

TERRAFUSE INC.

Safety Data Sheet TF Polyaspartic Tint-Slate Grey

SECTION 1: Identification

1.1 Product identifier

Product name

TF Polyaspartic Tint-Slate Grey

4008

Product number

1.2 Other means of identification TF Slate Grey Tint

1.3 Recommended use of the chemical and restrictions on use Used as a liquid tint for Terrafuse Brand Polyaspartic and Epoxy coatings. Do not use alone as a chemical coating, product must be mixed into a polymer system.

1.4 Supplier's details

Name Address	Terrafuse Inc. 1325 Hastings Cres. SE Calgary AB T2G 4C8 Canada
Telephone	403-243-3000
Fax	403-243-3050
email	info@terrafuse.ca

1.5 Emergency phone number(s)

CANUTEC 1-888-CANUTEC (226-8832) CHEMTREC USA 800-424-9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Specific target organ toxicity (repeated exposure), Cat. 1
- Flammable liquids, Cat. 3
- Germ cell mutagenicity, Cat. 1B
- Toxic to reproduction, Cat. 1B

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s) H226 H340 H360 H372	Flammable liquid and vapor May cause genetic defects May damage fertility or the unborn child Causes damage to organs [central nervous system] through prolonged or repeated exposure
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe fume/gas/mist/vapors/spray.
P264	Wash hands or contacted areas thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P370+P378	In case of fire: Use Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2) to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container according to local regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Titanium(IV) oxide

Concentration	60 - 80 % (weight), Trade secret
EC no.	236-675-5
CAS no.	13463-67-7

2. 2-methoxy-1-methylethyl acetate

Concentration	10 - 30 % (weight), Trade secret
EC no.	203-603-9
CAS no.	108-65-6
Index no.	607-195-00-7

- Flammable liquids, Cat. 3

H226	Flammable liquid and vapor	
3. Distillates, petroleum, hydrotreated light Concentration 5 - 10 % (weight), Trade secret		
EC no. CAS no.	265-149-8 64742-47-8	
 Aspiration hazard, Cat. 1 Flammable liquids, Cat. 4 Hazardous to the aquatic environm Specific target organ toxicity (single Skin corrosion/irritation, Cat. 2 	nent, long-term (chronic), Cat. 2	
H227	Combustible liquid	
H304	May be fatal if swallowed and enters airways	
H315	Causes skin irritation	
H335 H336	May cause respiratory irritation May cause drowsiness or dizziness	
H350 H411	Toxic to aquatic life with long lasting effects	
4. Aluminum hydroxide	Q 7.0/ (unitable). Trada accest	
Concentration EC no.	3 - 7 % (weight), Trade secret 244-492-7	
CAS no.	21645-51-2	
5. Solvent naphtha (petroleum), m	nedium aliph	
Concentration	3 - 7 % (weight), Trade secret	
EC no.	265-191-7	
CAS no.	64742-88-7	
Index no.	649-405-00-X	
 Aspiration hazard, Cat. 1 Specific target organ toxicity (repeating the second se	ated exposure), Cat. 1	
H304	May be fatal if swallowed and enters airways	
H372	Causes damage to organs [organs] through prolonged or repeated exposure	
	[route]	
6. Carbon black (Not in a respirab		
Concentration	1 - 5 % (weight), Trade secret	
CAS no.	1333-86-4	

Trade secret statement (OSHA 1910.1200(i)) The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

SECTION 4: First-aid measures

Description of necessary first-aid measures 4.1

General advice	Consult a physician/doctor if necessary. Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Remove and contaminated clothing immediately. Show this material safety data sheet to the doctor in attendance.	
If inhaled	If overcome by exposure, remove victim to fresh air immediately. Administer oxygen or artificial respiration as needed. Call a physician if syptoms persist or worsen.	
In case of skin contact	Remove contaminated clothing and shoes. Flush affected area with large amounts of water and soap. Get medical advice/attention if patient feels unwell, or irritation develops. Wash clothing before reuse.	
In case of eye contact	Immediately flush with plenty of running water for at least 15 minutes, occasionally holding eyelids apart. If eye irritation persists: Get medical advice/attention.	
If swallowed	Rinse mouth. Obtain emergency medical attention, or contact poison control center.	
Personal protective equipment for first-aid responders		

Use gloves, and

Use gloves, and eye protection if potential for chemical exposure exists. Remove victim to fresh air, and remove any contaminated clothing.

4.2 Most important symptoms/effects, acute and delayed

Narcosis. Behavioral changes. Decrease in motor functions. Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects.

4.3 Indication of immediate medical attention and special treatment needed, if necessary 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.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Specific hazards arising from the chemical

Releases flammable vapors below normal ambient temperatures. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Flammable vapors may be heavier than air and travel long distances along the ground before igniting and flashing back to vapor source. Move containers from fire area if it can be done without risk.

Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Always stay away from tanks engulfed in fire.

Distillates, petroleum, hydrotreated light: Carbon oxides may be released during a fire.

5.3 Special protective actions for fire-fighters

Wear full protective clothing and self-contained breathing apparatus. Use water spray to keep fire exposed containers cool.

Further information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures

6.1 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. Do not breathe 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.

6.2 Environmental precautions

Prevent this product from entering water courses or drainage system. Do not flush to sewer. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Flammable. Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Dike large spills and place materials in salvage containers. Water spray may reduce vapor; but may not prevent ignition in closed spaces.

For small quantities, wipe off with cloth or paper, and wash affected area with water and detergent. For large quantities, recover by taking up mechanically or with and inert absorbent material such as waste cloth, dry sand or soil.

Wash residue with water and detergent.

Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. 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 breathe mist or vapor. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

7.2 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, Strong oxidizing agents. (see Section 10 of the SDS).

Specific end use(s)

To be mixed with TF Polyaspartics or TF Epoxy resins only, and used as a concrete coating.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Solvent naphtha (petroleum), medium aliph (CAS: 64742-88-7)

TWA: 200mg/m3; US (ACGIH) Non-aerosol

2. Aluminum hydroxide (CAS: 21645-51-2) TWA (Inhalation): 1 mg/m3: US (ACGIH)

Respirable fraction

3. Titanium(IV) oxide (CAS: 13463-67-7) TWA: 10 mg/m3; US (ACGIH)

4. Solvent naphtha (petroleum), medium aliph (CAS: 64742-88-7) TWA: 200 mg/m3; Canada OELs Non Aerosol/Vapor

5. Titanium(IV) oxide (CAS: 13463-67-7) TWA: 10 mg/m3; Canada OELs

6. 2-methoxy-1-methylethyl acetate (CAS: 108-65-6) STEL: 75 ppm; Canada OELs

7. Distillates, petroleum, hydrotreated light (CAS: 64742-47-8) TWA: 200 mg/m3; Canada OELs Non-aerosol

8. Aluminum hydroxide (CAS: 21645-51-2) TWA: 1 mg/m3; Canada OELs Respirable fraction

8.2 Appropriate engineering controls

Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Avoid eye contact by wearing safety goggles. Wear appropriate protective eyeglasses or chemical safety goggles as described by Canadian CSA Eye Protection Standard Z94.3-M1982, Industrial Eye and Face Protectors. It is recommended to wear Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Distillates (petroleum), hydrotreated light (CAS 64742-47-8) Can be absorbed through the skin.

Solvent naphtha (petroleum), medium aliph.; Straight run kerosine (CAS 64742-88-7) Can be absorbed through the skin.

Avoid skin contact by wearing chemical resistant gloves (Viton is recommended). Follow OSHA's hand protection regulations in 29 CFR 1910.138. Wear suitable protective clothing. Use of an impervious apron is recommended.

Body protection

Where more extensive contact may occur, wear suitable protective clothing (e.g. apron, sleeves and boots). Follow Canadian CSA Foot Protection Standard Z195-M1984, Protective Footwear.

Respiratory protection

Wear respiratory protective equipment (organic vapor mask) if exposure to vapors is foreseen. Follow the Canadian CSA Respiratory Standard Z94.4-93-02.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.) Odor Odor threshold	Thick Grey Liquid Strong solvent odor (ether like) Not available Not available
pH Melting point/freezing point	Not available
Initial boiling point and boiling range	289.4 °F (> 143 °C)
Flash point	108.0 °F (42.2 °C) Closed Cup
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability limits	Not available
Upper/lower explosive limits	Not available
Vapor pressure	55.995 hPa
	at 20 °C
Vapor density	Not available
Relative density	Not available
Solubility(ies)	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not explosive
Oxidizing properties	Not considered an oxidizing agent.

Other safety information

Additional properties may be listed in Sections 2 and 5.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous decomposition products when stored and handled correctly. Hazardous polymerization does not occur.

10.4 Conditions to avoid

Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Avoid temperatures exceeding 108.0 °F (42.2 °C).

10.5 Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases, Amines

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Aluminum hydroxide (CAS 21645-51-2) Acute Oral LD50 Rat > 5000 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

Canada - Alberta OELs: Irritant Titanium dioxide (CAS 13463-67-7) Irritant Respiratory sensitization: Not a respiratory sensitizer. Skin sensitization: This product is not expected to cause skin sensitization.

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

Risk of cancer cannot be excluded with prolonged exposure. ACGIH Carcinogens Aluminum hydroxide (CAS 21645-51-2): A4 Not classifiable as a human carcinogen. Solvent naphtha (petroleum), medium aliph.; Straight run kerosine (CAS 64742-88-7): A3 Confirmed animal carcinogen with unknown relevance to humans. Titanium dioxide (CAS 13463-67-7): A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity Aluminum hydroxide (CAS 21645-51-2) Not classifiable as a human carcinogen. Solvent naphtha (petroleum), medium aliph.; Straight run kerosine (CAS 64742-88-7) Confirmed animal carcinogen with unknown relevance to humans.

Titanium dioxide (CAS 13463-67-7) Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

Reproductive toxicity

May damage the unborn child.

Summary of evaluation of the CMR properties

Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

STOT-single exposure

Not classified.

STOT-repeated exposure

Causes damage to organs (central nervous system) through prolonged or repeated exposure.

Aspiration hazard

Not an aspiration hazard. May be harmful if swallowed and enters airways.

Additional information

Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

SECTION 12: Ecological information

Toxicity

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. Aquatic

Crustacea EC50 Daphnia 107.1984 mg/l, 48 hours estimated Fish LC50 Fish 84.0596 mg/l, 96 hours estimated

Distillates (petroleum), hydrotreated light (CAS 64742-47-8) Aquatic Crustacea EC50 Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours Fish LC50 Rainbow trout,donaldson trout 2.9 mg/l, 96 hours (Oncorhynchus mykiss) Titanium dioxide (CAS 13463-67-7) Aquatic Crustacea EC50 Water flea (Daphnia magna) > 1000 mg/l, 48 hours Fish LC50 Mummichog (Fundulus heteroclitus) > 1000 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential Not available

Mobility in soil Not available

Results of PBT and vPvB assessment Not available

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

Disposal of the product

Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Comply with applicable federal/national, state/provincial, and local regulations.

Disposal of contaminated packaging

Empty containers retain this product and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or exposure such containers to heat, flame, sparks, static, electricity or other sources of ignition. The containers should be disposed of according to local regulations.

Waste treatment

Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Comply with applicable federal/national, state/provincial, and local regulations.

Sewage disposal

Do not dispose of in drains.

SECTION 14: Transport information

DOT (US)

UN Number: 1263 Class: 3 Packing Group: III Proper Shipping Name: Paint related material

IMDG

UN Number: 1263 Class: 3 Packing Group: III Proper Shipping Name: Paint Related materials Marine pollutant: No EMS Number 1: F-E EMS Number 2: S-E Marine Pollutant: No

ΙΑΤΑ

UN Number: 1263 Class: 3 Packing Group: III Proper Shipping Name: Paint related materials

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

Titanium dioxide (airborne, unbound particles of respirable size)

WARNING! This product contains a chemical known to the State of California to cause cancer. Titanium dioxide CAS-No. 13463-67-7

New Jersey Right To Know Components

Chemical name: Titanium dioxide CAS number: 13463-67-7

Pennsylvania Right To Know Components

Chemical name: Titanium dioxide CAS number: 13463-67-7

Massachusetts Right To Know Components

Distillates, petroleum, hydrotreated light CAS-No. 64742-47-8

Pennsylvania Right To Know Components

Distillates, petroleum, hydrotreated light CAS-No. 64742-47-8

New Jersey Right To Know Components

Distillates, petroleum, hydrotreated light CAS-No. 64742-47-8

SARA 311/312 Hazards Fire Hazard, Acute Health Hazard

New Jersey Right To Know Components Common name: CARBON BLACK CAS number: 1333-86-4

Pennsylvania Right To Know Components

Chemical name: Carbon black CAS number: 1333-86-4

California Prop. 65 components

Chemical name: Carbon black (airborne, unbound particles of respirable size) CAS number: 1333-86-4 02/21/2003 - Cancer

New Jersey Right To Know Components

Aluminium hydroxide CAS-No. 21645-51-2

Pennsylvania Right To Know Components

Aluminium hydroxide CAS-No. 21645-51-2

SECTION 16: Other information

Date of revision: March 27, 2019 Updates were made to the components section

16.1 Further information/disclaimer

NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to chemicals contained in our products.

16.2 Preparation information

Prepared by: Terrafuse Inc. www.terrafuse.ca 1-855-243-8080