

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Sodium aluminum hydride

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Substances, which in contact with water, emit flammable gases (Category 2)

Acute toxicity, Oral (Category 4)

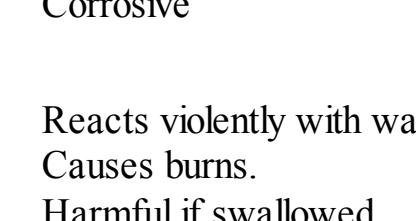
Skin corrosion (Category 1B)

According to European Directive 67/548/EEC as amended.

Reacts violently with water, liberating extremely flammable gases. Causes burns. Harmful if swallowed.

Label elements

Pictogram



Signal word : Danger

Hazard statement(s)

H261 In contact with water releases flammable gases.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P231 + P232 Handle under inert gas. Protect from moisture.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

P422 Store contents under inert gas.

Hazard symbol(s)

F Highly flammable

C Corrosive

R-phrase(s)

R14/15 Reacts violently with water, liberating extremely flammable gases.

R34 Causes burns.

R22 Harmful if swallowed.

S-phrase(s)

S 7/8 Keep container tightly closed and dry.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S43 In case of fire, use fire-fighting equipment on basis class D.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : H₄AlNa

Molecular Weight : 54,00 g/mol

CAS-No.	EC-No.	Classification	Concentration
13770-96-2	237-400-1	Water-react 2; Acute Tox. 4; Skin Corr. 1B; H261, H302, H314 F, C, R14/15 - R34 - R22	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂) Dry powder

Extinguishing media which shall not be used for safety reasons

Water

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Do not flush with water. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking.

Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form solid

Safety data

pH no data available

Melting point no data available

Boiling point no data available

Flash point not applicable

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Reacts violently with water.

Conditions to avoid

Heat, flames and sparks. Exposure to moisture.

Materials to avoid

Water, acids, Alcohols, Carbon dioxide (CO₂)

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sodium oxides, Aluminum oxide

Reacts with water to form: - flammable hydrogen gas

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - mouse - 740 mg/kg

Remarks: Gastrointestinal ulceration or bleeding from duodenum. Diarrhoea Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Genetic cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than 0.1% or equal to 0.1% is identified as

ICRC: No probable, possible or confirmed human carcinogen by IARC, or equal to 0.1% is identified as

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