

1. Identification

Product identifier	TC-2™
Other means of identification	
SDS number	6003
Recommended use	Coating material.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer / Importer / Supplier / Distributor information	
Manufacturer/Supplier	FIBER MATERIALS INC. 5 MORIN STREET Biddeford, ME 04005
Contact person	SDS Info 1-207-370-8370
E-mail	sds.info@fibermaterialsinc.com
Emergency number	For Chemical Emergency ONLY: Call 3E Company Hotline at 1-800-451-8346

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye damage. May cause drowsiness or dizziness.

Precautionary statement

Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection.
Response	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Propan-2-ol	67-63-0	> 60
Graphite	7782-42-5	< 30
Propylene Glycol Methyl Ether	107-98-2	< 5
n-Butyl alcohol	71-36-3	< 5
Free Crystalline Silica (Quartz)	14808-60-7	< 0.5

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant 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	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. 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	Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. 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

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not get this material in contact with eyes. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Free Crystalline Silica (Quartz) (CAS 14808-60-7)	PEL	0.05 mg/m ³	Respirable dust.
Graphite (CAS 7782-42-5)	PEL	5 mg/m ³	Respirable fraction.
n-Butyl alcohol (CAS 71-36-3)	PEL	15 mg/m ³	Total dust.
		300 mg/m ³	
Propan-2-ol (CAS 67-63-0)	PEL	100 ppm	
		980 mg/m ³	
		400 ppm	

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Free Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m ³	Total dust.
		0.1 mg/m ³	Respirable.
Graphite (CAS 7782-42-5)	TWA	2.4 mppcf	Respirable.
		15 mppcf	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Free Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.
Graphite (CAS 7782-42-5)	TWA	2 mg/m ³	Respirable fraction.
n-Butyl alcohol (CAS 71-36-3)	TWA	20 ppm	
Propan-2-ol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
Propylene Glycol Methyl Ether (CAS 107-98-2)	STEL	100 ppm	
	TWA	50 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Free Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m3	Respirable.
n-Butyl alcohol (CAS 71-36-3)	Ceiling	150 mg/m3	
Propan-2-ol (CAS 67-63-0)		50 ppm	
	STEL	1225 mg/m3	
		500 ppm	
Propylene Glycol Methyl Ether (CAS 107-98-2)	TWA	980 mg/m3	
		400 ppm	
	STEL	540 mg/m3	
		150 ppm	
	TWA	360 mg/m3	
		100 ppm	

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

n-Butyl alcohol (CAS 71-36-3)

Can be absorbed through the skin.

Propylene Glycol Methyl Ether (CAS 107-98-2)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

n-Butyl alcohol (CAS 71-36-3)

Skin designation applies.

US - Tennessee OELs: Skin designation

n-Butyl alcohol (CAS 71-36-3)

Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

n-Butyl alcohol (CAS 71-36-3)

Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) 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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves.

Skin protection**Other**

Wear appropriate chemical resistant clothing.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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**

Black liquid.

Physical state

Liquid.

Form

Liquid.

Color

Black.

Odor

Isopropanol.

Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	179.6 °F (82 °C)
Flash point	51.8 °F (11.0 °C) Tag Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	2 %
Flammability limit - upper (%)	12 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	2.07 (Air=1) at 68°F (20°C) 0.89 at 68°F (20°C)
Solubility(ies)	
Solubility (water)	Soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Vapors may form explosive mixture with air.
Oxidizing properties	Not oxidizing.
VOC	710 g/l

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	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Isocyanates. Chlorine.
Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye damage.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Graphite (CAS 7782-42-5)		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg
n-Butyl alcohol (CAS 71-36-3)		
Acute		
Dermal		
LD50	Rabbit	3400 mg/kg
Inhalation		
LC50	Rat	8000 mg/l, 4 Hours
Oral		
LD50	Rat	790 mg/kg
Propan-2-ol (CAS 67-63-0)		
Acute		
Dermal		
LD50	Rabbit	12870 mg/kg
Oral		
LD50	Rat	4710 mg/kg
Propylene Glycol Methyl Ether (CAS 107-98-2)		
Acute		
Dermal		
LD50	Rabbit	13000 mg/kg
Inhalation		
LC50	Rat	>= 6 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	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	Risk of cancer cannot be excluded with prolonged exposure.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Free Crystalline Silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.	
Propan-2-ol (CAS 67-63-0)	3 Not classifiable as to carcinogenicity to humans.	
NTP Report on Carcinogens		
Free Crystalline Silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Free 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	May cause drowsiness and dizziness.	
Specific target organ toxicity - 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.

Components	Species	Test Results
Propan-2-ol (CAS 67-63-0)		
Aquatic		
Fish	LC50 Bluegill (<i>Lepomis macrochirus</i>)	> 1400 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Propan-2-ol (CAS 67-63-0) 0.05

Mobility in soil The product is soluble in water.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

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 / unused products Dispose of in accordance with local regulations. Empty containers or liners 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 product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN1139
UN proper shipping name Coating solution
Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
Packing group II
Environmental hazards
Marine pollutant No.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions 149, IB2, T4, TP1, TP8
Packaging exceptions 150
Packaging non bulk 202
Packaging bulk 242

IATA

UN number UN1139
UN proper shipping name Coating solution
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards No.
ERG Code 3L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN1139
UN proper shipping name COATING SOLUTION

Transport hazard class(es)**Class** 3**Subsidiary risk** -**Packing group** II**Environmental hazards****Marine pollutant** No.**EmS** F-E, S-E**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.**15. Regulatory information****US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Free Crystalline Silica (Quartz) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects
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CERCLA Hazardous Substance List (40 CFR 302.4)

n-Butyl alcohol (CAS 71-36-3)	LISTED
Propan-2-ol (CAS 67-63-0)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories** Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical Yes**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
n-Butyl alcohol	71-36-3	< 5
Propan-2-ol	67-63-0	> 60

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 Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer.**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Free Crystalline Silica (Quartz) (CAS 14808-60-7)

US. Massachusetts RTK - Substance List

Free Crystalline Silica (Quartz) (CAS 14808-60-7)

Graphite (CAS 7782-42-5)

n-Butyl alcohol (CAS 71-36-3)

Propan-2-ol (CAS 67-63-0)

Propylene Glycol Methyl Ether (CAS 107-98-2)

US. New Jersey Worker and Community Right-to-Know Act

Free Crystalline Silica (Quartz) (CAS 14808-60-7)

Graphite (CAS 7782-42-5)
n-Butyl alcohol (CAS 71-36-3)
Propan-2-ol (CAS 67-63-0)
Propylene Glycol Methyl Ether (CAS 107-98-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Free Crystalline Silica (Quartz) (CAS 14808-60-7)
Graphite (CAS 7782-42-5)
n-Butyl alcohol (CAS 71-36-3)
Propan-2-ol (CAS 67-63-0)
Propylene Glycol Methyl Ether (CAS 107-98-2)

US. Rhode Island RTK

Free Crystalline Silica (Quartz) (CAS 14808-60-7)
Graphite (CAS 7782-42-5)
n-Butyl alcohol (CAS 71-36-3)
Propan-2-ol (CAS 67-63-0)
Propylene Glycol Methyl Ether (CAS 107-98-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date 20-June-2017
Revision date -
Version # 01
NFPA ratings



List of abbreviations

Disclaimer

FIBER MATERIALS, INC. ADVISES THE USERS OF THIS PRODUCT TO STUDY THIS SAFETY DATA SHEET (SDS). AND BECOME AWARE OF PRODUCT HAZARDS AND SAFETY INFORMATION. TO PROMOTE SAFE USE OF THIS PRODUCT, USERS SHOULD NOTIFY THEIR EMPLOYEES, AGENTS AND CONTRACTORS OF THE INFORMATION ON THIS SDS AND ANY PRODUCT HAZARDS AND SAFETY INFORMATION

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