

TF 750 – Thermo-Flex Acrylic Roof Coating

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Name	Product identifier	%	GHS-US classification
Titanium dioxide	(CAS No) 13463-67-7	< 7.5	Carc. 2, H351
Ammonia	(CAS No) 7664-41-7	<1	Flam. Gas 2, H221 Compressed gas, H280 Acute Tox. 3 (Inhalation:gas), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318
Pentapotassium triphosphate	(CAS No) 13845-36-8	<1	Acute Tox. 4 (Oral), H302

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
- First-aid measures after skin contact : Remove contaminated clothing and shoes. Wash hands with water and soap. Seek medical attention if irritation develops.
- First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately get medical attention.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Immediately call a POISON CENTER or doctor/ physician. Give water to drink if victim completely conscious/alert. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Inhalation of mist or aerosol may cause irritation to nose and throat . In case of repeated or prolonged exposure : Lungs irritation. Dizziness, headaches, nausea. Suspected of causing cancer if inhaled.
- Symptoms/injuries after skin contact : Prolonged or repeated contact with the skin may cause dermatitis.
- Symptoms/injuries after eye contact : May cause eye irritation. symptoms may include stinging, tearing, redness, swelling and blurred vision.
- Symptoms/injuries after ingestion : Abdominal pain, nausea. Vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : carbon dioxide (CO2), water, dry chemical powder. Foam.
- Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire.
- Protective equipment for firefighters : Wear proper protective equipment. Wear a self-contained breathing apparatus.
- Other information : Prevent entry to sewers and public waters. Material can splatter above 100° C (212° F). Dried product can burn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate ventilation. The vapour is heavier than air; beware of pits and confined spaces. Spilled material may present a slipping hazard. Stop leak if safe to do so. No action shall be taken involving any personal risk or without suitable training.

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing. Refer to section 8.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Evacuate unnecessary personnel.

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6.2. Environmental precautions

Do not discharge into drains or the environment. Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Wear proper protective equipment. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Collect all waste in suitable and labelled containers and dispose according to local legislation. Avoid static electricity discharges. Store away from other materials. Dispose of contents/container to comply with applicable local, national and international regulations.

6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection. For disposal of residues refer to section 13 : Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Use only in well-ventilated areas. Avoid all eye and skin contact and do not breathe vapour and mist. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container closed when not in use. Take precautionary measures against static discharge. Ensure adequate ventilation.

Hygiene measures : Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practices. Wash exposed skin thoroughly with soap and water after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

Storage conditions : Keep container tightly closed in a cool place. Keep only in the original container in a cool, well-ventilated place away from highly flammable substances. Store away from direct sunlight or other heat sources. PROTECT FROM FREEZING DURING SHIPMENT AND STORAGE. Do not store material at temperatures below 50 °F (10 °C).

Incompatible materials : Strong oxidizing agents. Acids. Base.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TF 750 – Thermo-Flex Acrylic Roof Coating	
ACGIH	Not applicable
OSHA	Not applicable

Ammonia (7664-41-7)		
ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	ACGIH STEL (ppm)	35 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	35 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm

Titanium dioxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust)

Pentapotassium triphosphate (13845-36-8)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls : Provide adequate ventilation. Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

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Personal protective equipment : Insufficient ventilation: wear respiratory protection. Protective goggles. Gloves. Protective clothing. For certain operations, additional Personal Protection Equipment (PPE) may be required.



Hand protection : Wear protective gloves. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles. Contact lenses should not be worn.

Skin and body protection : Long sleeved protective clothing. Personal protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling.

Respiratory protection : An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. Use an approved air purifying respirator equipped with an ammonia/methylamine cartridge. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: White or colors
Odour	: Slight odour
Odour threshold	: No data available
pH	: 8.5 - 9.5
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C (212 °F)
Flash point	: 115 °C (240 °F)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: Heavier than air
Relative density	: No data available
Density	: 1.44 Specific Gravity
Solubility	: soluble in water. Water: Soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 20.1 g/l (0.17 lb/gal)

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

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10.2. Chemical stability

Stable at normal conditions. will freeze and become unusable at temperatures below 32°F (0 °C).

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid Freezing. Heat, open flame, sparks, hot surfaces, ignition sources, elevated temperature.

Avoid exposure to temperatures above 150 °F (65.6 °C)

May emit toxic materials when heated to 350° F (177 °C) or above.

10.5. Incompatible materials

Strong oxidizing agents. Acids. Base.

10.6. Hazardous decomposition products

Hazardous combustion products are Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur, phosphorus, zinc and/or nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Ammonia (7664-41-7)	
LD50 oral rat	350 mg/kg
LC50 inhalation rat (ppm)	2000 ppm/4h
ATE US (oral)	350.000 mg/kg bodyweight
ATE US (gases)	2000.000 ppmv/4h

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg

Pentapotassium triphosphate (13845-36-8)	
LD50 oral rat	2000 mg/kg
ATE US (oral)	2000.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met pH: 8.5 - 9.5

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met pH: 8.5 - 9.5

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Suspected of causing cancer.

Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

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Symptoms/injuries after inhalation	: Inhalation of mist or aerosol may cause irritation to nose and throat . In case of repeated or prolonged exposure : Lungs irritation. Dizziness, headaches, nausea. Suspected of causing cancer if inhaled.
Symptoms/injuries after skin contact	: Prolonged or repeated contact with the skin may cause dermatitis.
Symptoms/injuries after eye contact	: May cause eye irritation. symptoms may include stinging, tearing, redness, swelling and blurred vision.
Symptoms/injuries after ingestion	: Abdominal pain, nausea. Vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects

Ammonia (7664-41-7)

LC50 fish 1	0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio)
EC50 Daphnia 1	25.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	0.26 - 4.6 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Ammonia (7664-41-7)

Log Pow	-1.14 (at 25 °C)
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects	: Prevent entry to sewers and public waters.
Effect on ozone layer	: No additional information available
Effect on the global warming	: No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose of contents/container to comply with applicable local, national and international regulations. Consult the appropriate authorities about waste disposal.
Additional information	: Do not re-use empty containers. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.
Ecology - waste materials	: Avoid release to the environment. Do not allow into drains or water courses.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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SECTION 15: Regulatory information

15.1. US Federal regulations

Ammonia (7664-41-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the United States SARA Section 302
Listed on United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500
SARA Section 313 - Emission Reporting	1.0 % (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)

Titanium dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Pentapotassium triphosphate (13845-36-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Ammonia (7664-41-7)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class E - Corrosive Material
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Titanium dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
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Pentapotassium triphosphate (13845-36-8)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Ammonia (7664-41-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Titanium dioxide (13463-67-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Pentapotassium triphosphate (13845-36-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

No additional information available

15.2.2. National regulations

Ammonia (7664-41-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Listed on the Canadian IDL (Ingredient Disclosure List)

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Titanium dioxide (13463-67-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
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Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Pentapotassium triphosphate (13845-36-8)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

Titanium dioxide (13463-67-7)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

SECTION 16: Other information

Indication of changes : 2.1. Classification of the substance or mixture. 3. Composition/information on ingredients. according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations.

Revision date : 01/29/2015

Sources of Key data : SDS - Safety Data Sheet.

Other information : None.

Full text of H-phrases:

Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Carc. 2	Carcinogenicity, Category 2
Compressed gas	Gases under pressure : Compressed gas
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Gas 2	Flammable gases, Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H221	Flammable gas
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H351	Suspected of causing cancer

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Personal Protection : I

SDS US (GHS HazCom 2012)

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