



i-Foam® Screen Cleaner

SAFETY DATA SHEET

SECTION 1 – CHEMICAL AND COMPANY IDENTIFICATION:

Product Name: Shield Industries i-Foam Screen Cleaner
12/9/2015
Date Printed:
Product Use/Class: Screen Cleaner for Electronic Screens
Product ID: i-Foam
Supplier: Shield Industries, Inc. Manufacturer: Shield Industries, Inc.
Address: 131 Smokehill Lane Address: 131 Smokehill Lane
Woodstock, GA 30188 - USA Woodstock, GA 30188 - USA
Telephone: 770-517-6869 24 Hour Emergency Hotline: 800-535-5053

SECTION 2 – HAZARD/ IDENTIFICATION:

Physical hazards:	Flammable Liquid	Category 3
Health hazards:	Acute toxicity	Not applicable
	Skin irritation	Category 3
	Specific target organ toxicity, single exposure	Category 3
Environmental hazards:	Acute aquatic toxicity	Category 3
OSHA defined hazards:	Not classified.	

Label elements:



Signal word: Warning

Hazard statement Causes skin irritation. (H315)
Causes serious eye irritation. (H319)

Precautionary statements:

Prevention: Wear protective gloves/protective clothing/eye protection/face protection. (P280)
Wash hands and exposed skin thoroughly after handling. (P264)

- Response:** IF SWALLOWED: Get medical advice/attention. (P301 + P313)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338)
- Storage:** Keep out of reach of children. (P102)
- Disposal:** Dispose of contents/container to an approved waste disposal plant. (P501)
- Hazard(s) not otherwise classified (HNOC):** None.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS:

<u>COMPONENTS</u>	<u>CAS NUMBER</u>	<u>%</u>
Water	7732-18-5	< 97 %
2-Propanol	67-63-0	< 5 %
Ammonium Hydroxide	1336-21-6	< 1 %

* Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Additional Information:

Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below:

2-Propanol	CAS# 67-63-0
Ammonium Hydroxide	CAS# 1336-21-6

SECTION 4 FIRST AID MEASURES

- Inhalation:** Move person to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If symptoms persist, contact a POISON CENTER or doctor/physician..
- Skin contact:** If on skin, wash thoroughly with soap and water. If on clothes, remove clothing. Get medical attention if irritation develops and persists.
- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Keep eyes wide open and continue rinsing. Get medical attention if irritation develops and persists.
- Ingestion:** Effects of ingestion are unknown. Ingestion of small amounts is likely not harmful; if large amounts are swallowed, consult a physician or local Poison Control Center. Give 8 to 16 ounces of water to dilute substance. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately and follow instructions given.

Most important symptoms/effects, acute and delayed:

May cause stinging of eyes and/or irritation. Prolonged and repeated skin exposure may be irritating to some people.

Indication of immediate medical attention and special treatment needed:

If ingested: Immediately seek medical attention. Provide general supportive measures and treat symptomatically. Keep victim under observation.

General information:

More affected persons from dangerous area. Do not leave victim unattended. Ensure that medical personnel are aware of the material(s) involved. Show this safety data sheet to the doctor in attendance.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing media:

Use media appropriate for surrounding fire. (water spray, foam, dry chemical powder, carbon dioxide)

Unsuitable extinguishing media:

None known.

Specific hazards arising from the chemical:

Thermal decomposition may evolve toxic and/or irritant vapours. Forms fumes of oxides of carbon and nitrogen.

Special protective equipment and precautions for firefighters:

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Fire-fighting equipment/instructions:

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapour pressure build up.

Specific methods:

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

General fire hazards:

None known.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Environmental precautions:

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so. Inform appropriate regulatory, managerial or supervisory personnel of all environmental releases.

Methods and materials for containment and cleaning up:

Contain spillages and then collect with sand, earth, diatomaceous earth, vermiculite, or any other suitable adsorbent material. Collect spillage. Transfer to a container for disposal or recovery. Following product recovery, flush area with water. If possible prevent water running into sewers. For waste disposal, see section 13 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin and eyes. Handle and open containers with care. Do not handle near an open flame, heat, or other source of ignition. Wear appropriate personal protective equipment. Smoking, eating and drinking should be prohibited in the application area. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. When opening containers, do so slowly to vent slight pressure that may build up after prolonged storage.

Advice on protection against fire and explosion:

Do not store, or handle, near an open flame, heat, or other source of ignition/extreme heat.

Conditions for safe storage, including any incompatibilities:

Keep out of reach of children. Keep container tightly closed in a dry and well-ventilated place. Do not store near an open flame, heat, or other source of ignition/extreme heat. Keep cool. Do not store in temperatures below 0° C or above 50° C. Containers which are opened must be carefully resealed and kept upright to prevent leakage. When opening containers, do so slowly to vent slight pressure that may build up after prolonged storage. Observe label precautions.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits for component materials:

U.S. ACGIH Threshold Limit Values

Components	CAS	Type	Value
2-Propanol	67-63-0	TWA	983 mg/m ³
		STEL	1,230 mg/m ³
Ammonium Hydroxide	1336-21-6	TWA	25 ppm (as NH ³)
		STEL	35 ppm (as NH ³)

U.S. OSHA

Components	CAS	Type	Value
2-Propanol	67-63-0	TWA	983 mg/m ³
		STEL	1,230 mg/m ³
Ammonium Hydroxide	1336-21-6	PEL	50 ppm (as NH ³)

U.S. NIOSH

Components	CAS	Type	Value
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2-Propanol	67-63-0	TWA (10 hr.)	983 mg/m ³
		STEL	1,230 mg/m

Appropriate engineering controls:

Not required when product is dispensed from retail packaging.

Individual protection measures, such as personal protective equipment:

Eye/face protection:

Not required when product is dispensed from retail packaging.

Hand protection:

Not required when product is dispensed from retail packaging.

Skin protection/Other:

Not required when product is dispensed from retail packaging.

Respiratory protection:

Not required when product is dispensed from retail packaging.

Thermal hazards:

Not required when product is dispensed from retail packaging.

General hygiene considerations:

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Physical state:	Liquid
Form:	Liquid
Color:	Clear to slightly hazy.

Odor: Characteristic, Mild

Odor threshold: Not available.

pH: 10.0 +/- 1.0

Melting point/freezing point: < 0 °C estimated

Initial boiling point and boiling range Approximately 100 °C estimated

Flash point: 51 °C (tagged closed cup)

Evaporation rate: Approximately 1 (water = 1)

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits:

Flammability limit – lower (%): Not available.

Flammability limit – upper (%): Not available.

Explosive limit - lower (%): Not available.

Explosive limit - upper (%): Not available.

Vapor pressure: Not available.

Relative Vapor density: Not available.

Relative density: 1.00 +/- 0.02

Solubility (water): Completely emulsifiable.

Partition coefficient (n-octanol/water): Not available.

Auto-ignition temperature: Not applicable.

Decomposition temperature: Not available.

Viscosity (kinematic cSt @ 40 °C): Not available.

Other information: None

SECTION 10 STABILITY AND REACTIVITY

Reactivity:

The product is stable and non-reactive under normal ambient conditions of use, storage and transport.

Chemical stability:

Material is stable under normal conditions.

Possibility of hazardous reactions:

None anticipated.

Conditions to avoid:

Avoid contact with incompatible materials.

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:

At temperatures over 200 C, or under fire conditions, thermal decomposition may evolve toxic and/or irritant vapours. Forms: oxides of carbon, and nitrogen.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

- Inhalation:** No effects expected, however, may cause mild irritation to respiratory tract.
- Skin contact:** May cause skin irritation and/or dermatitis.
- Eye contact:** Vapors may cause irritation to the eyes
- Ingestion:** Not a likely route of exposure. Effects are not known.

Symptoms related to the physical, chemical and toxicological characteristics:

- Eye irritation: Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
- Skin irritation. Prolonged and repeated skin exposure may be irritating to some people.
- Ingestion: Not a likely route of exposure. Effects are not known. Seek medical attention if injected

Information on toxicological effects of components:

Acute toxicity:

Components	CAS#	Test	Species	Test Results
2-Propanol	67-63-0	LD50 Oral	Rat	5,045 mg/kg
		LD50 Dermal	Rabbit	12,800 mg/kg
		LC50 Inhalation	Rat	16,000 ppm (8 hr.)
Ammonium Hydroxide	1336-21-6	LD50 Oral	Rat	350 mg/kg
		LC50 Inhalation	Rat	2,000 ppm (4 hr.)
		Draize Eye	Rabbit	250 ug

Skin corrosion/irritation: Prolonged and repeated skin exposure may be irritating to some people.

Serious eye damage/eye irritation: Vapours may cause eye irritation.

Respiratory or skin sensitization:
Respiratory sensitization: No effects expected, however, inhalation of mists may cause mild irritation to respiratory tract.

Skin sensitization: This product is not expected to cause skin sensitization.

Germ cell mutagenicity: A component of this product Ammonium Hydroxide (CAS# 1336-21-6) is present at < 1.0% and is a suspected of being mutagenic or genotoxic.

Carcinogenicity: No data available to indicate that this product is known to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Component information: 2-Propanol (CAS# 67-63-0)
IARC: Human Inadequate Evidence, Animal Inadequate Evidence, Group 3; EC: Category 1
Ammonium Hydroxide (CAS# 1336-21-6) is suspected of being a carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Not listed.

Repeated dose toxicity:

No data.

Specific target organ toxicity - single exposure:

No data for product:

Component data: 2-Propanol (CAS# 67-63-0): Central nervous system.

Teratogenicity:

No data.

Aspiration hazard:

No data.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: No data available for product. Components (<5.0%) 2-Propanol (CAS 67-63-0), (< 1.0 %) Ammonium Hydroxide (CAS# 1336-21-6) are known to be highly toxic to aquatic life.

Acute Toxicity:

Components/CAS	Test	Species	Test Results
2-Propanol/ 67-63-0	Aquatic Fish LC50	Brook trout (<i>Salvelinus fontinalis</i>)	730 ug/l, 96 hr.
	Invertebrate EC20	Ciliate Protoza (<i>Tetrahymena thermophila</i>)	3,142 mg/l, 48 hr.
	Algal EC50	Green algae (<i>Chlorella pyrenoidosa</i>)	2,200 ug/l, 96 hr.

Ammonium	Aquatic Fish LC50	Rainbow trout	8 ug/l, 24 hr.
Hydroxide/ 1336-21-6	Aquatic Fish LC50	Fathead minnow	8.2 mg/l, 96 hr.
	Aquatic Fish LC50	Bluegill	24 ug/l, 48 hr.
	Invertebrate EC50	Water flea	0.66 mg/l, 48 hr.

Long Term Toxicity:

No data available.

Persistence and degradability:

No data available on product. Based upon component data, expected to be readily biodegradable.

Bioaccumulative potential:

No data available for product.

Component data: 2-Propanol (CAS 67-63-0)

0.38 ug/L 15 hour(s) BCF (Residue) Red swamp crayfish (*Procambarus clarki*) 10 ug/L

Mobility in soil:

No data available.

Results of PBT and vPvB assessment:

No data available.

Other adverse effects:

None known.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment/disposal instructions:

Disposal should be in accordance with local, state, or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

Waste from residues / unused products:


Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging:

Exercise caution as empty containers or liners may retain some product residues. Do not re-use empty containers. Do not burn, or use a cutting torch on, empty containers. Dispose of empty containers in accordance with federal, state, and local regulations.

SECTION 14 TRANSPORT INFORMATION

DOT

UN number:	UN 1993
UN proper shipping name:	Flammable Liquid, NOS (contains isopropanol)
Transport hazard class(es):	
Class:	3
Subsidiary risk:	-
Label(s):	
Packing group:	III

Special precautions for user:

Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Environmental hazards: Acute aquatic toxicity Category 3

Special provisions:

REPORTABLE QUANTITY– 49CFR172.101:
Ammonium Hydroxide (reportable quantity 1,000 lbs)

Packaging exceptions:

In consumer packaging of 119 gallons or less this product is not regulated by DOT for domestic ground shipments. For international shipments, shipments by air and shipments in containers of more than 119 gallons, this product is regulated by DOT and must ship as a flammable liquid.

Packaging bulk:

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable

IATA

UN number: UN 1993
UN proper shipping name: Flammable Liquid, NOS (contains isopropanol)
Transport hazard class(es):
Class: 3
Subsidiary risk: -



Label(s):
Packing group: III
Special precautions for user:

Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Environmental hazards: Acute aquatic toxicity Category 3

ERG Code Not applicable

Special precautions for user:

Read safety instructions, SDS and emergency procedures before handling. Read Safety instructions, SDS and emergency procedures before handling.

Packaging exceptions:

Passenger and Cargo Aircraft Quantity limitation: 5 L
Cargo Aircraft Only Quantity limitation: 60 L
Limited Quantities - Passenger Aircraft Quantity limitation: 1 L

Packaging bulk:

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable

IMDG

UN proper shipping name: Flammable Liquid, NOS (contains isopropanol)

Transport hazard class(es):

Class: 3

Subsidiary risk: -



Label(s):

Packing group: III

Special precautions for user:

Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Environmental hazards: Acute aquatic toxicity Category 3

Special precautions for user:

Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Packaging bulk:

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable

SECTION 15 REGULATORY INFORMATION

US federal regulations:

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List or polymer exempt.

TSCA Section 5 SNUR: (40 CFR 721.10536).

No Listed materials.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ammonium Hydroxide reportable quantity 1,000 lbs.

SARA 311/312 – Superfund Amendments and Reauthorization Act of 1986:

Hazard categories:

Immediate Hazard	No
Delayed Hazard	No
Fire Hazard	Yes
Reactivity Hazard	No
Pressure Hazard	No

SARA 313 – Toxic Chemicals (40 CFR 372):

Ammonium Hydroxide, CAS 1336-21-6

SARA 302 Threshold Planning Quantity:

Not regulated.

Other federal regulations:

Clean Air Act (CAA) Ozone-Depletion Potential:

This product neither contains, nor was manufactured with a Class I, or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).

US state regulations:

U.S. California Proposition 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive effects.

Massachusetts Right to Know:

Ammonium Hydroxide	CAS 1336-21-6
2-Propanol	CAS 67-63-0

New Jersey Right to Know:

Ammonium Hydroxide	CAS 1336-21-6
2-Propanol	CAS 67-63-0

Pennsylvania Right to Know:

Ammonium Hydroxide	CAS 1336-21-6
2-Propanol	CAS 67-63-0

SECTION 16 OTHER INFORMATION

NFPA RATING: HEALTH: 1 FLAMMABILITY: 2 REACTIVITY: 0

HMIS RATING: HEALTH: 1 FLAMMABILITY: 2 REACTIVITY: 0
Personal protection rating to be supplied by user depending on use conditions.

PREPARATION INFORMATION:

DATE CREATED: 01/01/06 LAST REVISION: 11/04/2015
CREATED/REVISED BY: R. Lasnik

This information relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

End of SDS