Material Safety Data Sheet
Ethylaluminium sesquichloride, 0.4 M solution in hexane

MSDS\# 09927

MSDS Name:
Catalog Numbers:
Synonyms:

Section 1 - Chemical Product and Company Identification
Ethylaluminium sesquichloride, 0.4 M solution in hexane
AC185460000, AC185461000, AC185468000
EASC
Acros Organics BVBA
Company Identification:

Company Identification: (USA)
For information in the US, call:
For information in Europe, call:
Emergency Number, Europe:
Emergency Number US:
CHEMTREC Phone Number, US:
CHEMTREC Phone Number, Europe:
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
800-ACROS-01
+32 14575211
+32 14575299
201-796-7100
800-424-9300
703-527-3887
Section 2 - Composition, Information on Ingredients
Risk Phrases: 1138 48/20 51/53 626567

| CAS\#: | $110-54-3$ |
| :--- | :--- |
| Chemical Name: | Hexane |
| \%: | 85 |
| EINECS\#: | $203-777-6$ |
| Hazard Symbols: | F XN N |

Risk Phrases:

CAS\#:
Chemical Name:
\%:
EINECS\#:
Hazard Symbols:

Text for R-phrases: see Section 16
Hazard Symbols:

12075-68-2
Ethyl aluminum sesquichloride
15
235-137-7


Risk Phrases:

F C N


11 14/15 35 48/20 51/53 626567
Section 3 - Hazards Identification
EMERGENCY OVERVIEW

Potential Health Effects
Eye: Causes eye burns.
Skin: Causes skin burns.
Ingestion: Causes gastrointestinal tract burns. May cause lung damage.
Harmful if inhaled. Causes chemical burns to the respiratory tract. Inhalation of vapors may cause drowsiness and dizziness.
Chronic: May impair fertility.

## Section 4 - First Aid Measures

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

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do not induce vomiting. Get medical aid immediately.
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to
Physician:
Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Water reactive. Material will react with water and may release a flammable and/or toxic gas. Flammable liquid and vapor.
Extinguishing Do NOT use halogenated agents. Use dry sand, dry chemical, soda ash or lime. DO NOT USE WATER
Media: OR FOAM.
${ }^{\text {Autoignition }}$ Not available
Temperature:
Flash Point: Not available
Explosion Limits: Not available Lower:
Explosion Limits: Not available Upper:
NFPA Rating: 3 - flammability, 0 - instability

## Section 6 - Accidental Release Measures

General
Information:
Spills/Leaks:
Use proper personal protective equipment as indicated in Section 8 .
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Do not expose spill to water.

Section 7 - Handling and Storage
Do not allow water to get into the container because of violent reaction. Use spark-proof tools and explosion
Handling: proof equipment. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Take precautionary measures against static discharges. Use and store under nitrogen. Do not allow contact with water. Use only in a chemical fume hood.

Storage:
Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammablesarea. Corrosives area. Water free area. Store protected from moisture. Store under nitrogen.

Section 8 - Exposure Controls, Personal Protection

| Chemical Name | ACGIH | NIOSH | \|OSHA - Final P |
| :---: | :---: | :---: | :---: |
| Hexane | 150 ppm; Skin - | 150 ppm TWA; 180 | 1500 ppm TWA; |
|  | \| potential | $1 \mathrm{mg} / \mathrm{m} 3$ TWA 1100 | $11800 \mathrm{mg} / \mathrm{m} 3 \mathrm{TWA}$ |
|  | \| significant | lppm IDLH (10\% | \| |
|  | \| contribution to | ( LEL) | \| |
|  | \| overall exposure | \| | \| |
|  | \|by the cutaneous | 1 | 1 |



OSHA Vacated PELs: Hexane: 50 ppm TWA; $180 \mathrm{mg} / \mathrm{m} 3$ TWA Ethyl aluminum sesquichloride: None listed
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.
Exposure Limits
Personal Protective Equipment
Eyes: Not available
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties
Physical State: Clear liquid Color: colorless Odor: hexane-like
$\mathrm{pH}:<7$
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Decomposition Temperature:
Solubility in water: vigorous reaction
Specific Gravity/Density: 0.701
Molecular Formula: C6H16Al2Cl3
Molecular Weight: 247.51
Section 10 - Stability and Reactivity
Chemical Stability: Air sensitive. Reacts violently with water. Moisture sensitive.

Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition
Products
Hazardous Polymerization

Incompatible materials, ignition sources, exposure to moist air or water, temperatures above $160^{\circ} \mathrm{C}$.

Not available

Hydrogen chloride, carbon monoxide, carbon dioxide, aluminum oxide.
Will not occur.
Section 11 - Toxicological Information

RTECS\#:
CAS\# 110-54-3: MN9275000
CAS\# 12075-68-2: BD1950000
RTECS:
CAS\# 110-54-3: Draize test, rabbit, eye: 10 mg Mild;
Inhalation, mouse: LC50 $=150000 \mathrm{mg} / \mathrm{m} 3 / 2 \mathrm{H}$;
Inhalation, rat: LC50 $=48000 \mathrm{ppm} / 4 \mathrm{H}$;
LD50/LC50: Inhalation, rat: LC50 $=627000 \mathrm{mg} / \mathrm{m} 3 / 3 \mathrm{M}$;
Oral, rat: LD50 $=25 \mathrm{gm} / \mathrm{kg}$;

## RTECS:

## CAS\# 12075-68-2:

Hexane - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Ethyl aluminum sesquichloride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Other: The toxicological properties have not been fully investigated.

Section 12 - Ecological Information
Other: $\quad$ No information available.
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

US DOT
Shipping Name: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE
Hazard Class: 4.3
UN Number: UN3399
Packing Group: I
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

USA RQ: CAS\# 110-54-3: 5000 lb final RQ; 2270 kg final RQ
Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: F C N
Risk Phrases:
R 11 Highly flammable.
R 14/15 Reacts violently with water liberating extremely flammable gases.
R 35 Causes severe burns.
R 48/20 Harmful : danger of serious damage to health by prolonged exposure through inhalation.
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 62 Possible risk of impaired fertility.
R 65 Harmful: may cause lung damage if swallowed.
R 67 Vapours may cause drowsiness and dizziness.
Safety Phrases:
S 6A Keep under nitrogen.
S 16 Keep away from sources of ignition - No smoking.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 29 Do not empty into drains.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 43B In case of fire, use fire-fighting equipment on basis of sodium chloride, sodium bicarbonate (never use water).
S 43E In case of fire, use dry sand (never use water).
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 57 Use appropriate containment to avoid environmental contamination.

## WGK (Water Danger/Protection)

CAS\# 12075-68-2: 1
Canada
CAS\# 110-54-3 is listed on Canada's DSL List
CAS\# 12075-68-2 is listed on Canada's DSL List
Canadian WHMIS Classifications: Not available
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 110-54-3 is listed on Canada's Ingredient Disclosure List
CAS\# 12075-68-2 is not listed on Canada's Ingredient Disclosure List.

## US Federal

TSCA
CAS\# 110-54-3 is listed on the TSCA Inventory.
CAS\# 12075-68-2 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 9/20/2004
Revision \#3 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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 event shall the company 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 howsoever arising, even if the company has been advised of the possibility of such damages.

