1. Identification

1.1 Product identifier

Product name: *TOP 1FR*

Proper Shipping Name Paint

1.2 Relevant identified uses of the substance or mixture and uses advised against

Chemical/technical description: *Paint product*

Field of application: *Protective lacquer for fire retarding systems*

1.3 Details of the supplier

Company: *Fire Protection Coatings Ltd*

Address: *Unit 4, 201 Opawa Road, Hillsborough, Christchurch 8022*

Contact person: *Per Olsson*

Phone: *0800 347 374*

E-mail: *info@fireshield.co.nz*

Website: *www.fireshield.co.nz*

1.4 Emergency telephone number

Supplier Emergency Contact *027 439 4271 (day time only)*

NZ Poisons Information Centre 0800 764 766

Emergency Services 111 – Fire, Police or Ambulance

2. Hazards identification

2.1 Statement of Hazardous Nature

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

2.2 HSNO Classification and Hazard Statements

3.1C	*Flammable Liquid and Vapour*
6.1E	*May be harmful if swallowed and enters airways*
6.8B	*Suspected of damaging fertility or the unborn child if swallowed or enters airways*
6.9B	*May cause drowsiness or dizziness*
9.1C	*Harmful to aquatic life with long lasting effects*

WARNING

2.3 Prevention Statements

Read Safety Data Sheet before use
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat/sparks/open flames/hot surfaces
Keep container tightly closed
Ground / bond container and receiving equipment
Use explosion-proof electrical ventilation or lighting
Use only non-sparking tools
Take precautionary measures against static discharge
Avoid breathing vapours
Wash hands thoroughly after handling
Do no eat, drink or smoke when using this product
Avoid release into the environment
Use personal protective equipment as required

2.4 Other hazards

Health hazard:

Long lasting and repeated exposure to solvent vapours above the occupational exposure limits may be seriously detrimental to health and result in adverse health effects such as mucous membrane and respiratory system irritation. It may cause permanent nerve damage. Repeated exposure may cause skin dryness or cracking.

Fire:

Prevent formation of flammable or explosive concentrations of vapour in air. Avoid vapour concentrations above the occupational exposure limits. Ventilate well. Keep away from open flame or other ignition sources. The product may build up electrostatic charges. Ground all equipment. Prevent sparks from static electricity. Operators should wear antistatic footwear and clothing

Physical / Chemical Hazards:

May cause damage to seals, certain painted surfaces, protective grease layers and materials of natural rubber.

3. Composition / information on ingredients

3.1 Composition

Substance:	CAS#	Composition
Naphtha (petroleum), Hydrodesulphurised, heavy (14-17%),	*64742-82-1*	*< 25%*
Xylene	*1330-20-7*	*10 – 20%*
n-Butyl acetate	*123-86-4*	*2.5 – 10%*

4. First-aid measures

4.1 Description of first aid measures

General information:	*Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.*
Inhalation:	*Remove to fresh air. Keep person warm and at rest. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice. If INHALED and symptoms develop or you feel unwell: call* NZ Poisons Information Centre (0800 764 766). Do NOT induce vomiting
Eye contact:	*Remove contact lenses. Flush copiously with clean, fresh water for at least 10 minutes, keeping the eyelids open. Seek medical advice.*
Skin contact:	*Remove contaminated clothing. Wash skin thoroughly with water. Do not use solvents or thinners.*
Ingestion:	*IF SWALLOWED do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Call* NZ Poisons Information Centre (0800 764 766) *or doctor/physician.*

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	*Inhalation may cause headache, dizziness, fatigue and nausea. Long lasting and repeated exposure to solvent vapours above limits can be seriously detrimental to health and result in adverse health effects such as mucous membrane and respiratory system irritation and may cause permanent nerve damage.*
Skin contact:	*Repeated or prolonged contact may dry and irritate the skin and cause skin dryness or cracks.*
Eye contact:	*Eye contact causes irritation.*
Ingestion:	*May cause vomiting, stomach pains and same symptoms as by inhalation of vapours. Because of "naphtha" (see point 3) there is a risk for lung damage if swallowed.*

4.3 Indication of any immediate medical attention and special treatment needed

Other information	*Treat symptomatically*

5. Fire-fighting measures

5.1 Flammability

Flammable liquid and vapour

5.2 Extinguishing media

In case of fire use recommended extinguishing media: Alcohol resistant foam, CO2, powders, water spray. Extinguishing media may be used for small fires only. Do not use water jet. Do not allow run-off from the fire fighting to enter drains or watercourses.

5.3 Special hazards arising from the substance or mixture

Vapours are heavier than air and may spread along the ground. Vapours can form explosive mixtures with air and be ignited, for example by static electricity.

5.4 Advice for fire fighters

Use breathing apparatus and full protective clothing. Avoid inhalation of vapours. Alert the emergency. Move container standing near fire, otherwise cool them with water. Remove combustible materials. Do not allow spillage from fire fighting to enter drains or watercourses

6. Accidental release measures

6.1 Personal protections, protective equipment and emergency procedures

Avoid contact with skin and eyes. Avoid inhalation of vapours.

6.2 Environmental precautions

Contain and collect spillage with non-combustible absorbent materials e.g. earth, sand or other inert material. Prevent entry into drains and watercourses. If the product contaminates lakes, rivers or sewers, inform appropriate authorities – local or regional council and emergency services (if required for emergency response).

6.3 Methods and material for containment and cleaning up

Contain and clean up spillage with non-combustible material such as sand, earth and place in container for disposal according to local council or Ministry for the Environment requirements. Paints that have been allowed to dry to a solid product may be able to be disposed of as non-hazardous waste. Clean contaminated surfaces of residual material preferably with a detergent, avoid use of solvents. Exclude sources of ignition and ventilate the area.

6.4 Reference to other sections

See Section 1 for emergency contact information

See Section 7 for protective measures

See Section 8 regard personal protective equipment

See section 13 regard waste management.

7. Handling and storage

7.1 Safe handling

Avoid vapour concentration higher than the workplace exposure limits(see section 8). Avoid contact with skin and eyes. Avoid inhalation of dust from sanding. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8.

Always keep in containers of same material as the original one.

7.2 Safe storage, including any incompatibilities

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air by storing in a well-ventilated place.

In addition, the product should only be used in areas from which all-naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.

Always keep in containers of same material as the original one.

Storage facilities must comply with the HSNO Act. Observe label precautions. Store between 5-25°C. Keep away from oxidizing agents, from strongly alkaline and strongly acidic materials.

No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure control / personal protection

8.1 Exposure Standards

Substances with an exposure limit:

Workplace Exposure Standards (WES): WorkSafe New Zealand (Feb 2013)

	TWA		*STEL*	
	ppm	*mg/m³*	*ppm*	*mg/m³*
Xylene	*50*	*217*		
Butyl acetate	*150*	*713*	*200*	*950*

8.2 Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the occupational exposure limit, suitable respiratory protection must be worn.

Respiratory protection: *When exposure to concentrations above the exposure limit occurs, wear a well fitted mask with combined particulate/organic gas and vapour protection. See AS/NZS 1715 for further information. Mask must conform to AS/NZS 1716.*

Hand, skin protection: *When prolonged or direct contact cannot be excluded, use gloves recommended by the supplier. Barrier-creams could be used to protect the skin against exposure. The cream should however not be applied on the skin if the skin already has been exposed to the preparation. To avoid other types of direct contact, suitable protective clothing is recommended.*

Eye protection: *Avoid contact with eyes. Splash resistant Safety Glasses with side shields, safety goggles (AS/NZS 1337), or a face-shield should be worn.*

Thermal hazard: *Flammable product.*

Environmental exposure controls: *Avoid releases to water and drain.*

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: *Varnish with an odour of solvents.*

Colour: *Colourless*

Flash point: *25°C*

Explosive limits: *1-8 vol%*

Density: *1060 kg/m³*

Viscosity: *2000 mPa s, Brookfield RV, spindle 5, 60 r/min, 23°C*

Solubility: *Soluble in several organic solvents, but insoluble in water.*

Organic solvent % w/w: *50%*

Relative vapour density: *Heavier than air.*

9.2 Other information

VOC: *499 g/l*

10. Stability and reactivity

Stability: *The product is stable at recommended storing and handling conditions.*

Conditions to avoid: *When heated or at incomplete combustion (after evaporation of water) the product may emit carbon- dioxide, carbon monoxide, nitrogen oxides and smoke.*

Incompatibility/ Materials to avoid: *Keep away from oxidizing agents, strongly alkaline and strongly acidic materials in order to avoid exothermic (heat releasing) reactions.*

11. Toxicological information

11.1 Health Effects/Symptoms of Exposure

Inhalation: *Exposure to component solvents vapours concentration in excess of the occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.*

Skin contact: *Some of the above effects may be caused by absorption through the skin. Prolonged or repeated direct contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.*

Eye contact: *Splashes in the eyes may cause irritation and reversible damage.*

Ingestion: *May cause vomiting, stomach ache in addition to the symptoms that may arise when the product is inhaled.*

11.2 Toxicological Data

There is no data available for the product itself. Therefore, toxicological data is based on individual components.

	Xylene (10-20%)	**n-Butyl acetate (2.5-10%)**
Acute Dermal Toxicity	*Class 6.1D Harmful if in contact with skin LD50 range for 6.1D is 1000-2000 mg/kg≠*	
Acute Oral Toxicity	*Mouse: 1590mg/kg LD50**	*Rabbit: 32000mg/kg LD50**
Acute Inhalation Toxicity	*Inhalation from vapour, Rat: 6350ppm LC50**	*Inhalation from dust/mist, Rat: approximately 2mg/L LC50**
Skin Irritation	*R-phase R 38*: Irritating to skin*	*Rabbit: Moderate Irritation to skin*
Eye Irritation	*Rabbit: Reversible damage to eye by exposure to 0.1ml*	*Rabbit: Irritation to eye*
Reproductive Toxicity	*Placental transfer has been shown in humans and experimental animals. LOAEL values of 115-500 ppm have been reported depending on length of exposure. Rat: Postnatal development long lasting with 500 ppm exposure.*	
Specific Target Organ Toxicity (STOT)	*Inhalation: 435-1300 mg/cu m for 15 min to 6 hr/day for 4 days results in central nervous system (CNS) disturbances.*	

** Information obtained from the EPA's Chemical Classification and Information Database (CCID)*
≠ Determined with reference to EPA's Assigning a Hazardous Substance to a group Standard.

12. Ecological information

12.1 Ecological Effects

There is no data available for the product itself. Therefore, toxicological information is based on individual components.

	Naphtha (petroleum), Hydrodesulphurised, heavy (>25%)	Xylene (10-20%)	n-Butyl acetate (2.5-10%)
Mobility	*The product evaporates relatively fast from the water and ground surface. If large amounts are released to the ground there is a risk that the product moves down through the ground and harms the ground water.*[≠]		
Bioaccumulability	*Bioaccumulability may be possible (Estimated log Pow: 2-7)*[≠]	*Not bioccumulative**	*Not bioccumulative**
Persistence/ biodegradability	*Easily biodegraded. Is biodegraded relatively fast by naturally existing microorganisms*[≠]*.*	*Readily biodegradable**	*Readily degradable, domestic sewage: 98% degradation after 28 days*.*
Aquatic Toxicity	*LC50 for water organisms is assumed to be in the area of 1-100 mg/l*[≠]*.*	*Fish: Static exposure for 96hr 3.3 mg/l LC50** *Algae: 72hr exposure 10mg/l LC50**	*Fish: Flow through exposure for 96hr 18mg/l LC50** *Crustacean: Static exposure for 48hr 32mg/l LC50**
Terrestrial Toxicity		*Mouse: 1590 mg/kg LD50**	

** Information obtained from the EPA's Chemical Classification and Information Database (CCID)*
≠ Obtained from the suppliers Safety Data Sheet.

13. Disposal considerations

13.1 Waste treatment methods

If unable to be reused contact a hazardous waste contractor for disposal or treatment options. Paint that has dried to a solid material may be able to be disposed of as non-hazardous waste. Empty packaging should be made non-hazardous; or be rendered incapable of containing any substance and be disposed of as hazardous waste.

14. Transport information

UN Packaging group: *III* **UN-No.:** *1263*

DG Class: Class: 3

Subsidiary Risk: Class: 3

Marine pollutant: -

Proper shipping name: *Paint*

15. Regulatory information

15.1 HSNO Approval

Group Standard – HSR002662 Surface Coating and Colourants (Flammable) Group Standard 2006

HSNO CLASSES:

3.1C	*Flammable Liquid and Vapour*
6.1E	*May be harmful if swallowed and enters airways*
6.8B	*Suspected of damaging fertility or the unborn child if swallowed or enters airways*
6.9B	*May cause drowsiness or dizziness*
9.1C	*Harmful to aquatic life with long lasting effects*

16. Other information

Abbreviations / Terminology:

AS/NZS 1337	*Personal eye-protection*
AS/NZS 1715	*Selection Use and Maintenance of Respiratory Protective Devices*
AS/NZS 1716	*Respiratory Protective Devices*
AS/NZS	*Joint Australian New Zealand Standard*
CAS#	*Chemical Abstract Service number (a unique identifier for chemicals)*
CCID	*Chemical Classification and Information Database*
HSNO	*(New Zealand) Hazardous Substances and New Organisms Act*
NZS 5433	*Transport of Dangerous Goods on Land*
NZS	*New Zealand Standard*
SDS	*Safety Data Sheet*
STEL	*Short Term Exposure Limit*
WES	*Workplace Exposure Standard*

Prepared with reference to: *Preparation of Safety Data Sheets, Approved Code of Practice under the HSNO Act [COP 8-1], New Zealand Chemical Industry Council Sep 2006*

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This revision: Version 1.1 updated footer of document. Version 1.0 updated to New Zealand standards, updated to be HSNO compliant, updated logo and header.
Previous revision dated: 21 August 2012, Manufacturer's Safety Data Sheet

Disclaimer:

This safety data sheet attempts to describe as accurately as possible the potential exposures associated with normal use of the product described herein. Health and safety precautions in the data sheet may not be adequate for all individuals and/or situations. Users have the responsibility to evaluate and use this product safely and to comply with all applicable laws and regulations.

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