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**** MATERIAL SAFETY DATA SHEET ****

1-Octene, 99+% 97436

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 1-Octene, 99+% Catalog Numbers: AC301250000, AC301250025, AC301251000

Synonyms: Alpha-Octylene Caprylene: Alpha-Octylene Companies N.V. Company Identification: Acros Organics N.V. October Company Identification: Acros Organics N.V. N. O. October Company Identification: Acros October Company Identification: Acros October Company Identification Company Identification

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

			Hazard Symbols: F Risk Phrases: 11 36/37/38
203-893-7	99	Zm	6
EINECS#	%	Chemical Name	CAS#

**** SECTION 3 - HAZARDS IDENTIFICATION ****

Appearance: Clear colourless liquid. Flash Point: 21 deg C. Warning! Flammable liquid. May cause central nervous system depression. Causes eye and skin irritation. Causes digestive and respiratory tract irritation.

Target Organs: Central nervous system.

Causes eye irritation.

Potential Health Effects

Causes skin irritation.

Ingestion:

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

Inhalation:
Causes respiratory tract irritation. Causes narcotic effects
Causes respiratory tract irritation. Causes narcotic effects
including headache, dizziness, weakness, unconsciousness, and
possible death.

Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.

immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Possible aspiration hazard. Get medical aid immediately.

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration, if breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

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

General Information: As in any fire, v As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Containers may explode in the heat of a fire. Flammable Liquid. Vapor may explode if ignited in a confined area. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

spray to cool fire-exposed containers. Use foam, dry

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chemical, or carbon dioxide. Water may be ineffective. Do NOT use straight streams of water. Autoignition Temperature: 221 deg C (429.80 deg F)
Tissh Point: 221 deg C (69.80 deg F)
NFPA Rating: health-1; flammability-3; reactivity-0
Explosion Limits, Lower: 70 vol %
Upper: 3.90 vol %

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

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
Wash thoroughly after handling. Use with adequate ventilation.
Wash thoroughly after handling. Use with adequate ventilation.
Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

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

Exposure Limits

	none listed	none	none listed		none listed	1-OCTENE
		!			-1	
OSHA - Final PELs	HA - F		HSOIN	ACGIH	AC	Chemical Name
		111111111	+			***************************************

OSHA Vacated PELs:
No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Skin: Wear appropriate protective eveglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Wear appropriate protective gloves to prevent skin exposure.

Clothing

Wear appropriate protective clothing to prevent skin exposure.

Respirators Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Vapor Pressure: 36 mm Hg @38C
Vapor Density: 9.9
Vapor Density: 100 available.
Viscosity: Not available.
Viscosity: 122 - 123 deg C @ 760.00mm Hg
Freezing/Melting Point: -101 deg C
Decomposition Temperature: Not available.
Specific Gravity/Density: 1750g/cm3
Molecular Formula: 175.21 Physical State: Appearance: Gasoline-like Not available 36 mm Hg @38C Clear colourless liquid

**** SECTION 10 - STABILITY AND REACTIVITY ****

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Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, ignition sources.
Incompatibities with Other Materials:
Incompatibities
                                                                                                                                                                               Hazardous Polymerization: Will not occur.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INDEX: N/A
**** SECTION 11 - TOXICOLOGICAL INFORMATION ****
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03/30/98
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CRA F-Series: None listed.
CRA P-Series: None listed.
CRA U-Series: None listed.
Vot listed as a material banned from land disposal
uccording to RCRA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dispose of in a manner consistent with federal, state, and local regulations. ICRA D-Series Maximum Concentration of Contaminants:
Shipping Name: FLAMMABLE LIQUID, N.O.S.*
Hazard Class: 3
UN Number: 1993
Packing Group: II
RID/ADR Group: II
Shipping Name: FLAMMABLE LIQUID, N.O.S.
Dangerous Goods Code: 3(3B)
UN Number: 1993
Canadian TDG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mutagenicity:
No informa
Other Studies:
                                                                                                                                                                   Shipping Name: FLAMMABLE LIQUID, N.O.S. Hazard Class: 3.2
UN Number: 1993
Packing Group: II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ecotoxicity. Water danger/protection: WGK 1 Environmental Fate: Environmental Fate: Physical/Chemical: Physical/Chemical: Not available.
                                                                                                                                                                                                                                                                              US DOT
No information available
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Other:
Not available.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Other Studies.
No data available.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Neurotox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RTECS#:
CAS# 111-66-0 unlisted.
LD50/LC50:
Not available.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Epidemiology:
No information available.
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No inform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            listed.
D-Series Chronic Toxicity Reference Levels: None
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        information available uctive Effects:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          information available
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  information available.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          **** SECTION 13 - DISPOSAL CONSIDERATIONS ****
                                                                                                                                                                                                                                                                                                                                              **** SECTION 14 - TRANSPORT INFORMATION ****
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US FEDERAL TSCA

CAS# 111-66-0 is listed on the TSCA inventory.

Health & Safety Reporting List
None of the Chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule
Section 12 the Chemicals are listed under TSCA Section 12b.

Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

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Clean Air Act:

This material does not contain any class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

None of the chemicals in this product are considered highly hazardous by OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE
TI-OCTER can be found on the following state right to know lists:
TI-OCTER can be found on the following state right to know lists:
Florida, Pennsylvania, Massachusetts.
California No Significant Risk Level:
California No Significant Risk Level:
None of the chemicals in this product are listed.
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols:
Hazard Symbols:
Risk Phrases:
Risk Phrases:

Hazard Symbols:
Risk Phrases:
Risk Phrases:

Hazard Symbols:
Risk Phrases:
Risk 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Canada

CAS# 111-66-0 is listed on Canada's DSL/NDSL List.

WHMIS: Not available.

CAS# 111-66-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howscover arising, even if Fisher has been advised of the possibility of such damages.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MSDS Creation Date: 2/07/1996 Revision #1 Date: 12/30/1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
Section 313
Section 313
No chemicals are reportable.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Safety Phrases:
S 16. Keep away from sources of ignition - No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 **** SECTION 16 - ADDITIONAL INFORMATION ****
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R 11 Highly flammable.
R 36/37/38 Irritating to eyes, respiratory system and skin.
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