



**ADVANCED**  
**CHEMICAL**  
TECHNOLOGIES, INC.

## SAFETY DATA SHEET

### SECTION 1

### MATERIAL IDENTIFICATION

PRODUCT NAME/DESCRIPTION: LOCK OUT 100

DISTRIBUTED / MANUFACTURED BY:  
Advanced Chemical Technologies  
9608 N Robinson  
Oklahoma City, OK 73114

Date: 1/27/2020, Version 1  
Phone: (405) 843-2585  
Emergency Phone: (800) 255-3924

### SECTION 2

### HAZARD IDENTIFICATION

#### CLASSIFICATION:

Flammability: Category 2  
Skin Irritation: Category 2  
Specific Target Organ Toxicity: Category 3

SIGNAL WORD:  
WARNING

#### HAZARD STATEMENTS:

Vapors may cause drowsiness and dizziness

Flammable liquid and vapor

Cause skin irritation

May cause lung damage if swallowed

Combustible liquid



#### PRECAUTIONARY STATEMENTS

Avoid breathing spray.

Use outdoors or in a well-ventilated area.

Keep away from heat, sparks, open flames, and hot surfaces

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment/ non-sparking tools

Wash skin thoroughly after using

### SECTION 3

### COMPOSITION / INGREDIENTS

CHEMICAL NAME	%W/W	CAS NUMBER
Isobutyl trimethoxysilane	50% - 90%	18395-30-7
Silicone Resin	1% - 5%	*
Solvent Naphtha Medium Aliphatic	5% - 10%	64742-88-7
Fluorochemical Acrylate Polymer	1% - 5%	*

\*Trade secret.

### SECTION 4

### FIRST AID

Medical conditions aggravated by exposure:

None known.

**Eye Contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after 1-2 minutes and continue flushing for several additional minutes.

**Skin Contact:** May cause moderate irritation to skin. Repeated exposure may cause skin dryness/cracking. Wash off with plenty of water.

**Inhalation:** Vapors may cause drowsiness, dizziness, and slightly irritating to respiratory system. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms develop.

**Ingestion:** If swallowed, do not induce vomiting. If vomiting occurs spontaneously, get head below hips to prevent aspiration. Transport to the nearest medical facility if swallowed or any of the following symptoms occur with 6 hours: fever greater than 101 °F, shortness of breath, chest congestion, or continued coughing/wheezing. May cause lung damage if swallowed.

**Advice to Physician:** Potential for chemical pneumonitis, or cardiac sensitization. Consider gastric lavage with protected airway, administration of activated charcoal, or oxygen therapy. Call a doctor or the poison control center for guidance. Hypoxia or negative inotropes may enhance these effects.

**SECTION 5****FIRE FIGHTING MEASURES**

Fire Hazard Classification (OSHA/NFPA):	3
Suitable extinguishing media:	Foam Water spray Alcohol-resistant foam Carbon dioxide (CO <sub>2</sub> ) Dry chemical powder Fog
Unsuitable extinguishing media:	High volume water jet
Hazardous by-products of incomplete combustion:	Carbon monoxide
Hazardous combustion by-products:	Carbon oxides Silicon oxides Carbonyl Fluoride Hydrogen Fluoride
Specific extinguishing methods:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers; water alone may not extinguish fires. Remove undamaged containers from fire area if it is safe to do so.
Special protective equipment for fire-fighters:	Wear self-contained breathing apparatus for firefighting. Use personal protective equipment.

**SECTION 6****ACCIDENTAL RELEASE MEASURES**

Personal Precautions, PPE, and Emergency Procedures:	Use personal protection equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental precautions:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so.
Methods/materials for containment/cleaning up:	Prevent spreading over a wide area by containment using sand, earth, or oil barriers. Collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Local authorities should be advised if significant spillages cannot be contained. Local/national regulations may apply to release and disposal of this material and materials used to clean-up; determine which are applicable. Retain and dispose of contaminated wash water.

**SECTION 7****HANDLING AND STORAGE**

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Take care to prevent spills, waste, and an minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. Use only with adequate ventilation. Keep away from sources of ignition.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Store in accordance with the national regulations. Keep in properly labeled containers. Containers which are opened must be carefully resealed and kept upright. Keep away from heat sources.
Do not store with the following product types:	Strong oxidizing agents Aerosols Flammables Oxidizing agents Corrosives

**SECTION 8****PERSONAL PROTECTION / EXPOSURE CONTROLS**

Personal Protection:	Use protective clothing chemically resistant to this material. Face shield and safety glasses.
Eyes:	Use safety glasses with side shields.
Hands & Skin:	Impervious clothing. Flame retardant antistatic protective clothing. Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include butyl rubber, neoprene, or nitrile.
Respiratory:	In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air-supply.

**SECTION 9****TYPICAL PHYSICAL AND CHEMICAL PROPERTIES**

Physical Form:	Liquid
Color:	Clear
Odor:	Solvent
Odor Threshold:	No data available
pH:	No data available
Boiling Point:	134-137 °C
Melting Point:	N/A
Flash Point:	27 °C
Flammability:	No data available

Upper Explosion Limit (UEL):	No data available
Lower Explosion Limit (LEL):	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
Relative Density:	0.93 g/cm <sup>3</sup>
Solubility Water:	Insoluble
Partition Coefficient:	No data available
Auto ignition Temperature:	267 °C
Decomposition Temperature:	No data available

## SECTION 10

## STABILITY AND REACTIVITY

Reactivity:	Not classified as a reactivity hazard.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Vapors may form explosive mixture with air.
Conditions to avoid:	Avoid heat, sparks, open flames, and other ignition sources.
Incompatible materials:	Strong oxidizing agents and acids.
Hazardous decomposition products:	Methanol.
Thermal decomposition:	Carbon monoxide and other organic compounds.

## SECTION 11

## TOXICOLOGICAL PROPERTIES

**Product:**  
**Isobutyl Trimethoxysilane**

### Acute toxicity

LD50 Oral - Rat - male and female - > 2,000 mg/kg  
(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 1525 ppm  
(OECD Test Guideline 403)

### Dermal

No data available

### Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin. - 4 h  
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation - 24 h

(OECD Test Guideline 405)

**Respiratory or skin sensitization**

Buehler Test - Guinea pig

Result: Does not cause skin sensitization.

(OECD Test Guideline 406)

**Germ cell mutagenicity**

Ames test

Salmonella typhimurium

Result: negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: Not available

Gastrointestinal disturbance, May cause convulsions., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

**Product:**

**Silicone Resin**

**Acute oral toxicity**

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

For similar material(s):

LD50, Rat, male and female, > 5,000 mg/kg

**Acute dermal toxicity**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.  
The dermal LD50 has not been determined.

**Acute inhalation toxicity**

At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.  
The LC50 has not been determined.

**Skin corrosion/irritation**

Brief contact is essentially nonirritating to skin.  
Serious eye damage/eye irritation  
May cause slight temporary eye irritation.  
Corneal injury is unlikely.

**Sensitization**

For skin sensitization:

For similar material(s):  
Did not cause allergic skin reactions when tested in guinea pigs.  
For respiratory sensitization:  
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

No relevant data found.

**Carcinogenicity**

No relevant data found.

**Teratogenicity**

No relevant data found.

**Reproductive toxicity**

No relevant data found.

**Mutagenicity**

No relevant data found.

**Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

**COMPONENTS INFLUENCING TOXICOLOGY:**

**1. Dimethyl Siloxane w/ Me Silsesquioxanes & n-Octyl Silsesquioxanes, Methoxy-term**

**Acute dermal toxicity**

The dermal LD50 has not been determined.

**Acute inhalation toxicity**

The LC50 has not been determined.

**2. Methanol**

**Acute dermal toxicity**

Effects of methanol are the same as observed via oral and inhalation exposure and include central nervous system (CNS) depression, visual impairment up to blindness, metabolic acidosis, with effects on organ systems such as liver, kidneys and heart, even death. LD50, Rabbit, 15,800 mg/kg

**Acute inhalation toxicity**

Easily attainable vapor concentrations may cause serious adverse effects, even death. At lower concentrations: May cause respiratory irritation and central nervous system depression. Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness. Inhalation of methanol may cause effects ranging from headache, narcosis and visual impairment to metabolic acidosis, blindness, and even death. Effects may be delayed.

LC50, Rat, 4 Hour, vapor, 3 mg/l

**Product:**

**Mineral Spirits**

**Basis for Assessment:**

Information given is based on product testing, and/or similar products, and/or components.

**Acute Oral Toxicity:**

Expected to be of low toxicity: LD50 >2000 mg/kg , Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

**Acute Dermal Toxicity:**

Expected to be of low toxicity: LD50 >2000 mg/kg , Rat

**Acute Inhalation Toxicity:**

Low toxicity: LC50 greater than near-saturated vapor concentration. / 1 hours, Rat

**Skin Irritation:**

May cause moderate skin irritation (but insufficient to classify).

Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

**Eye Irritation:**

Essentially non-irritating to eyes.

**Respiratory Irritation:**

Inhalation of vapors or mists may cause irritation to the respiratory system. Insufficient to classify.

**Repeated Dose Toxicity:**

Kidney: caused kidney effects in male rats which are not considered relevant to humans

**Carcinogenicity:** Repeated exposure causes skin tumor promotion in experimental animals. An increased tumor incidence has been observed in experimental animals; the significance of this finding to man is unknown. (Stoddard solvent IIC)

Not classified as a carcinogen.

**Additional Information:**

Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.



**Product:****Fluorochemical Acrylate Polymer****Acute Toxicity**

Name Route Species Value

Overall product Ingestion No data available; calculated ATE &gt;5,000 mg/kg

Ethyl Acetate Dermal Rabbit LD50 &gt; 18,000 mg/kg

Ethyl Acetate Inhalation Vapor (4 hours)

Rat LC50 70.5 mg/l

Ethyl Acetate Ingestion Rat LD50 5,620 mg/kg

Fluorochemical Acrylate Polymer (NJTSRN 04499600-6882) Dermal LD50 estimated to be &gt; 5,000 mg/kg

Fluorochemical Acrylate Polymer (NJTSRN 04499600-6882) Ingestion LD50 estimated to be 2,000 - 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name Species Value

Ethyl Acetate Rabbit Minimal irritation

Serious Eye Damage/Irritation

Name Species Value

Ethyl Acetate Rabbit Mild irritant

Skin Sensitization

Name Species Value

Ethyl Acetate Guinea pig Not classified

**Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity**

Name Route Value

Ethyl Acetate In Vitro Not mutagenic

Ethyl Acetate In vivo Not mutagenic

Fluorochemical Acrylate Polymer (NJTSRN 04499600-6882) In Vitro Not mutagenic

**Reproductive Toxicity**

Reproductive and/or Developmental Effects

For the component/components, either no data are currently available or the data are not sufficient for classification.

Target Organ(s)

**Specific Target Organ Toxicity - single exposure**

Name Route Target Organ(s) Value Species Test Result Exposure Duration

Ethyl Acetate Inhalation central nervous system depression

May cause drowsiness or dizziness

Human NOAEL Not available

Ethyl Acetate Inhalation respiratory irritation Some positive data exist, but the data are not sufficient for classification

Human NOAEL Not available

Ethyl Acetate Ingestion central nervous system depression

May cause drowsiness or dizziness

Human NOAEL Not available

**Specific Target Organ Toxicity - repeated exposure**

Name Route Target Organ(s) Value Species Test Result Exposure Duration

Ethyl Acetate Inhalation endocrine system |liver | nervous system

Not classified Rat NOAEL

0.043 mg/l

90 days

Ethyl Acetate Inhalation hematopoietic system

Not classified Rabbit LOAEL 16 mg/l 40 days  
Ethyl Acetate Ingestion hematopoietic system | liver | kidney and/or bladder  
Not classified Rat NOAEL  
3,600  
mg/kg/day  
90 days

#### **Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

## **SECTION 12**

## **ECOLOGICAL INFORMATION**

### **Ingredients:**

#### **Isobutyl Trimethoxysilane**

#### **Toxicity to Fish**

Semi-static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h

#### **Toxicity to Daphnia and Other Aquatic Invertebrates**

Static test EC50 - Daphnia magna (Water flea) - > 864 mg/l - 48 h

#### **Toxicity to Algae**

Static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - > 1,170 mg/l - 72 h

#### **Persistence and degradability**

Biodegradability aerobic - Exposure time 28 d

Result: 36 % - Not readily biodegradable.

(OECD Test Guideline 301B)

#### **Bioaccumulative Potential**

No data available

#### **Mobility in Soil**

No data available

#### **Results of PBT and vPvB Assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### **Other Adverse Effects**

No data available

### **Ingredients:**

#### **Silicone Resin**

#### **Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis  
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

For similar material(s):

LC50, Fish, 96 Hour, > 100 mg/l

#### **Acute toxicity to aquatic invertebrates**

For similar material(s):

EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l

**Acute toxicity to algae/aquatic plants**

For similar material(s):

EC50, algae, 14 d, > 2,000 mg/l

**Chronic aquatic toxicity**

For similar material(s):

NOEC, Cyprinodon variegatus (sheepshead minnow), 33 d, 91 mg/l

**Toxicity to Above Ground Organisms**

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

For similar active ingredient(s).

oral LD50, Colinus virginianus (Bobwhite quail), > 5,000 mg/kg

**Persistence and degradability**

Biodegradability: For similar material(s): No appreciable biodegradation is expected.

**Bioaccumulative potential**

Bioaccumulation: For similar material(s): No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

**Mobility in soil**

For similar material(s):

Expected to be relatively immobile in soil (Koc > 5000).

**Ingredients:****Mineral Spirits****Acute Toxicity Fish:**

Low toxicity: LC/EC/IC50 > 1000 mg/l

**Aquatic Invertebrates:**

Low toxicity: LC/EC/IC50 > 1000 mg/l

**Algae:**

Low toxicity: LC/EC/IC50 > 1000 mg/l

**Microorganisms:**

Expected to be toxic:  $1 < LC/EC/IC50 \leq 10$  mg/l

**Mobility:**

Adsorbs to soil and has low mobility. Floats on water.

**Persistence/degradability:**

Readily biodegradable. Oxidizes rapidly by photo-chemical reactions in air.

**Bioaccumulation:** Has the potential to bioaccumulate.

**Ingredients:****Fluorochemical Acrylate Polymer****Ecotoxicological information**

No information available. Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

### Chemical fate information

No information available. Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13

## DISPOSAL CONSIDERATIONS

Disposal Methods	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. All disposal practices must follow all Federal, State/Provincial, and local law and regulations.
Treatment and Disposal Methods of Used Packaging:	Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Do not dump into sewers, on the ground, or into any body of water. Do not reuse containers for any purpose.
Contaminated packaging:	Dispose of as unused product.

## SECTION 14

## TRANSPORT INFORMATION

### DOT (US)

UN number: 1993

Class: 3

Packing group: III

### Proper shipping name:

Flammable liquids, n.o.s.

**Poison Inhalation Hazard:** No

### IMDG

UN number: 1993

Class: 3

Packing group: III EMS-No: F-E, S-E

**Proper shipping name:** FLAMMABLE LIQUID, N.O.S.

### IATA

UN number: 1993

Class: 3

Packing group: III

**Proper shipping name:** Flammable liquid, n.o.s.

**SECTION 15****REGULATORY INFORMATION****SARA 302 Components**

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

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

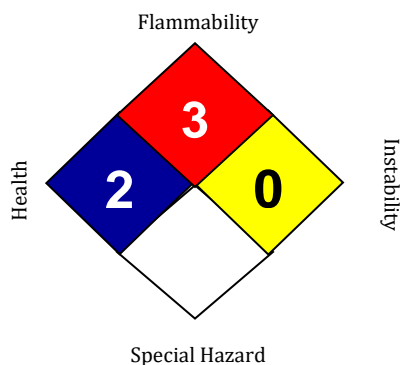
No components are subject to the Massachusetts Right to Know Act.

**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**

THIS INFORMATION IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.

HMIS:

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>3</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

**0 = not significant**  
**1 = slight**  
**2 = moderate**  
**3 = high**  
**4 = extreme**  
**\* = chronic**

NFPA HAZARD INFORMATION SIGN:

[3] **HEALTH HAZARD (BLUE DIAMOND)**

- 4-DEADLY
- 3-EXTREME DANGER
- 2-HAZARDOUS
- 1-SLIGHTLY HAZARDOUS
- 0-NORMAL MATERIAL

[0] **REACTIVITY HAZARD (YELLOW DIAMOND)**

- 4-MAY DETONATE
- 3-SHOCK AND HEAT MAY DETONATE
- 2-VIOLENT CHEMICAL CHANGE
- 1-UNSTABLE IF HEATED
- 0-STABLE

[3] **FIRE HAZARD (RED DIAMOND)**

- FLASH POINTS:
- 4-BELOW 73 F
  - 3-BELOW 100 F
  - 2-BELOW 200 F
  - 1-ABOVE 200 F
  - 0-WILL NOT BURN

[ ] **SPECIFIC HAZARD (WHITE DIAMOND)**

- OX      OXIDIZER
- ACID    ACID
- ALK     ALKALI
- COR     CORROSIVE
- W        USE NO WATER