

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier					
Product Name	CT420D Spike				
Product Description	Red liquid				
1.2 Relevant identified u	ses of the substance or mixture and uses advised against				
Relevant identified use(s)	Water-based emulsion				
1.3 Details of the supplie	er of the safety data sheet				
Manufacturer	IKONICS Corporation				
	4832 Grand Ave. Duluth, MN 55807 United States www.ikonics.com sds@ikonics.com				
Telephone (General)) • (218) 628-2217				
Telephone (General)	● (800) 328-4261 - Toll free				
1.4 Emergency telephon	ne number				

Chemtrec

- 1-800-424-9300 Within USA and Canada
- +1 703-527-3887 Outside USA and Canada (collect calls accepted)

Section 2: Hazards Identification

EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

- CLP
 Not classified

 DSD/DPD
 Not classified

 2.2 Label Elements
 Not classified

 CLP
 Hazard statements Not classified

 Precautionary
 statements

 statements
 Not classified

 Precautionary
 statements

 Prevention P280 Wear protective gloves/protective clothing/eye protection/face protection.

 Response P302+P352 IF ON SKIN: Wash with plenty of soap and water.

 P304+P341 IE INHALED: If breathing is difficult, remove victim to fresh air and
 - Response P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
 Remove contact lenses, if present and easy to do. Continue rinsing.
 - **Storage/Disposal** P501 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD

Safety phrases • S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

2.3 Other Hazards	
CLP	 No data available
DSD/DPD	 No data available

UN GHS

According to Third Revised Edition

2.1 Classification of	of the substance or mixture
UN GHS	Not classified
2.2 Label elements	
UN GHS	
Hazard statement	s • Not classified
Precautionar statement	ТУ IS
Preventio	n • P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Respons	 P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage/Dispos	al • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
2.3 Other hazards	
UN GHS	No data available
United States (US) According to OSHA 29	OCFR 1910.1200 HCS
2.1 Classification of	of the substance or mixture
OSHA HCS 2012	Not classified
2.2 Label elements	i de la constante d
OSHA HCS 2012	
Precautionar statement	Ϋ́ S

Prevention • Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response •	IF ON SKIN: Wash with plenty of soap and water P302+P352
I	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a
	position comfortable for breathing P304+P341
ĺ	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
1	present and easy to do. Continue rinsing P305+P351+P338
Storage/Disposal • I	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations P501
Other hazards	

2.3 Other hazards

OSHA HCS 2012	 No data available
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2.1 Classification of the substance or mixture

 Not classified
 Not classified
 No data available

2.4 Other information



Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Hazardous Components						
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments	
Isopropyl alcohol	CAS: 67-63-0 EC Number :200- 661-7 UN :UN1219 EINECS :200-661- 7	0.5%	Inhalation-Rat LC50 • 16000 ppm 8 Hour(s) Skin-Rabbit LD50 • 12800 mg/kg Ingestion/Oral-Rat LD50 • 5000 mg/kg	WHMIS: Flam. Liq B2; Other Toxic Effects - D2B UN GHS: Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3: Narc. EU DSD/DPD: Highly Flammable(F); Irritant(Xi); R11; R36; R67 EU CLP: Flam. Liq. 2; Eye Irrit. 2; STOT SE 3: Narc. OSHA HCS 2012:		

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation	• IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration and call 911 or emergency medical service.
Skin	 IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Еуе	• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	 If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth. Never give anything by mouth to an unconscious person. If large quantities are swallowed, call a physician immediately.
4.2 Most impo	rtant symptoms and effects, both acute and delayed

• No data available

4.3 Indication of any immediate medical attention and special treatment needed

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media	 SMALL FIRES: Dry chemical, CO2, water spray or regular foam. LARGE FIRE: Water spray, fog or regular foam. 			
Unsuitable Extinguishing Media	No data available			
Firefighting Procedures	 Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep unauthorized personnel away. Ventilate closed spaces before entering. LARGE FIRES: Use extinguishing agent suitable for type of surrounding fire. 			
5.2 Special hazards	arising from the substance or mixture			
Unusual Fire and Explosion Hazards	 Material may burn, but does not ignite readily. ards 			
Hazardous Combustion Products	 Products of combustion include: carbon oxides (COx). 			
5.3 Advice for firefig	hters			
	• Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Wear chemical protective clothing that is specifically recommended by the manufacturer.			

It may provide little or no thermal protection. Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

6.2 Environmental precautions

No data available

6.3 Methods and material for containment and cleaning up

 Containment/Clean-up
 • Use appropriate Personal Protective Equipment (PPE)

 Measures
 • Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container.

6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

• Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

- Storage
- Keep container closed when not in use. Store away from extreme heat. Do not freeze. Ventilate enclosed areas.

7.3 Specific end use(s)

• Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

			Exposure Limits	/Guidelines		
	Result	ACGIH	Argentina	Australia	Belgium	Brazil
Isopropyl alcohol (67-63-0)	STELs	400 ppm STEL	500 ppm STEL [CMP-CPT]	500 ppm STEL; 1230 mg/m3 STEL	400 ppm STEL; 1000 mg/m3 STEL	Not established
	TWAs	200 ppm TWA	400 ppm TWA [CMP]	400 ppm TWA; 983 mg/m3 TWA	200 ppm TWA; 500 mg/m3 TWA	310 ppm TWA LT; 765 mg/m3 TWA LT
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Canada Alberta	Canada British Columbia	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories
Isopropyl alcohol	STELs	400 ppm STEL; 984 mg/m3 STEL	400 ppm STEL	400 ppm STEL	500 ppm STEL; 1230 mg/m3 STEL	500 ppm STEL; 1228 mg/m3 STEL
(67-63-0)	TWAs	200 ppm TWA; 492 mg/m3 TWA	200 ppm TWA	200 ppm TWA	400 ppm TWA; 983 mg/m3 TWA	400 ppm TWA; 983 mg/m3 TWA
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Canada Nova Scotia	Canada Nunavut	Canada Ontario	Canada Quebec	Canada Saskatchewan
Isopropyl alcohol	STELs	400 ppm STEL	500 ppm STEL; 1228 mg/m3 STEL	400 ppm STEL	500 ppm STEV; 1230 mg/m3 STEV	400 ppm STEL
(67-63-0)	TWAs	200 ppm TWA	400 ppm TWA; 983 mg/m3 TWA	200 ppm TWA	400 ppm TWAEV; 985 mg/m3 TWAEV	200 ppm TWA
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Canada Yukon	Chile	China	Denmark	Egypt
	STELs	500 ppm STEL; 1225 mg/m3 STEL	500 ppm STEL LPT; 1230 mg/m3 STEL LPT	700 mg/m3 STEL	Not established	500 ppm STEL; 1230 mg/m3 STEL
(67-63-0)	TWAs	400 ppm TWA; 980 mg/m3 TWA	320 ppm TWA LPP; 786 mg/m3 TWA LPP	350 mg/m3 TWA	200 ppm TWA; 490 mg/m3 TWA	Not established
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result Finland France Germany DFG Germany TRGS Hong Kong					Hong Kong
	STELs	250 ppm STEL; 620 mg/m3 STEL	400 ppm STEL [VLCT]; 980 mg/m3 STEL [VLCT]	Not established	Not established	500 ppm STEL; 1230 mg/m3 STEL
Isopropyl alcohol (67-63-0)	TWAs	200 ppm TWA; 500 mg/m3 TWA	Not established	Not established	200 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 500 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)	Not established
	Ceilings	Not established	Not established	400 ppm Peak; 1000 mg/m3 Peak	Not established	Not established
	MAKs	Not established	Not established	200 ppm TWA MAK; 500 mg/m3 TWA MAK	Not established	Not established

		Exposure Limits/Guidelines (Con't.)					
	Result	Indonesia	Ireland	Japan	Korea	Mexico	
	Ceilings	Not established	Not established	400 ppm Ceiling; 980 mg/m3 Ceiling	Not established	Not established	
lsopropyl alcohol (67-63-0)	STELs	Not established	400 ppm STEL	Not established	400 ppm STEL; 980 mg/m3 STEL	500 ppm STEL [LMPE-CT]; 1225 mg/m3 STEL [LMPE-CT]	
	TWAs	400 ppm TWA; 983 mg/m3 TWA	200 ppm TWA	Not established	200 ppm TWA; 480 mg/m3 TWA	400 ppm TWA LMPE-PPT; 980 mg/m3 TWA LMPE- PPT	
		Ex	oosure Limits/Gui	idelines (Con't.)			
	Result	New Zealand	NIOSH	Norway	OSHA	Philippines	
Isopropyl alcohol	TWAs	400 ppm TWA; 983 mg/m3 TWA	400 ppm TWA; 980 mg/m3 TWA	100 ppm TWA; 245 mg/m3 TWA	400 ppm TWA; 980 mg/m3 TWA	400 ppm TWA; 980 mg/m3 TWA	
(67-63-0)	STELs	500 ppm STEL; 1230 mg/m3 STEL	500 ppm STEL; 1225 mg/m3 STEL	Not established	Not established	Not established	
		Ex	oosure Limits/Gu	idelines (Con't.)			
	Result	Poland	Portugal	Russia	Singapore	South Africa	
	STELs	1200 mg/m3 STEL [NDSCh]	400 ppm STEL [VLE-CD	50 mg/m3 STEL (vapor)	500 ppm STEL; 1230 mg/m3 STEL	500 ppm STEL; 1225 mg/m3 STEL	
Isopropyl alcohol (67-63-0)	TWAs	900 mg/m3 TWA 2 [NDS]	200 ppm TWA [VLE- MP]	10 mg/m3 TWA (vapor)	400 ppm PEL; 983 mg/m3 PEL	400 ppm TWA; 960 mg/m3 TWA; 980 mg/m3 TWA (regulated under Propane-2-ol)	
		Ex	oosure Limits/Gui	idelines (Con't.)			
	Result	Spain	Sweden	Switzerland	Taiwan	Venezuela	
Isopropyl alcohol (67-63-0)	MAKs	Not established	Not established	200 ppm TWA [MAK]; 500 mg/m3 TWA [MAK]	Not established	Not established	
	STELs	400 ppm STEL [VLA-EC]; 1000 mg/m3 STEL [VLA- EC]	250 ppm STV; 600 mg/m3 STV	400 ppm STEL [KZW]; 1000 mg/m3 STEL [KZW]	Not established	500 ppm STEL [LEB	
	TWAs	200 ppm TWA [VLA- ED] (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary o biocide compound); 500 mg/m3 TWA [VLA-ED] (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary o biocide compound)	150 ppm LLV; 350 mg/m3 LLV	Not established	400 ppm TWA; 983 mg/m3 TWA	400 ppm TWA [CAP	
	Biologica Limit Values (BLV)	¹ 40 mg/L urine end of workweek Acetone (1,F,I)	Not established	Not established	Not established	Not established	

Exposure Control Notations

Switzerland

•Isopropyl alcohol (67-63-0): Developmental Risk Groups: (Developmental Risk Group C)

Portugal

•Isopropyl alcohol (67-63-0): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)

Singapore

•Isopropyl alcohol (67-63-0): Odour Threshold - High: (490 mg/m3) | Odour Threshold - Low: (8 mg/m3) | Irritation: (490 mg/m3) South Africa

•Isopropyl alcohol (67-63-0): Skin: (Skin Notation)

Brazil

•Isopropyl alcohol (67-63-0): Skin: (skin designation)

Ireland

•Isopropyl alcohol (67-63-0): Skin: (Potential for cutaneous absorption)

ACGIH

•Isopropyl alcohol (67-63-0): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)

Germany DFG

•Isopropyl alcohol (67-63-0): Pregnancy: (no risk to embryo/fetus if exposure limits adhered to)

Exposure Limits Supplemental

Switzerland

•Isopropyl alcohol (67-63-0): Biological Limit Values: (25 mg/L Medium: urine Time: end of shift Parameter: Acetone; 25 mg/L Medium: whole blood Time: end of shift Parameter: Acetone)

Argentina

•Isopropyl alcohol (67-63-0): BEIs: (2 mg/g Creatinine urine Acetone)

ACGIH

•Isopropyl alcohol (67-63-0): **BEIs:** (40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)) | **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation) **Germany TRGS**

•Isopropyl alcohol (67-63-0): **BELs:** (50 mg/L Medium: whole blood Time: end of shift Parameter: Acetone; 50 mg/L Medium: urine Time: end of shift Parameter: Acetone)

8.2 Exposure controls

Engineering Measures/Controls Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

Personal Protective Equipment

Pictograms



Respiratory

Eye/Face

Hands

Skin/Body

General Industrial Hygiene Considerations

Environmental Exposure Controls

- In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear protective eyewear (goggles, face shield, or safety glasses).
- Wear protective gloves rubber or neoprene.
- Wear protective clothing apron or other impervious body coverings.
- Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.
- No data available

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Viscous liquid.
Color	Red	Odor	Mild
Taste	Not relevant	Odor Threshold	No data available
Physical and Chemical Properties	Not relevant		
General Properties			
Boiling Point	100 C(212 F)	Melting Point	Not relevant
Decomposition Temperature	Not relevant	pН	No data available
Density	9.04 lbs/gal	Water Solubility	Miscible
Viscosity	No data available	Explosive Properties	Not relevant

Oxidizing Properties:	Not relevant		
Volatility	-	-	-
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	< 1 Water = 1	VOC (Vol.)	5 g/L
Volatiles (Wt.)	51 %		
Flammability			
Flash Point	Not measurable	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not relevant		
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available
Degradation	No data available		

9.2 Other Information

• No data available

Section 10: Stability and Reactivity

10.1 Reactivity

• No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

• Hazardous polymerization will not occur.

10.4 Conditions to avoid

• Direct sunlight. Excess heat. Avoid freezing.

10.5 Incompatible materials

• Strong oxidizing agents.

10.6 Hazardous decomposition products

 Hazardous decomposition products formed under fire conditions - carbon oxides (COx). No decomposition is expected under normal storage and use conditions.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data	
Isopropyl alcohol (0.5%) 67-63-0		Acute Toxicity: orl-rat LD50:5000 mg/kg; ihl-rat LC50:16000 ppm/8H; skn-rbt LD50:12800 mg/kg; Irritation: eye-rbt 100 mg/24H MOD	
GHS Properties		Classification	
Acute toxicity		EU/CLP• OSHA HCS 2012• UN GHS•	
Aspiration Hazard		EU/CLP• OSHA HCS 2012• UN GHS•	
Carcinogenicity		EU/CLP• OSHA HCS 2012•	

	UN GHS•
Germ Cell Mutagenicity	EU/CLP• OSHA HCS 2012• UN GHS•
Skin corrosion/Irritation	EU/CLP• OSHA HCS 2012• UN GHS•
Skin sensitization	EU/CLP• OSHA HCS 2012• UN GHS•
STOT-RE	EU/CLP• OSHA HCS 2012• UN GHS•
STOT-SE	EU/CLP• OSHA HCS 2012• UN GHS•
Toxicity for Reproduction	EU/CLP• OSHA HCS 2012• UN GHS•
Respiratory sensitization	EU/CLP• OSHA HCS 2012• UN GHS•
Serious eye damage/Irritation	EU/CLP• OSHA HCS 2012• UN GHS•

Potential Health Effects

Innalation	
Acute (Immediate)	 May cause mild irritation.
Chronic (Delayed)	 Repeated and prolonged exposure may cause irritation.
Skin	
Acute (Immediate)	 May cause mild irritation.
Chronic (Delayed)	 Repeated and prolonged exposure may cause irritation.
Eye	
Acute (Immediate)	May cause irritation.
Chronic (Delayed)	 Repeated and prolonged exposure may cause irritation.
Ingestion	
Acute (Immediate)	• Under normal conditions of use, no health effects are expected.
Chronic (Delayed)	 No specific information available.

Section 12 - Ecological Information

12.1 Toxicity

• No data available

12.2 Persistence and degradability

• No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in Soil

• No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content in accordance with local, regional, national, and/or international regulations.
- Dispose of container in accordance with local, regional, national, and/or international regulations.

13.2 Other Information

• Dispose of wastes in an approved waste disposal facility.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	NDA	NDA	NDA	NDA
IMO/IMDG	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code 14.8 Other information

- None specified.
- Not relevant.

DOT • Not regulated.

- IMO/IMDG Not regulated.
- IATA/ICAO Not regulated.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Not classified

State Right To Know				
Component	CAS	MA	NJ	PA
Isopropyl alcohol	67-63-0	Yes	Yes	Yes

Inventory										
Component	CAS	CAS Australia AICS Canada DSL China EU EINECS Japan ENCS			Japan ENCS					
Isopropyl alcohol	67-63-0	Yes		Yes	Yes Yes Y		Yes	Yes	\$	
Inventory (Con't.)										
Component	(CAS	AS Korea KECL New Zealand Philippines PICCS TSCA			TSCA				
Isopropyl alcohol	67-63	3-0	Yes		Yes		Yes		Yes	

Australia

Labor

Australia - High Volume Industrial Chemicals List •Isopropyl alcohol 67-63-0 0.5% Australia - List of Designated Hazardous Substances - Classification •Isopropyl alcohol 67-63-0 0.5% F, Xi R11, R36, R67

Environment

Australia - Priority Existing Chemical Program •Isopropyl alcohol 67-63-0 0.5% Candidate chemical

Canada

Labor

Canada - WHMIS - Classifications of Substances •Isopropyl alcohol 67-63-0 0.5% B2, D2B (including 70%) Canada - WHMIS - Ingredient Disclosure List •Isopropyl alcohol 67-63-0 0.5% 1 %

Canada Alberta

Environment

Canada - Alberta - Ambient Air Quality Objectives •Isopropyl alcohol 67-63-0 0.5% 3190 ppbv 1 hour average; 7850 µg/m3 1 hour average

China

Other

China - Dangerous Goods List •Isopropyl alcohol 67-63-0 0.5% UN1219 PG = II

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification •Isopropyl alcohol 67-63-0 0.5% F; R11 Xi; R36 R67 EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling •Isopropyl alcohol 67-63-0 0.5% F Xi R:11-36-67 S:(2)-7-16-24/25-26 EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases •Isopropyl alcohol 67-63-0 0.5% S:(2)-7-16-24/25-26 EU - Existing Substance Regulation (793/93/EEC) - Evaluation of Existing HPV Chemicals (REPEALED) •Isopropyl alcohol 67-63-0 0.5%

Germany

Environment

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes •Isopropyl alcohol 67-63-0 0.5% ID Number 135, hazard class 1 - Iow hazard to waters

Hong Kong

Labor

Hong Kong - Dangerous Substances Regulations - Classification
Isopropyl alcohol 67-63-0 0.5% Flammable
Hong Kong - Dangerous Substances Regulations - Particular Risks
Isopropyl alcohol 67-63-0 0.5% R-11
Hong Kong - Dangerous Substances Regulations - Safety Precautions
Isopropyl alcohol 67-63-0 0.5% S-6/8, S-13

Other

Hong Kong - Dangerous Goods - Category 5 - Substances Giving Off Flammable Vapour •Isopropyl alcohol 67-63-0 0.5% Class 1, Division 2

India

Environment

India - Hazardous Chemical Rules - List of Hazardous and Toxic Chemicals •Isopropyl alcohol 67-63-0 0.5%

Japan

Labor

Japan - ISHL Dangerous Substances

Isopropyl alcohol 67-63-0 0.5% Flammable substance
 Japan - ISHL Harmful Substances Requiring Workers to Subject to Medical Exams

Isopropyl alcohol 67-63-0 0.5% (when produced and handled indoors)

Japan - ISHL Harmful Substances Whose Names Are to be Indicated on the Label

Isopropyl alcohol 67-63-0 0.5% >1 % weight

Japan - ISHL Notifiable Substances

•Isopropyl alcohol 67-63-0 0.5% >0.1 % weight [Table 9, 494] (listed under Propyl alcohol) Japan - ISHL Prevention of Organic Solvent Poisoning •Isopropyl alcohol 67-63-0 0.5% Class 2

Environment

Inventory - Japan - Industrial Safety and Health Law Substances (ISHL) •Isopropyl alcohol 67-63-0 0.5% 2-(8)-319

Other

Japan - Chemical Substance Control Law (CSCL) - Examined Existing Chemical Substances •Isopropyl alcohol 67-63-0 0.5% Decomposable Japan - Fire Service Law - Hazardous Materials •Isopropyl alcohol 67-63-0 0.5% Group 4 - Flammable liquids II (listed under Alcohols) Japan - ISHL Working Environment Evaluation Standards - Administrative Control Levels •Isopropyl alcohol 67-63-0 0.5% 200 ppm ACL

Mexico

Other

Mexico - Hazard Classifications •Isopropyl alcohol 67-63-0 0.5% Hazard Class = 3 PG = II UN1219 Mexico - Regulated Substances •Isopropyl alcohol 67-63-0 0.5% UN1219

Singapore

Environment

Singapore - Petroleum and Flammable Materials - Hazard Classes •Isopropyl alcohol 67-63-0 0.5% Hazard Class = 3 Singapore - Petroleum and Flammable Materials - Regulated Products •Isopropyl alcohol 67-63-0 0.5% SCDIPA1219L2

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List •Isopropyl alcohol 67-63-0 0.5%

15.2 Chemical Safety Assessment

• No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.3 Other Information

 California Proposition 65: This product contains or may contain a substance(s) known to the State of California to cause cancer and/or reproductive toxicity: Formaldehvde CAS #50-00-0 <0.0005%

ormaluenyue	CAS #50-00-0	<0.0005%
,4-Dioxane	CAS #123-91-1	<0.0003%

Section 16 - Other Information

1

Relevant Phrases (code & full text)

	 P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
	P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
	R11 - Highly flammable. R36 - Irritating to eyes. R67 - Vapors may cause drowsiness and dizziness. S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
Classification method for mixtures	Calculation method.
Last Revision Date	• 28 April 2006

Preparation Date	• 29 January 2013
Other Information	• Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
Disclaimer/Statement of Liability	• The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under direct supervision, no representation is made that the information is accurate, reliable, complete, or representative and Buyer may rely thereon only at the Buyer's risk. We make no guarantee that the health and safety precautions we have suggested will be adequate for all individuals and / or situations involving its handling and uses. No warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet.