Safety Data Sheet

1. Identification

Product Identifier Flexible Graphite
Grade Names TF-BE
SDS Number A001
Recommended Use Gasket material
Recommended Restrictions Workers and your customers or users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of the material should be provided as required under applicable regulations.

Manufacturer Information
Manufacturer
EGC Enterprises, Inc.
140 Parker Court
Chardon, Ohio 44024

Contact
Phone: (440) 285-5835
Fax: (440) 285-8337
E-mail egc@EGCgraphite.com
Emergency CHEMTREC: (800) 424-9300

2. Hazard(s) identification

Physical Hazards Not classified
Health Hazards Not classified
OSHA Defined Hazards Not classified
Label Elements
Hazard Symbol None
Signal Word None
Hazard Statement The substance does not meet the criteria for classification
Precautionary Statement
Prevention Observe good industrial hygiene practices
Response Wash hands after handling
Storage Store away from incompatible materials
Disposal Dispose of waste and residues in accordance with local authority requirements
Hazards Not Otherwise Classified (HNOC) None known
Supplemental Information None

3. Composition/information on ingredients

Substances

Chemical Name	Common name	CAS Number	%
Graphite (Natural)		7782-42-5	98 – 100
Impurity: Crystalline Silica (Quartz)		14808-60-7 (Quartz)	0 – 2

Composition Comments All concentrations are in percent by weight unless ingredient is a gas
Gas concentrations are in percent by volume
This product does not generate dust when used as intended

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Wash off with soap and water.
Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops or persists.
Ingestion Rinse mouth. Get medical attention if irritation develops or persists.
Most Important Symptoms, Acute and Delayed Direct contact with eyes may cause temporary irritation
Indication of Immediate Medical Attention and Special Treatment Needed Treat symptomatically
General Information Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Fire-fighting measures

Suitable Extinguishing Media	Water fog, foam, dry chemical powder, carbon dioxide (CO_2)
Unsuitable Extinguishing Media	Do not use water jet as an extinguisher, as this will spread the fire
Specific Hazards Arising from the Chemical	During fire, gases hazardous to health may be formed
Special Protective Equipment and Precautions for Firefighters	
Firefighting	Self-contained breathing apparatus and full protective clothing must be worn in case of fire
Equipment/Instructions	Move containers from fire area if you can do so without risk
Specific Methods	Use standard firefighting procedures and consider the hazards of other involved materials
General Fire Hazards	No unusual fire or explosion hazards noted

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures	Keep unnecessary personnel away For personal protection, see section 8 of the SDS
Methods and Materials for Containment and Cleaning Up	The products are immiscible with water and will spread on the water surface Stop the flow of material, if this is without risk Following product recovery, flush area with water For waste disposal, see section 13 of the SDS
Environmental Precautions	Avoid discharge into drains, water courses or onto the ground

7. Handling and storage

Precautions for Safe Handling	Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do no breathe dust. Avoid prolonged exposure.
Conditions for Safe Storage, Including any Incompatibilities	Store in original tightly closed container. Store away from incompatible materials **(**See Section 10 of the SDS)

8. Exposure controls/personal protection

U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)			
Components	**Type**	**Value**	**Form**
Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m^3	
U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
Components	**Type**	**Value**	**Form**
Graphite (Natural) (CAS 7782-42-5)	PEL	5 mg/m^3 15 mg/m^3	Respirable fraction Total dust
U.S. OSHA Table Z-3 (29 CFR 1910.1000)			
Components	**Type**	**Value**	**Form**
Graphite (Natural) (CAS 7782-42-5)	TWA	15 mppfc	
Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m^3 2.4 mppcf	Respirable Respirable
U.S. ACGIH Threshold Limit Values			
Components	**Type**	**Value**	**Form**
Graphite (Natural) (CAS 7782-42-5)	TWA	2 mg/m^3	Respirable fraction
Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m^3	Respirable fraction
U.S. NIOSH: Pocket Guide to Chemical Hazards			
Components	**Type**	**Value**	**Form**
Graphite (Natural) (CAS 7782-42-5)	TWA	2.5 mg/m^3	Respirable
Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m^3	Respirable dust

Biological Limit Values	No biological exposure limits noted for the ingredients
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled
Appropriate Engineering Controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level
Individual Protection Measures, such as Personal Protective Equipment	
Eye/Face Protection	Wear safety glasses with side shields or goggles
Skin Protection	
Hand Protection	Wear appropriate chemical resistant gloves
Other	Wear suitable protective clothing
Respiratory Protection	Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit
Thermal Hazards	Wear appropriate thermal protective clothing, when necessary
General Hygiene Considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Graphite foil
Physical State	Solid
Form	Graphite foil
Color	Black
Odor	Slight hydrocarbon
Odor Threshold	Not available
pH	Not applicable
Melting Point	1500 °C
Freezing Point	Not applicable
Initial Boiling Point and Boiling Range	Not applicable
Flash Point	Not applicable
Evaporation Rate	Not Applicable
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limits	
Flammability limit	
Lower (%)	Not applicable
Upper (%)	Not applicable
Explosive Limit	
Lower (%)	Not available
Upper (%)	Not available
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative Density	1.0
Solubility	
Water	Negligible
Partition Coefficient (n-octanol/water)	Not applicable
Auto-Ignition Temperature	Not applicable
Decomposition Temperature	Not applicable
Viscosity	Not applicable
Other Information	
Bulk Density	70 lb/ft^3
Explosive Properties	Not explosive
Oxidizing Properties	Not oxidizing
Percent Volatile	Not applicable

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport

Chemical Stability Material is stable under normal conditions

Possibility of Hazardous Reactions No dangerous reaction known under conditions of normal use

Conditions to Avoid Contact with incompatible materials

Incompatible Materials Chromium Trioxide, Nitric Acid, Strong Sulfuric Acid

Hazardous Decomposition Products No hazardous decomposition products are known

11. Toxicological information

Information on Likely Routes of Exposure

Inhalation Prolonged inhalation may be harmful

Skin Contact No adverse effects due to skin contact are expected

Eye Contact Direct contact with eyes may cause temporary irritation

Ingestion Expected to be low ingestion hazard

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics Direct contact with eyes may cause temporary irritation

Information on Toxicological Effects

Acute Toxicity		
Components	**Species**	**Test Results**
Graphite (Natural) (CAS 7782-42-5) **Acute Oral** LD50	Rat	10,000 mg/kg

Skin Corrosion/Irritation Prolonged skin contact may cause temporary irritation

Serious Eye Damage/Irritation Direct contact with eyes may cause temporary irritation

Respiratory or Skin Sensitization

Respiratory Not a respiratory sensitizer

Skin This product is not expected to cause skin sensitization

Germ Cell Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic

Carcinogenicity In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However, in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibers, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs – Overall Evaluation of Carcinogenicity

Impurity: Crystalline Silica (Quartz)(CAS 14808-60-7) 1 Carcinogenic to humans

NTP Report on Carcinogens

Impurity: Crystalline Silica (Quartz)(CAS 14808-60-7) Known to be human carcinogen

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Impurity: Crystalline Silica (Quartz)(CAS 14808-60-7) Cancer

Reproductive Toxicity This product is not expected to cause reproductive or developmental effects

Specific Target Organ Toxicity

Single Exposure Not classified

Repeated Exposure Not classified

Aspiration Hazard Not an aspiration hazard

Chronic Effects Prolonged inhalation may be harmful
Prolonged exposure may cause chronic effects

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and Degradability No data is available on the degradability of this substance

Bio-accumulative Potential No data available

Mobility in Soil No data available

Other Adverse Effects No other adverse environmental effects are expected from this component

13. Disposal considerations

Disposal Instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site

Local Disposal Regulations Dispose in accordance with all applicable regulations

Hazardous Waste Code The waste code should be assigned in discussion between the user, the producer and the waste disposal company

Waste from Residues and Unused Products Dispose of in accordance with local regulations. Empty containers or lines may retain some product residues. This material and its container must be disposed of in a safe manner (See Disposal Instructions)

Contaminated Packaging Since emptied containers may retain residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved handling site for recycling or disposal.

14. Transport information

DOT Not regulated as dangerous goods

IATA Not regulated as dangerous goods

IMDG Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory information

U.S. Federal Regulations This product is not known to be a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpart D)
Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed

SARA 304 Emergency Release Notification
Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Impurity: Crystalline Silica (Quartz)(CAS 14808-60-7) — Cancer; Lung effects; Immune system effects; Kidney effects

Superfund Amendments and Reauthorization Act of 1985 (SARA)

SARA 302 Extremely Hazardous Substance
Not listed

SARA 311/312 Hazardous Chemical
Yes

SARA 313 (TRI Reporting)
Not regulated

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Preventions (40 CFR 68.130)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

U.S. State Regulations

U.S. Massachusetts RTK – Substance List

Graphite (CAS 7782-42-5)

Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)

U.S. New Jersey Worker and Community Right-to-Know Act

Graphite (CAS 7782-42-5)

Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)

U.S. Pennsylvania Worker and Community Right-to-Know Law

Graphite (CAS 7782-42-5)

Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)

U.S. Rhode Island RTK

Graphite (CAS 7782-42-5)

Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)

California Proposition 65

WARNING: This product can expose you to Impurity: Crystalline Silica (Quartz), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

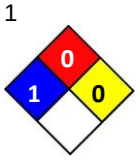
California Proposition 65 – CRT: Listed Date/Carcinogenic Substance

Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7) Listed: October 1, 1988

U.S. California: Candidate Chemicals List – Safer Consumer Products Regulations (Cal. Code Regs, Title 22, 69502.3, Subdivision (a))

Impurity: Crystalline Silica (Quartz) (CAS 14808-60-7)

16. Other information, including date of preparation or last revision

Issue Date	4/7/2020
Revision Date	4/27/2020
Revision	1
NFPA Rating	

Disclaimer

The data in this safety data sheet relate only to the specific material designated herein and do not relate to be used in combination with any other material or in any process. The opinions expressed herein are those of EGC Enterprises, Inc. We believe that the information contained herein is current as to the date of issue of the safety data sheet. Since the use of this information and these opinions and conditions of use of the product are no with the control of EGC Enterprises, Inc., it is the user's obligation to determine the conditions of safe use of this product.