SAFETY DATA SHEET



Fiberwash® NF Precision Fiber Optic Cleaner

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier	
Product name	: Fiberwash® NF Precision Fiber Optic Cleaner
Product code	: FW2170
Product description	: Not available.
Product type	: Liquid.
Other means of identification	: Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against Not applicable.

1.3 Details of the supplier of the safety data sheet

Manufacturer Chemtronics 8125 Cobb Center Drive Kennesaw, GA 30152 Tel. 770-424-4888 or toll free 800-645-5244

Distributor

Importer ITW Contamination Control BV Saffierlaan 5 VZ-2132 Hoofddorp The Netherlands Email: info@itw-cc.com

Tel: +31 88 1307 400 FAX: +31 88 1307 499

e-mail address of person

responsible for this SDS

: askchemtronics@chemtronics.com

National contact

ITW Contamination Control BV Saffierlaan 5 VZ-2132 Hoofddorp The Netherlands

Email: info@itw-cc.com

Tel: +31 88 1307 400 FAX: +31 88 1307 499

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number

: EMERGENCY HEALTH INFORMATION: Chemtrec - 1-800-424-9300 or collect 703-527-3887

Supplier

Date of issue/Date of revision

: 6/13/2016

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

Telephone number	: Chemtronics Product Information: 800-TECH-401 (800-832-4401) Chemtronics Customer Service: 800-645-5244 Chemtrec 800-424-9300
Hours of operation	: Chemtrec - 1-800-424-9300 or collect 703-527-3887 For emergency responders 24/7
Information limitations	: EMERGENCY HEALTH INFORMATION: EMERGENCY SPILL INFORMATION: Transport information

SECTION 2: Hazards identification

2.1 Classification of the sub	ostance or mixture
Product definition	: Mixture
Classification according to Not classified.	o Regulation (EC) No. 1272/2008 [CLP/GHS]
The product is not classified	as hazardous according to Regulation (EC) 1272/2008 as amended.
Ingredients of unknown toxicity	: 90 percent of the mixture consists of component(s) of unknown toxicity
Ingredients of unknown ecotoxicity	: Contains 90 % of components with unknown hazards to the aquatic environment
Classification according to	o Directive 1999/45/EC [DPD]
The product is not classifie	ed as dangerous according to Directive 1999/45/EC and its amendments.
Classification	: Not classified.

See Section 16 for the full text of the R phrases or H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements						
Signal word	4	No signal word.				
Hazard statements	:	No known significant effects or critical hazards.				
Precautionary statements						
Prevention	:	Not applicable.				
Response	:	Not applicable.				
Storage	:	Not applicable.				
Disposal	:	Not applicable.				
Supplemental label elements	:	Safety data sheet available on request.				
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.				
Special packaging requirem	Special packaging requirements					
Containers to be fitted with child-resistant fastenings	:	Not applicable.				
Tactile warning of danger	:	Not applicable.				

2.3 Other hazards

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SECTION 2: Hazards identification

Other hazards which do : None known. not result in classification

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

			<u>Classi</u>	Classification		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре	
propan-2-ol	EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥3 - <5	F; R11 Xi; R36 R67	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]	
			See Section 16 for the full text of the R-phrases declared above.	See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.
4.2 Most important sympton Potential acute health effec	ns and effects, both acute and delayed

May cause eye irritation.
At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
May cause skin irritation.
Do not ingest. If swallowed then seek immediate medical assistance.
<u>ns</u>

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SECTION 4: First aid measures

Eye contact	: Adverse symptoms may include the following: pain or irritation redness watering
Inhalation	: Adverse symptoms may include the following: dizziness/vertigo drowsiness/fatigue central nervous system depression headache
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: Adverse symptoms may include the following: nausea or vomiting dizziness/vertigo headache

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media	:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	None known.
5.2 Special hazards arising f	rom	the substance or mixture
Hazards from the substance or mixture	:	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters		Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	ote	ctive equipr	ment and emergency	procedures			
For non-emergency personnel	:	Evacuate si	hall be taken involving urrounding areas. Kee o not touch or walk thr quipment.	p unnecessary and ur	protected pers	onnel fro	
For emergency responders	:	information	ed clothing is required t in Section 8 on suitabl in "For non-emergenc	e and unsuitable mate			
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SECTION 6: Accidental release measures

6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and material	for containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
6.4 Reference to other sections	 See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures Advice on general occupational hygiene	 Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
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7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

: Not available.

Recommendations Industrial sector specific : Not available. solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

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SECTION 8: Exposure controls/personal protection

Recommended monitoring : procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
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DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls		
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.	
Individual protection meas	<u>res</u>	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.	
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.	
Skin protection		
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.	
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.	
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.	
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.	
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical	l a	nd chemical properties
<u>Appearance</u>		
Physical state	1	Liquid.
Colour	:	Clear. Colourless.
Odour	:	Characteristic.
Odour threshold	:	Not available.
рН	:	Not available.
Melting point/freezing point	1	Not available.
Initial boiling point and boiling range	1	54°C
Flash point	:	[Product does not sustain combustion.]
Evaporation rate	1	<1 (butyl acetate = 1)
Flammability (solid, gas)	:	Not available.
Upper/lower flammability or explosive limits	:	Not available.
Vapour pressure	1	Not available.
Vapour density	:	Not available.
Relative density	1	1.45
Solubility(ies)	:	Not available.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	1	Not available.
Decomposition temperature	1	Not available.
Viscosity	:	Not available.
Explosive properties	:	Not available.
Oxidising properties	1	Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	The product is stable.
10.3 Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	:	Avoid all possible sources of ignition (spark or flame).
10.5 Incompatible materials	:	Reactive or incompatible with the following materials: Alkaline. strong alkalis reactive metals
10.6 Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
propan-2-ol	LD50 Dermal LD50 Oral	Rabbit Rat	12800 mg/kg 5000 mg/kg	-

Conclusion	/Summary
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: Not available.

Acute toxicity estimates

Not available.

Mutagenicity

Carcinogenicity

Teratogenicity

Conclusion/Summary

Conclusion/Summary

Reproductive toxicity Conclusion/Summary

Conclusion/Summary

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
propan-2-ol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Conclusion/Summary	: Not available.				
<u>Sensitisation</u>					
Conclusion/Summary	: Not available.				

Specific target organ toxicity (single exposure)					
	Product/ingredient name	Category	Route of exposure	Target organs	
propan-2-ol		Category 3	Not applicable.	Narcotic effects	

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	May cause eye irritation.
Inhalation	:	At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
Skin contact	:	May cause skin irritation.
Ingestion	:	Do not ingest. If swallowed then seek immediate medical assistance.

Symptoms related to the physical, chemical and toxicological characteristics

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SECTION 11: Toxicological information

Eye contact	: Adverse symptoms may include the following: pain or irritation redness watering
Inhalation	: Adverse symptoms may include the following: dizziness/vertigo drowsiness/fatigue central nervous system depression headache
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: Adverse symptoms may include the following: nausea or vomiting dizziness/vertigo headache

Delayed and immediate effect	ts as well as chronic effects from short and long-term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	ects
Not available.	
Conclusion/Summary	: Not available.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Other information

: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
propan-2-ol	Acute LC50 1400000 to 1950000 µg/l Marine water	Crustaceans - Crangon crangon	
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
Conclusion/Summary	: Not available.		

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

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SECTION 12: Ecological information

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Ρ	roduct/ingredient name	LogPow	BCF	Potential
р	ropan-2-ol	0.05	-	low

: Not available.
: Not available.

12.5 Results of PBT	and VPVB assessment
PBT	: Not applicable.
vPvB	: Not applicable.

12.6 Other adverse effects

: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	 Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group		-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
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SECTION 14: 1	Fransport inform	ation		
Additional information	-	-	-	-

14.6 Special precautions for	1	Transport within user's premises: always transport in closed containers that are
user		upright and secure. Ensure that persons transporting the product know what to do in
		the event of an accident or spillage.

14.7 Transport in bulk	1	Not available.
according to Annex II of		
Marpol and the IBC Code		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation sp	pecific for the substance or mixture	
EU Regulation (EC) No. 1907/2006 (REACH)		
Annex XIV - List of substances subject to authorisation		
Annex XIV		
None of the components are listed.		
Substances of very high concern		
None of the components are listed.		
Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles		
Other EU regulations		
Europe inventory : Not determined.		
Industrial emissions : Listed (integrated pollution prevention and control) - Air		
Ozone depleting substances (1005/2009/EU)		
Not listed.		
Prior Informed Consent (PIC) (649/2012/EU) Not listed.		
Seveso Directive		
This product is not controlled under the Seveso Directive.		
International regulations		
Chemical Weapon Convention List Schedules I, II & III Chemic Not listed.	<u>als</u>	
<u>Montreal Protocol (Annexes A, B, C, E)</u>		
Not listed.		
Stockholm Convention on Persistent Organic Pollutants Not listed.		
Rotterdam Convention on Prior Inform Consent (PIC) Not listed.		
UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.		
International lists		
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SECTION 15: Regulatory information

National inventory	
Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: Not determined.
Taiwan	: All components are listed or exempted.
Turkey	: Not determined.
United States	: All components are listed or exempted.
15.2 Chemical safety assessment	: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification			Justification
Not classified.			
Full text of abbreviated H statements	:	H225 H319 H336	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.
Full text of classifications [CLP/GHS]	:	Eye Irrit. 2, H319 Flam. Liq. 2, H225 STOT SE 3, H336	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Full text of abbreviated R phrases	:	R11- Highly flammable. R36- Irritating to eyes. R67- Vapours may cause	drowsiness and dizziness.
Full text of classifications [DSD/DPD]	:	F - Highly flammable Xi - Irritant	
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Notice to reader			

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SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.