

# SurfEllent LLC

## Material Safety Data Sheet

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** AI-10, AI-11, AI-12, AI-13, AI-20, AI-21, AI-22, and AI-23

**SUPPLIER/MANUFACTURER:** SurfEllent LLC.  
UH Technology Park  
5000 Gulf Freeway, Bldg 5, Rm 144,  
Houston, TX, 77023  
www.surfellent.com

**RECOMMENDED USE:** Coatings

**INQUIRIES:** (617) 416-2782; Monday-Friday 9:00 am – 5:00 pm CDT

**CHEMTREC:** 800-424-9300; 24 HOURS

### SECTION 2 – COMPOSITION/INFORMATION

Name	CAS #	% by Weight
Hexanes	110-54-3	<30
Polydimethylsiloxane and fillers and auxiliaries and acetoxysilane cross-linker		30
Triacetoxymethylsilane	4253-34-3	<2.0
Proprietary Non Hazardous Ingredients	NA	20-30

NA = Not Available; ND = Not Determined; NE = Not Established; NF = Not Found;  
All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z200.1-2010 format.

### SECTION 3 – HAZARDS IDENTIFICATION

#### 3.1 Emergency Overview


##### OSHA Hazards

Flammable liquid, Target Organ Effect, Irritant

##### Target Organs

Peripheral nervous system., Kidney, Testes. Peripheral nervous system., Kidney, Testes.

#### 3.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315 + H320	Causes skin and eye irritation
H361	Suspected of damaging fertility or the unborn child.
H371	May cause damage to organs.
H401	Toxic to aquatic life.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P281	Use personal protective equipment as required.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.

## SECTION 4 – FIRST AID MEASURES

### 4.1 Description of first aid measures.

#### Eye Contact

Flush eyes immediately with plenty of water for at least 15 minutes and get medical attention.

#### Skin Contact

Wash thoroughly with soap and water.

#### Inhalation

If affected by inhalation of vapor or spray mist, remove to fresh air.

#### Ingestion

If swallowed, seek immediate medical attention.

## SECTION 5 – FIRE FIGHTING MEASURES

### 5.1 Extinguishable media.

Use Carbon dioxide, foam, and chemical powder to extinguish any fire caused by the mixture. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapors and protect those trying to stem the leak.

### 5.2 Special hazards arising from the mixture

Excess pressure may form in containers exposed to fire at risk of explosion. Do not breathe combustion products.

### 5.3 Advice for firefighters.

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Collect extinguishing water to prevent it from draining into the sewer system.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### 6.1 Steps to be taken in case material is released or spilled

Ventilate area. Avoid breathing of vapors. Use self-contained breathing apparatus or air mask for large spills in a confined area. Eliminate ignition sources. Remove with inert absorbent and non-sparking tools. Avoid contact with eyes.

### 6.2 Environmental precautions.

Avoid leakage into the sewer system or come in contact with surface water.

## SECTION 7 – HANDLING AND STORAGE

### 7.1 Precautions to be taken in handling.

Keep away from heat, sparks and naked flame. If not kept in well ventilated areas, vapors might accumulate at ground level and if ignited, will catch fire. Do not eat, drink, or smoke during usage. Avoid leakage of the product into the environment.

### 7.2 Conditions for storage.

Store only in the original container. Keep in well ventilated area. Keep at room temperature 23 °C.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Exposure controls.

#### HAND PROTECTION

Handle with gloves.

**SKIN PROTECTION**

Wear suitable protective clothing

**EYE PROTECTION**

Chemical goggles. Contact lenses should not be worn

**RESPIRATORY PROTECTION**

NIOSH-certified organic vapor (black cartridge) respirator.

**8.2 Potential Health Effect**

**Inhalation:** Vapor overexposure may cause drowsiness, injure blood and liver, and may irritate eyes, nose and throat

**Skin Contact:** On direct contact uncured product or its vapor may cause slight irritation to skin.

**Eye Contact:** On direct contact uncured product or its vapor may cause slight irritation to eyes.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties.**

Appearance	Viscous liquid
Color	Colorless and colorful
Odor	Mild odor
Flash Point	-26 °C
Solubility	Immiscible with water
Auto-ignition temperature	234 °C
Explosive properties	No data available
Oxidizing properties	No data available
Freezing point	-60 °C
Highest working temperature	200 °C

**SECTION 10 – STABILITY AND REACTIVITY**

**10.1 Conditions to Avoid.**

Avoid heating and all sources of ignition

**10.2 Incompatibility.**

Information not available

**10.3 Hazardous Decomposition Products.**

By fire: CO<sub>2</sub>, CO

**10.4 Hazardous Polymerization.**

None

**10.5 Stability.**

Stable in cool condition

**10.6 Reactivity.**

None

**10.7 Possibility of hazardous reactions.**

Vapors might form an explosive mixture with the air.

**SECTION 11– ECOLOGICAL INFORMATION**

**11.1 Information of toxicity effects.**

Acute toxicity	LD50 Oral - rat - 25,000 mg/kg LC50 Inhalation - rat - 4 h - 48000 ppm
Skin corrosion/irritation	Not classified Skin Irritation - rabbit: 500 mg/24H: mild irritant effect
Serious eye damage/irritation	Not classified

	Eye Irritation - rabbit: 100 uL/24H: mild irritant effect
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity – single exposure	Not classified
Specific target organ toxicity – repeated exposure	Not classified
Aspiration hazard	Not classified

**TRIMETHOXY (METHYL) SILANE**

LD50 (Oral)	> 9500 mg/kg (Rat)
LD50 (Dermal)	> 9500 mg/kg (Rat)
LC50 (Inhalation)	> 42.1 mg/l/4h (Rat)

**AMPHOROUS SILICATE HYDRATE**

LD50 (Oral)	> 2000 mg/kg (Rat)
LD50 (Dermal)	> 2000 mg/kg (Rat)
LC50 (Inhalation)	> 2.2 mg/l/1h (Rat)

**OCTAETHYLTETRACYCLOSILOXANE**

LC50 (Inhalation)	> 2975 ppm/4h
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**SECTION 12– ECOLOGICAL INFORMATION**

**12.1 Toxicity.**

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 2.5 mg/l - 96.0 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 3,878.00 mg/l - 48 h
Toxicity to algae	EC50 - Chlorella vulgaris (Fresh water algae) - 12,840.00 mg/l - 3 h EC50 - SKELETOMA - 0.30 mg/l - 8 h

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**13.1 Disposal.**

Comply with all Federal, State and Local Regulations for polymers disposing. Re-use when possible.

**SECTION 14 – TRANSPORTATION INFORMATION**

<b>Note</b>	Limited quantity This product may be reclassified as Consumer Commodity, ORM-D, when shipped by ground; packaging quantity limitations apply.
<b>DOT</b> Proper shipping name	Quarts and gallons ship as limited quantity. UN1263, Paint, 3, III
<b>MEX</b>	no data available
<b>IMDG</b> Proper shipping name	UN1263, Paint, 3, III
<b>IATA</b> Proper shipping name	UN1263, Paint, 3, III

**SECTION 15 – REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations.**

**OSHA Hazards**

Flammable liquid, Target Organ Effect, Irritant

**DSL Status**

All components of this product are on the Canadian DSL list.

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**California Prop. 65 Components**

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

**SECTION 16 – OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.