLC, MX, MB, KC, MK, F, KL, MAA****C-ENERGY™ KS-L, SFG-L**Substance name Graphite (> 99,5 %)  
REACH registration no. 01-2119486977-12**Identification numbers**CAS no. 7782-42-5  
EC no. 231-955-3**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**Electrical and thermal conductive additive  
Friction modifier  
Carbon carrier  
Lubricant  
Refractories**Uses advised against**

None known

**1.3 Details of the supplier of the safety data sheet****Address**Imerys Graphite & Carbon Switzerland Ltd.  
Strada Industriale 12  
6743 Bodio (Switzerland)Telephone no. +41 91 873 20 10  
Fax no. +41 91 873 20 19  
e-mail graphiteandcarbon.ch@imerys.com**Information provided by / telephone**

Research and Development

**Advice on Safety Data Sheet**

sdb\_info@umco.de

**1.4 Emergency telephone number**For Hazardous Materials [or Dangerous Goods] Incident  
Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
International Number: +1 703-741-5970 (collect calls accepted)  
Local number: +(44)-870-8200418**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification information**

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

**2.2 Label elements**

Not relevant

**2.3 Other hazards**PBT assessment  
The product is not considered to be a PBT.  
vPvB assessment  
The product is not considered to be a vPvB.

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Substance name Graphite (&gt; 99,5 %)

**Identification numbers**

CAS no. 7782-42-5

EC no. 231-955-3

**3.2 Mixtures**

Not applicable. The product is not a mixture.

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

In case of persisting adverse effects, consult a physician. Change contaminated clothing.

**After inhalation**

Remove affected person from the immediate area. Ensure supply of fresh air.

**After skin contact**

When in contact with the skin, clean with soap and 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 out mouth and give plenty of water to drink. 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**

Foam; Carbon dioxide; Extinguishing powder; Water spray jet; Sand

**Unsuitable extinguishing media**

High power water jet

**5.2 Special hazards arising from the substance or mixture**In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO<sub>2</sub>)**5.3 Advice for firefighters**

Use self-contained breathing apparatus. Wear protective clothing.

**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. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Avoid dust formation. High risk of slipping due to leakage/spillage of product.

**For emergency responders**

Personal protective equipment (PPE) - see section 8. In case of emergency, use of personal protective equipment [DIN EN 469, EN 12021].

**6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

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**6.3 Methods and material for containment and cleaning up**

Take up with dust-binding material or using a suitable vacuum cleaner. When collected, handle material as described under the section heading "Disposal considerations".

**6.4 Reference to other sections**

No data available.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Advice on safe handling**

Provide good ventilation at the work area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn.

**General protective and hygiene measures**

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove contaminated clothing. Wash hands before breaks and after work. Do not inhale dust. Provide eye wash fountain in work area.

**Advice on protection against fire and explosion**

Under certain circumstances fine dust clouds may form explosive mixtures with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition. Dust should be aspirated immediately on-the-spot.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Keep container tightly closed and dry.

**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.

**Incompatible products**

None known

**7.3 Specific end use(s)**

No data available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	Dust		
	<b>List of approved workplace exposure limits (WELs) / EH40</b>		
	Dust respirable		
	WEL long-term (8-hr TWA reference period)	4	mg/m <sup>3</sup>
	Comments	see Definition 44 "Dust"	
	<b>List of approved workplace exposure limits (WELs) / EH40</b>		
	Dust inhalable		
	WEL long-term (8-hr TWA reference period)	10	mg/m <sup>3</sup>
	Comments	see Definition 44 "Dust"	

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

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	Graphite			7782-42-5 231-955-3
	inhalative	Long term (chronic)	local	1.2 mg/m <sup>3</sup>

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**DNEL value (consumer)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Graphite			7782-42-5 231-955-3	
	oral	Long term (chronic)	systemic	813	mg/kg/day
	inhalative	Long term (chronic)	local	0.3	mg/m <sup>3</sup>

**Other information**

The DNEL value (inhalation) is applicable for respirable fractions of graphite dust that can reach the alveolar regions of the lung.

**8.2 Exposure controls**
**Appropriate engineering controls**

No data available.

**Personal protective equipment**
**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified. Dust mask

Respirator FFP2 (EN 149)

**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.

**Other**

Normal chemical work clothing.

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties**
**9.1 Information on basic physical and chemical properties**

<b>State of aggregation</b>	
liquid	
<b>Form/Colour</b>	
Powder	
grey to black	
<b>Odour</b>	
odourless	
<b>pH value</b>	
Not applicable	
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point/freezing point</b>	
Value	> 3000 °C
Method	OECD 102
<b>Decomposition temperature</b>	
No data available	

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<b>Flash point</b>	
Not applicable	
<b>Ignition temperature</b>	
Value	> 500 °C
<b>Oxidising properties</b>	
Inorganic substance not containing oxygen or halogen atoms.	
<b>Explosive properties</b>	
Non-combustible. Contains no chemical groups associated with explosive properties. The minimum ignition energy of fine dusts is >1 J.	
<b>Flammability</b>	
The product is NOT highly flammable according to Regulation (EG) Nr. 440/2008 , method EC A.10 (flammability, solids)	
<b>Lower explosion limit</b>	
No data available	
<b>Upper explosion limit</b>	
No data available	
<b>Vapour pressure</b>	
Comments	Solid whose melting point is > 3000°C.
<b>Relative vapour density</b>	
No data available	
<b>Relative density</b>	
No data available	
<b>Density</b>	
Value	appr. 2.2 g/cm <sup>3</sup>
Method	DIN 51901
<b>Solubility in water</b>	
Value	< 0.001 g/l
<b>Solubility</b>	
Comments	Graphite/ carbon is however considered being insoluble in water. The relative solubility corresponds to the solubility of impurities contained in the test substance.
<b>Partition coefficient n-octanol/water (log value)</b>	
No data available	
<b>Viscosity</b>	
Not applicable	
<b>Particle characteristics</b>	
No data available	

## 9.2 Other information

<b>Other information</b>
No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

No data available.

### 10.3 Possibility of hazardous reactions

No data available.

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**10.4 Conditions to avoid**

No data available.

**10.5 Incompatible materials**

Fluorine; Chlorine trifluoride

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 423		
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute dermal toxicity			
No data available			

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
LC50	>	2000	mg/l
Duration of exposure		4	h
State of aggregation	Dust		
Species	rat		
Method	OECD 403		
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
Species	rabbit		
Method	OECD 404		
Source	CSR		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
Species	rabbit		
Method	OECD 405		
Source	CSR		
Evaluation	non-irritant		

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
Route of exposure	respiratory tract		
Species	mouse		
Method	OECD 429		
Source	CSR		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	Skin		
Species	mouse		

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Method	OECD 429
Source	CSR
Evaluation	non-sensitizing
Evaluation/classification	Based on available data, the classification criteria are not met.

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
Type of examination		Bacterial Reverse Mutation Test	
Method		OECD 471	
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		Mammalian cell gene mutation assay	
Method		OECD 476	
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		Mammalian chromosome aberration test	
Method		OECD 473	
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
Method		OECD 422	
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
Method		Waiving	
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are not met.	

STOT - single exposure			
No data available			

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
Route of exposure		oral	
NOAEL		813	mg/kg
Species		rat	
Method		OECD 422	
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		inhalational	
NOAEC		12	mg/m <sup>3</sup>
Species		rat	
Method		OECD 412	
Source		CSR	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Aspiration hazard			
No data available			

Delayed and immediate effects as well as chronic effects from short and long-term exposure			
Contact with the skin and eyes may cause mechanical irritation. Inhalation of dusts may irritate the respiratory tract.			

## 11.2 Information on other hazards

### Endocrine disrupting properties

No data available.

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**Other information**

No data available.

**SECTION 12: Ecological information****12.1 Toxicity**

<b>Toxicity to fish (acute)</b>			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
LC50	>	100	mg/l
Duration of exposure		96	h
Species	Danio rerio		
Method	OECD 203		
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

<b>Toxicity to fish (chronic)</b>			
No data available			

<b>Toxicity to Daphnia (acute)</b>			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
EC50	>	100	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

<b>Toxicity to Daphnia (chronic)</b>			
No data available			

<b>Toxicity to algae (acute)</b>			
No	Substance name	CAS no.	EC no.
1	Graphite	7782-42-5	231-955-3
EC50	>	100	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	CSR		
Evaluation/classification	Based on available data, the classification criteria are not met.		

<b>Toxicity to algae (chronic)</b>			
No data available			

<b>Bacteria toxicity</b>			
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**

<b>Results of PBT and vPvB assessment</b>	
PBT assessment	The product is not considered to be a PBT.
vPvB assessment	The product is not considered to be a vPvB.

**12.6 Endocrine disrupting properties**

No data available.



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### 12.7 Other adverse effects

No data available.

### 12.8 Other information

#### Other information

Do not discharge product unmonitored into the environment.

## 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 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

### 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

### 14.4 Other information

The product is NOT highly flammable according to Regulation (EG) Nr. 440/2008 , method EC A.10 (flammability, solids)

### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

### 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)

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

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

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

#### 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 substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

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

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

### **National regulations**

#### **National chemical inventories**

EINECS/ELINCS (European Community)	listed	
USA (TSCA)	listed	
DSL/NDSL (Canada)	DSL listed	
ENCS (Japan)	Exempted from listing	
ECL (Korea)	listed	KE-18101
AICS (Australia)	listed	
IECSC / NEPA (China)	listed	
PICCS (Philippines)	listed	
NZIoC (New Zealand)	New Zealand: not subject to the provisions of the HSNO Act.	
CSNN (Taiwan)	listed	

### **15.2 Chemical safety assessment**

A chemical safety assessment has been carried out for this substance.

## **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.

#### **Creation of the safety data sheet**

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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