Safety data sheet

ACCORDING TO 1907/2006/EC, ARTICLE 31

1 Product information

Product identifier

Trade Name: **Aculon NanoClear™Treatment Pouch**

Chemical Family **Chemical Coating Mixture**

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Aculon 11839 Sorrento Valley Road
Suite 901, San Diego, CA 92121

Tel: 858-350-9474 Fax: 858-350-9422
Email: support@aculon.com www.aculon.com

Emergency Telephone Number

Chemtrec CCN696855 1-800-424-9300 (US/Canada)
+1-703-527-3887 (International)

Revision Date: 19 March 2014

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2 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

3 Hazardous identification

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

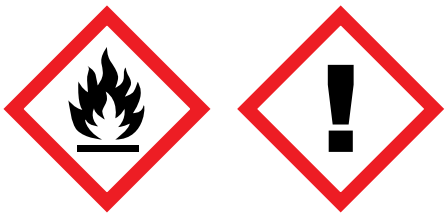
NFPA rating
Health = 2
Flammability = 2
Reactivity = 0

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

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4 First aid measures

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical aid immediately

Skin contact
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.

Inhalation
Supply fresh air or oxygen. If not breathing begin artificial respiration. Seek immediate medical attention.

Ingestion
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

5 Firefighting measures

General Information
EXTINGUISHING MEDIA
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

Flash point
14 °C/35 °F (Product, closed- cup method)

Auto-ignition Temperature
380 °C (Solvent Mixture, approximate)

Explosion limits
Lower: 3.3% (Ethanol) Upper: 18.0% (Ethanol)

6 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

7 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.

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8 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.

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.

9 Physical and chemical properties

Appearance / Physical state	Liquid	EVAPORATION RATE	3.3 (Ethanol) 49 (Fluorocarbon)
Molecular formula	Mixture	SOLUBILITY (in H_2O)	> 60%
Odor	Mild characteristic odor	Percent Volatile by Volume	> 95%
Vapor density	1.6 (Ethanol) 8.6 (Fluorocarbon)	BOILING POINT	77.1 °C (Ethanol) 60.0 °C (Fluorocarbon)
Vapor pressure	48 mm Hg (Ethanol) 200 mm Hg (Fluorocarbon)	SPECIFIC GRAVITY	0.982 (water = 1.000)
Ph	NA		

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10 Stability and reactivity

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

11 Toxicology information

General information	No data

12 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 wills 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 avaliable.

13 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:

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14 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

15 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.

16 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 WARRANT 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.
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