

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name	TexFRon 5001	
Product id	7001TP	
Revision date	15/05/2016	Revision: 2
Supersedes	12/08/2015	

1. Identification of the substance & the company

Chemical name	The chemical identity of this product is a trade secret.
Type of product and use	Flame retardant for textile applications
Supplier	ICL-IP America Inc. 622 Emerson Road - Suite 500 St Louis, Missouri 63141, USA Tel:(314)983-7884 Fax:(314)983-7607 e-mail:msdsinfo@icl-group.com
Emergency Telephone	Chemtrec: (800) 424-9300 Medical: PROSAR 1-888-875-1685 (24HRS)

2. Hazards identification

Product is not subject to classification according to GHS. No label elements required.

NFPA Ratings (Scale 0-4)	Health = 1, Fire = 1, Reactivity = 0
HMIS Ratings (Scale 0-4)	Health = 1, Fire = 1, Reactivity = 0.

3. Composition / information on ingredients

Components	CAS No.	Weight %
TexFRon 5001	Confidential	>99.9

4. First-aid measures

Eye contact	Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before reuse. Get medical attention if irritation occurs.
Inhalation	In case of inhalation, remove person to fresh air. Keep him quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.

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Ingestion If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately.

NOTE: Never give an unconscious person anything to drink

Most important symptoms and effects, acute or delayed

None known

Notes to the physician Treat symptomatically and supportively.
No specific antidote.

5. Fire - fighting measures

Suitable extinguishing media	Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.
Unusual fire and explosion hazards	When heated to decomposition, may release poisonous and corrosive fumes of carbon dioxide, carbon monoxide, phosphorus oxides and phosphoric acid.
Fire fighting procedure	Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Contain runoff to prevent entry into water or drainage systems.

6. Accidental release measures

Personal precautions	Wear appropriate safety clothing and eye/face protection (see Section 8).
Methods for cleaning up	Soak up with sand or other suitable absorbent and dispose of as solid waste. Collect in suitable and properly labeled containers. Ventilate area and wash spill site after material pickup is complete.
Environmental precautions	Prevent product from entering drains, ditches and rivers.

7. Handling and storage

Handling	Keep containers tightly closed. Avoid bodily contact.
Storage	Store in a dry, cool, well-ventilated area away from incompatible materials (see "materials to avoid").

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8. Exposure controls / personal protection

Exposure Limits :

Components	ACGIH-TLV Data	OSHA (PEL) Data
TexFRon 5001	Not determined	Not determined

Ventilation requirements Good general ventilation.

Personal protective equipment:

- **Respiratory protection** In case of insufficient ventilation wear suitable respiratory equipment.
- **Hand protection** Neoprene gloves
- **Eye protection** Chemical safety goggles
- **Skin and body protection** Use protective clothing impervious to this material.

Hygiene measures Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.

9. Physical and chemical properties

Appearance	Colorless to pale yellow viscous liquid
Odor	Slight characteristic.
pH	Not determined
Melting point/range	-13°C
Boiling point/range	>400°C
Pour point	-12.22°C (10 °F)
Flash point	>230°C (>446°F) (closed cup)
Evaporation rate (ether=1)	Not determined
Flammability (solid, gas)	Not applicable
Flammable/Explosion limits	Not flammable/Not explosive
Vapor pressure	2.59x10 ⁻³ Pa (20°C)
Vapor density	Not determined
Density	1.30 (25°C)
Solubility:	
- Solubility in water	8.9 µg/L
Partition coefficient (n-octanol/water)	Log Kow : 4.9
Auto-ignition temperature	Not self-ignitable
Decomposition temperature	>210°C
Viscosity	600mPas (25°C)
Bulk density	10.8 lbs/gal @ 25°C
Specific gravity	1.304(25°C)
Oxidising properties	Not oxidising

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10. Stability and reactivity

Reactivity	No reactive hazards known/expected.
Stability	Stable under normal conditions
Possibility of hazardous reactions	Not expected to occur
Conditions to avoid	Heating above decomposition temperature Under wet acidic or alkaline conditions this product hydrolyzes slowly and nonviolently. Also, hydrolyzes at 150 F (66°C) or above in moist air. Prevent moisture condensation in the container
Materials to avoid	Strong oxidizers, strong acids and strong alkalis.
Hazardous decomposition products	Carbon dioxide and carbon monoxide Phosphorus oxides

11. Toxicological information

Acute toxicity:	
- Rat oral LD50	> 5000 mg/kg
- Rat dermal LD50	> 2000 mg/kg
- Rat inhalation LC50	> 4.14 mg/l (4-hr)
- Dermal irritation (rabbit)	Not irritant
- Eye irritation (rabbit)	Not irritant
Dermal sensitization	Not a sensitizer
Mutagenicity	Not mutagenic by the Ames Test. No micronucleus induction was detected in bone marrow erythrocytes of mice Not clastogenic in chromosome aberration test with Human lymphocytes.
Carcinogenicity	Not included in NTP 13th Report on Carcinogens Not classified by IARC Not classified as a carcinogen by USA OSHA
Reproductive toxicity	Pregnant rabbits were dosed orally with 50, 200 or 1000 mg/kg/day of this product on days 6 through 28 of gestation. There were no maternal toxicity or teratogenicity at any dose level. In a two-generation study in rats, no adverse effects on reproduction were seen at doses up to 20,000 ppm of this product in the diet.

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Developmental toxicity	NOAEL 1000 mg/kg bw/day (rat, oral)
Teratogenicity	Not teratogenic
Specific Target Organ Toxicity (STOT) - Single exposure	No effects on specific target organs have been identified
Specific Target Organ Toxicity (STOT) - Repeat exposure	28-day repeated dose nose-only inhalation toxicity study (OECD Guideline 412), rats: NOEL 0.1 mg/L Target organs: respiratory: lung
- NOEL	> 5000 mg/kg/day immunological function (4 weeks oral mice)
Aspiration hazard	Not expected to occur
Neurotoxicity	Not neurotoxic

12. Ecological information

Aquatic toxicity :

- 96 Hour-LC50, Fish	> 100 mg/l (Brachydanio rerio)
- 48 Hour-EC50, Daphnia magna	> 100 mg/l
- 72 Hour-EC50, Freshwater algae	> 100 mg/l

Chronic toxicity	The No Observed Effect Concentration (NOEC) in Daphnia magna after exposure of 21 day is 0.021 mg/l
Biodegradation	Readily biodegradable
Bioaccumulative potential	BCF=969 BCF ranges suggest the potential for bioconcentration in aquatic organisms is low

Note: Not considered to be PBT or vPvB

13. Disposal considerations

Waste disposal	Dispose in a safe manner in accordance with local/national regulations.
Disposal of Packaging	Dispose of in a safe manner in accordance with local/national regulations.

14. Transportation information

DOT	Not regulated
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IMDG Not regulated

ICAO/IATA Not regulated

15. Regulatory information

USA Reported in the EPA TSCA Inventory.

- SARA 313 This product does not contain a chemical listed at or above de minimis concentrations

- California-Prop 65 This product does not contain any ingredient known to the State of California to cause cancer or reproductive toxicity as listed under the State drinking Water and Toxic Enforcement Act of 1986.

- Waste Classifications This material does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40CFR 261.33.

Canada Listed in DSL

WHMIS hazard class Non-controlled

EU Reported in EINECS

Regulated in France - Possible work-related illnesses, Tables A and B (Code de la Sécurité Sociale, Section III, Annex A, Article D.461-1, July 1999)

German Water hazard classes (WGK):1

Japan Listed in ENCS

Australia Listed in AICS

New Zealand Inventory Listed in NZIoC

- China inventory Listed in IECSC

Korea Listed in ECL

Taiwan Listed

Philippines Listed in PICCS

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16. Other information

This data sheet contains changes from the previous version in section(s)

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Health, Safety & Environment Policy

We will strive to ensure that our operations and products meet the needs of the present global community without compromising the ability of future generations to meet their needs. We accept that the success of our business is dependent on the supply of products and services that will benefit society whilst ensuring human safety and protection of the environment and natural resources. Within the framework of our commitment to the Responsible Care program, we will provide a healthy and safe work environment for employees and will responsibly manage our products at all stages of their life cycle in order to protect human health and the environment whilst maintaining high production standards of operation.

Implement documented management systems consistent with and for promotion of the Responsible Care ethics. TO MEET THIS COMMITMENT WE WILL: Comply with or exceed applicable national and international regulatory requirements and other requirements to which we subscribe. Communicate openly and actively encourage dialogue with employees, customers and community concerning our products and operations.

Develop and supply products that can be manufactured, transported, used and disposed of safely whilst best meeting the needs of our customers. Regularly assess, continually improve and responsibly manage health, safety and environmental risks associated with products and processes throughout their life-cycles. Share knowledge and expertise with others and seek to learn from and incorporate improved practices into our own operations.

Educate and train employees, contractors and customers to improve their HSE performance. Communicate up-to-date information to enable our workers, customers and other interested parties to handle our products in a safe and environmentally responsible manner. Endeavor to work with customers, suppliers, distributors and contractors to foster the safe use, transport and disposal of our chemicals. Support Product Stewardship programs in cooperation with customers, distributors and transporters.

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, ICL-IP America Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will ICL-IP America Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE, ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

Prepared by	HERA Division
	telephone: +/972-8-6297835
	telefax: +/972-8-6297832
	www.icl-ip.com
	e-mail:msdsinfo@icl-group.com

End of safety data sheet

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