



Material Safety Data Sheet (MSDS) of

1. Identification of the substance/preparation and of company/undertaking Identification of the product

Product name: Ethanol 96%
Cat. No. A2146 / A2147 / A2148 / A8084 / A21507 / A80935

Manufacturer/supplier identification

Company: Avonchem Ltd Macclesfield, Cheshire, UK SK11 6PJ
Telephone No.: 0044 (0)1625-434300
Fax No: 0044 (0)1625-869777
Email: info@avonchem.co.uk

2. Hazards identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Highly flammable .

3. Composition/information on ingredients

Product Name CAS # EC no Annex I
Index Number
ETHANOL FIXATIVE None None None
Ingredient Name Percent CAS # EC no Annex I
Index Number
ETHYL ALCOHOL, ABSOLUTE 96% 64-17-5 200-578-6 603-002-00-5
WATER 4%
Symbols: F
R-Phrases: 11
Highly flammable.
Formula C₂H₆O
Molecular Weight 46.07 AMU

4. First aid measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Avonchem Ltd, 10 Waterloo St. West, Macclesfield, Cheshire, SK11 6PJ, UK

Telephone: 01625-434300, Fax: 01625-869777, e-mail: grayrobert@aol.com
Registered in England: 3269705 London



5. Fire-fighting measures

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SPECIFIC METHOD(S) OF FIRE FIGHTING

Use water spray to cool fire-exposed containers.

6. Accidental release measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

7. Handling and storage

HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame.

8. Exposure controls/personal protection

ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

EXPOSURE LIMITS

Country Source Type Value

Poland NDS 1900 MG/M3

Poland NDSCh -

Poland NDSP -

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PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

Skin Protection: Chemical resistant apron.

9. Physical and chemical properties

Appearance Physical State: Liquid

Property Value At Temperature or Pressure

pH N/A

BP/BP Range N/A

MP/MP Range N/A

Flash Point 13.0 °C

Flammability N/A

Autoignition Temp N/A

Oxidizing Properties N/A

Explosive Properties N/A

Explosion Limits N/A

Vapor Pressure N/A

SG/Density N/A

Partition Coefficient N/A

Viscosity N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Evaporation Rate N/A

Bulk Density N/A

Decomposition Temp. N/A

Solvent Content N/A

Water Content N/A

Surface Tension N/A

Conductivity N/A

Miscellaneous Data N/A

Solubility N/A

10. Stability and reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Acids, Acid chlorides, Acid anhydrides,

Oxidizing agents, Reducing agents, Alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Nature of decomposition products

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not known.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11. Toxicological information

SIGNS AND SYMPTOMS OF EXPOSURE

Can cause CNS depression. Exposure can cause: Narcotic effect.

Nausea, headache, and vomiting. Damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

TARGET ORGAN INFORMATION

Nerves. Liver. Heart.

CONDITIONS AGGRAVATED BY EXPOSURE

Alcohol has been linked to birth defects and cancer in humans.

Repeated ingestion over a prolonged period has caused liver and kidney damage. IARC has determined that ethanol is carcinogenic based on the chronic exposure of humans through the drinking of alcoholic beverages over time.

CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification

12. Ecological information

No data available.

13. Disposal considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

14. Transport information

RID/ADR

UN#: 1170

Class: 3

PG: II

Proper Shipping Name: Ethanol

IMDG

UN#: 1170

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Class: 3
PG: II
Proper Shipping Name: ETHANOL
Marine Pollutant: No
Severe Marine Pollutant: No
IATA
UN#: 1170
Class: 3
PG: II
Proper Shipping Name: Ethanol
Inhalation Packing Group I: No

15. Regulatory information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: F

Highly Flammable.

R-PHRASES: 11

Highly flammable.

S-PHRASES: 7-16

Keep container tightly closed. Keep away from sources of ignition - no smoking.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

Self-Classification

16. Other information

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