

# Material Safety data sheet

## ACULON NANOCLEAR™ TREATMENT POUCH



11839 Sorrento Valley Road Suite 901  
San Diego, CA 92121

phone 858-350-9474

fax 858-350-9422

Email: [support@aculon.com](mailto:support@aculon.com) [www.aculon.com](http://www.aculon.com)



### Emergency Telephone Number

Chemtrec CCN696855

1-800-424-9300 (US/Canada)

+1-703-527-3887 (International)

Revision Date: 19 March 2014

Revision date 19.3.2014

**Aculon NanoClear™ Treatment Pouch**

Page 2/7

## I. PRODUCT INFORMATION

**Trade Name** Aculon NanoClear™ Treatment  
**Chemical Family** Chemical Coating Mixture

## II. COMPOSITION / INFORMATION ON INGREDIENT(S)

Ingredient(s)	CAS number	CONC.	OSHA PEL	ACGIH TLV-TWA
Ethanol	64-17-5	> 60%	1000 ppm	1900 mg/m3
Proprietary Ingredient	NA	< 5%		
Methyl Nonafluorobutyl Ether	163702-07-6	< 30%	600ppm	750 ppm

## III. HAZARDOUS IDENTIFICATION

**NFPA scale** 4 = Extreme, 3 = High, 2 = Moderate, 1=Slight, 0=Insignificant

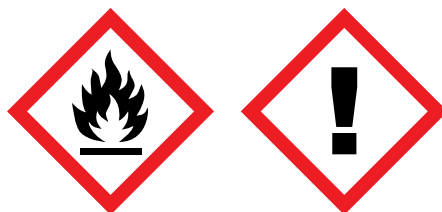
**NFPA rating** Health = 2 Flammability = 2 Reactivity = 0

**Eye contact** Causes severe eye irritation. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

**Skin contact** Avoid all skin contact. May cause moderate skin irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact

**Inhalation** Vapor and/or spray mist harmful if inhaled. Vapor irritates eyes, nose, and throat

**Ingestion** Harmful or fatal if swallowed  
GHS Label Elements, Statements, Precautions



**Danger**  
Highly flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation.  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove Contact lenses, if present and easy to do. Continue rinsing

## IV. FIRST AID MEASURES

<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical aid immediately
<b>Skin contact</b>	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.
<b>Inhalation</b>	Supply fresh air or oxygen. If not breathing begin artificial respiration. Seek immediate medical attention.
<b>Ingestion</b>	Immediately call a poison control center or a doctor. Never give anything by mouth to an unconscious person. Only induce vomiting at the instruction of a physician

## V. FIREFIGHTING MEASURES

<b>General Information</b>	<b>EXTINGUISHING MEDIA</b> Carbon dioxide, dry chemical, water spray or foam. Use a blanketing effect to smother fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand. MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Combustible Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. May form explosive peroxides. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Will be easily ignited by heat, sparks or flame
<b>Flash point</b>	14 °C/35 °F (Product, closed- cup method)
<b>Auto-ignition</b>	
<b>Temperature</b>	380 °C (Solvent Mixture, approximate)
<b>Explosion limits</b>	Lower: 3.3% (Ethanol)    Upper: 18.0% (Ethanol)

## VI. ACCIDENTAL RELEASE MEASURES

### Person-related safety precautions

Wear protective equipment. See section 8 for proper protective equipment. Keep unprotected persons away

### Measures for cleaning/collecting

Absorb spill with an inert material (i.e. vermiculite, sand, diatomite, soil, etc.). Sweep or scoop material into proper containers for disposal. Prevent material from entering storm sewers or waterways

## VII. HANDLING AND STORAGE

### Handling precautions

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

### Storage precautions

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well ventilated area away from incompatible substances. Do not store near perchlorates, peroxides, chromic acid or nitric acid.

## VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Ventilation / engineering controls

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits

### Respiratory protection

If material is in a room with adequate ventilation/exhaust then no respiratory protection is required. However, if the material is used for spray or in an open bath with little/no ventilation, use respiratory protection when handling this material. Wear a NIOSH approved Category 23C air-purifying respirator with a full facepiece and combination cartridges approved for paints, lacquers, and enamels, or a Category 23C powered air-purifying respirator equipped with a tight-fitting facepiece and combination cartridges approved for paints, lacquers, and enamels.

Revision date 19.3.2014

**Aculon NanoClear™ Treatment Pouch**

Page 5/7

**Skin protection** Wear appropriate protective gloves to prevent skin exposure.

**Eye protection** Wear appropriate protective eyeglasses or chemical safety goggles as described in OSHA 29 CFR 1910.133 or European Standard EN166.

**Clothing** Wear appropriate protective clothing to prevent skin exposure.

## IX. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance / Physical state</b>	Liquid	<b>EVAPORATION RATE</b>	3.3 (Ethanol) 49 (Fluorocarbon)
<b>Molecular formula</b>	Mixture	<b>SOLUBILITY (in H<sub>2</sub>O)</b>	> 60%
<b>Odor</b>	Mild characteristic odor	<b>Percent Volatile by Volume</b>	> 95%
<b>Vapor density</b>	1.6 (Ethanol) 8.6 (Fluorocarbon)	<b>BOILING POINT</b>	77.1 °C (Ethanol) 60.0 °C (Fluorocarbon)
<b>Vapor pressure</b>	48 mm Hg (Ethanol) 200 mm Hg (Fluorocarbon)	<b>SPECIFIC GRAVITY</b>	0.982 (water = 1.000)
<b>Ph</b>	NA		

## X. STABILITY AND REACTIVITY

<b>Stability</b>	Stable at ambient temperature
<b>Conditions to avoid</b>	Ignition sources, excess heat.
<b>Incompatible materials</b>	Strong oxidizing agents, strong acids, and strong caustics.
<b>Hazardous decomposition products</b>	Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide..
<b>Hazardous polymerization</b>	Has not been reported.

## XI. TOXICOLOGY INFORMATION

### General information

No data

## XII. ECOLOGICAL INFORMATION

**Ecotoxicity** When spilled on land it is apt to volatilize, biodegrade, and leach into the ground water, but no data on the rates of these processes could be found. Its fate in groundwater is unknown. When released into water it will volatilize and probably biodegrade. It would not be expected to adsorb to sediment or bioconcentrate in fish.

**Environmental** When released to the atmosphere it will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.

**Physical** No information available.

## XIII. DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed

RCRA U-Series:

## XIV. TRANSPORTATION INFORMATION

**Not regulated for transport per IATA SP 46 and DOT 172.102 SP 47**

For informational purposes: Solid containing flammable liquid, n.o.s. UN 3175, class 4.1, pg II

## XV. REGULATORY INFORMATION

- TSCA** The components in this mixture are listed on the U.S. inventory.
- OSHA** This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard.
- SECTION 313** Combustible liquid. To the best of our knowledge, This product does not contain a toxic chemical, above the minimum, that is required to be reported
- SECTION 12B** None of the chemicals are listed under TSCA Section 12b.
- TSCA significant new use rule** None of the chemicals in this material have a SNUR under TSCA.
- SARA SECTION 302 extremely hazardous substances** None of the chemicals in this product have a TPQ.

## XVI. OTHER INFORMATION

INFORMATION CONTAINED IN THIS MATERIAL DATA SAFETY SHEET IS FOR USE BY TECHNICALLY QUALIFIED PERSONNEL AT THEIR DISCRETION AND RISK. ALL STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED ON TESTS AND DATA WHICH WE BELIEVE TO BE RELIABLE, BUT THE ACCURACY OR COMPLETENESS THEREOF IS NOT GUARANTEED AND NO WARRANTY OF ANY KIND IS MADE WITH RESPECT THERETO. SINCE THE COMPANY SHALL HAVE NO CONTROL OF THE USE OF THE PRODUCT DESCRIBED HEREIN, THE COMPANY ASSUMES NO LIABILITY OF LOSS OR DAMAGE INCURRED FROM THE PROPER OR IMPROPER USE OF SUCH PRODUCT.

### DISCLAIMER

This material must be handled by or under direct supervision of technically qualified persons. Not for drug, household or other uses.