IMERYS SAFETY DATA SHEET

OSHA 29 CFR HCS-2012 APPENDIX D TO §1910.1200

Issue Date 29-May-2015

Version 1

Product NameTIMREX® C-THERMRevision date29-May-2015

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

Product identifier

Product Name TIMREX® C-THERM

Other means of identification

Synonyms Graphite

Recommended use of the chemical and restrictions on use

Recommended Use Electrical and thermal conductive additive

Friction modifier Carbon carrier Lubricant Refractory

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Imerys Graphite & Carbon Switzerland Ltd.
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Emergency telephone number

For Hazardous Materials [or Dangerous Goods] Incident

Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

2. HAZARDS IDENTIFICATION

GHS Classification

Not classified

Label elements

Symbols/Pictograms None Signal word None

Hazard Statements Not classified

Precautionary Statements

Prevention None
Response None
Storage None
Disposal None

Hazards not otherwise classified (HNOC)

No information available

Unknown acute toxicity

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature	Substance

Chemical Name	CAS No	Weight-%
Graphite	7782-42-5	> 95

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician. Remove contaminated clothing and shoes.

Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact Wash off immediately with soap and plenty of water while removing all

contaminated clothes and shoes. Wash contaminated clothing before reuse. If

skin irritation persists, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and

upper eyelids. Consult a physician.

Ingestion Rinse mouth. Get medical attention. Never give anything by mouth to an

unconscious person.

Most important symptoms and effects, both acute and delayed

Contact with the skin and eyes may cause mechanical irritation.

Inhalation of dusts may irritate the respiratory tract.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing

CO2, dry chemical, dry sand, water spray or alcohol-resistant foam. Do not scatter spilled material with high pressure water streams.

media

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors Carbon oxides (COx)

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas

Evacuate personnel to safe areas

Use personal protection recommended in Section 8

Avoid contact with skin, eyes or clothing

Do not touch or walk through spilled material

Remove all sources of ignition

Avoid creating dust

Extremely slippery when spilled.

High risk of slipping due to the leakage/ spillage of product.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so

Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust

Take up mechanically, placing in appropriate containers for disposal

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice

Ensure adequate ventilation, especially in confined areas

Use personal protection recommended in Section 8

Do not eat, drink or smoke when using this product

Avoid contact with skin, eyes or clothing

Remove contaminated clothing and shoes

Wash contaminated clothing before reuse

Wash thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Avoid generation of dust

Take precautionary measures against static discharges

Keep away from heat, sparks, flame and other sources of ignition

Under certain circumstances fine dust clouds may form explosive mixtures with air.

Dust should be aspirated immediately on-the-spot

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place

Keep away from heat

Store in accordance with local regulations

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Denmark	European Union
Graphite (CAS #:	TWA: 2 mg/m ³	-	IDLH: 1250 mg/m ³	TWA: 2.5 mg/m ³	-
7782-42-5)	respirable fraction		TWA: 2.5 mg/m ³		
	all forms except		natural respirable		
	graphite fibers		dust		

Chemical Name	Latvia	France	Finland	Germany	Italy
Graphite (CAS #:	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 1.5 mg/m ³	-
7782-42-5)				TWA: 4 mg/m ³	

Chemical Name	Norway	United Kingdom	Australia	Austria	Belgium
Graphite (CAS #:	TWA: 5 mg/m ³	=	3 mg/m ³	STEL 10 mg/m ³	=
7782-42-5)	TWA: 2 mg/m ³		-	TWA: 5 mg/m ³	
·	TWA: 10 mg/m ³			_	
	TWA: 4 mg/m ³				
	STEL: 5 mg/m ³				
	STEL: 2 mg/m ³				
	STEL: 10 mg/m ³				
	STEL: 4 mg/m ³				

Appropriate engineering controls

Ventilation systems

Individual protection measures, such as personal protective equipment

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA

approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local

regulations.

Hand Protection Wear protective gloves.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

AppearancePowderColorGrey to blackOdorOdorlessOdor ThresholdNot determinedpHNot determined

Melting point/freezing point > 3000°C (OECD 102) >5432°F (OECD 102)

Boiling point / boiling range Not determined Flash point Not applicable **Evaporation rate** Not determined Flammability (solid, gas) Not flammable Flammability Limit in Air Not determined **Vapor Pressure** Not applicable Vapor density Not determined **Density** appr.18.36 lbs/gallon Not determined

Relative density

Bulk density

Specific gravity

Not determined

Not determined

Not determined

Water solubility < 0.001 g/l (insoluble in water)

Partition coefficient (LogPow)
Ignition temperature

> 500°C
> 932°F

Decomposition temperature

Not determined

Kinematic viscosity
Not determined

Not determined

Not applicable

Explosive properties
Not an explosive

Not an explosive

No oxidising properties

Other information

No information available

10. STABILITY AND REACTIVITY

Reactivity

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

Chemical stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

Conditions to avoid

Extremes of temperature

Incompatible materials

None known based on information supplied.

<u>Hazardous Decomposition Products</u>

None known based on information supplied

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Inhalation of dusts may irritate the respiratory tract.

Eye contact Contact with the eyes may cause mechanical irritation.

Skin Contact Contact with the skin may cause mechanical irritation.

No known effect based on information supplied

Information on toxicological effects

Acute toxicity

Chemical Name	Chemical Name Oral LD50		Chemical Name Oral LD50		Inhalation LC50
Graphite (CAS #: 7782-42-5)	> 2000 mg/kg (rat) (OECD 423)	=	> 2000 mg/m3/4h (rat) (OECD		
, , ,			403)		

Skin corrosion/irritation

Non-irritant (OECD 404)

Serious eye damage/eye irritation

Non-irritant (OECD 405)

Sensitization

Non-sensitizing (OECD 429)

Germ cell mutagenicity

Negative (OECD 471)

Negative (OECD 476)

Negative (OECD 473)

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Reproductive toxicity

Negative (OECD 422)

STOT - single exposure

No information available

STOT - repeated exposure

NOAEL=813 mg/kg bw/d (rat, oral) (OECD 422) NOAEC=12 mg/m³ (rat, inhalative) (OECD 412)

Aspiration hazard

Not applicable

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Graphite (CAS #: 7782-42-5)	> 100 mg/l/72h	> 100 mg/l/96h (Danio rerio)	> 100 mg/l/48h (Daphnia
	(Pseudokirchneriella	(OECD 203)	magna) (OECD 202)
	subcapitata) (OECD 201)		

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local

laws and regulations

Contaminated packaging Dispose of in accordance with federal, state and local regulations

14. TRANSPORT INFORMATION

DOT

UN/ID No.
Proper shipping name
Hazard Class
Packing Group

Not regulated
Not regulated
Not regulated

Special precautions No information available

Marine pollutant Not applicable

15. REGULATORY INFORMATION

International Inventories

Component	AICS	DSL/NDS L	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	TSCA
Graphite 7782-42-5	X	X	X	-	X	X	X	Х

[&]quot;-" Not Listed

US FEDERAL REGULATIONS

Toxic Substances Control Act (TSCA)

Is listed on the TSCA inventory

OSHA: This product is not classified as hazardous in accordance with US OSHA Hazard Communication Standard 29 CFR 1910.1200.

US Federal Regulations

SARA Section 302 (RQ):

Not listed

SARA 313

Not apply

SARA 311/312 Hazard Categories

Not apply

[&]quot;X" Listed

CWA (Clean Water Act)

Not listed.

CERCLA

Not apply

HAPS Hazardous Air Pollutants

Not listed.

HMIS Classification

Health 1
Flammability 0
Physical Hazard 0
Personal Protection C

US State Regulations

California Proposition 65

Not listed.

New Jersey Worker and Community Right to Know Act.

Not listed.

Pennsylvania HAZARDOUS SUBSTANCE LIST

Not listed.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Graphite	X	X	-
7782-42-5			

16. OTHER INFORMATION

Revision Note

Issue Date 29-May-2015
Revision date 29-May-2015
Revision Note Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average)

STEL - STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

----- End of Safety Data Sheet -----