

**1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Aluminium hydroxide - Al(OH)<sub>3</sub> – REACH Ref. 01-2119529246-39-0019

**1.1.1 Trade name**

**ALUFY 2, ALUFY 6, ALUFY 10, ALUFY 13, ALUFY 16, ALUFY 20**

**1.2 Relevant identified uses of the substance and uses advised against**

Mineral filler for plastic, rubber and paint industry. Flame retardant.

**1.3 Details of the supplier of the safety data sheet**

Nuova Sima Srl – Fraz. Valtreara 83, 60040 Genga (AN) – Italia – Tel. +39 0732.90162 Fax +39 0732.90348

Competent person responsible for the safety data sheet : SDS Office.

E-mail of competent person responsible for SDS [msds@nuovasima.it](mailto:msds@nuovasima.it)

**1.4 Emergency telephone number**

+39.0732.90162 (h 08.30- 18.00)

**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance**

Product not classified as dangerous according to Regulation (CE) nr. 1272/2008.

**2.2 Label elements**

Label not required according to Regulation (CE) nr. 1272/2008.

**2.3 Other hazards**

No other hazards identified.

**2.3.1 PBT or vPvB evaluation**

The substance does not meet the criteria for PBT or vPvB substance.

**2.3.2 Other**

In a dusty environment or if used improperly can irritate the eyes and the respiratory tract.

**3. COMPOSITION / INFORMATION ON INGREDIENTS****3.1 Substances**

Name	Molecular formula	Molecular weight (g/mol)	CAS No.	EINECS No.	Content
Aluminium Hydroxide	Al(OH) <sub>3</sub>	78.0036	21645-51-2	244-492-7	99,5 %

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

Take off contaminated clothing.

**4.1.1 Skin contact**

Rinse skin with water/shower. In case of skin irritation, consult a dermatologist.

**4.1.2 Eye contact**

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

**4.1.3 Inhalation**

Ventilate the place. Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

**4.1.4 Ingestion**

Rinse mouth. Call a doctor if you feel unwell.

**4.2 Most important symptoms and effects, both acute and delayed**

Eye irritation or mucous of the upper respiratory tract irritation.

**4.3 Indication of any immediate medical attention and special treatment needed**

In case of discomfort or irritation consult a medical doctor.

**5. FIREFIGHTING MEASURES****5.1 Extinguishing media**

Not flammable product, without explosion danger.

**5.1.1 Suitable extinguishing media**

Non-combustible. Use extinguishing media that are appropriate to surrounding environment.

**5.1.2 Unsuitable extinguishing media**

No information available.

**5.2 Special hazards arising from the substance**

None. Not flammable product, without explosion danger.

**5.3 Advice for firefighters**

No special recommendations.

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****6.1.1 For non emergency personnel**

Leave the area of the accidental release. Protect the skin and the respiratory tract with protection devices. (face anti dust mask, gloves and protective clothes).

**6.1.2 For emergency personnel**

Wear dust mask, gloves, goggles and protective clothing.

**6.2 Environmental precautions**

Do not drain the product into sewers or waterways. If the product has entered a watercourse, sewer system or has contaminated soil or vegetation, notify the authorities. Trying to contain the leakage.

**6.3 Methods and material for containment and cleaning up**

Clean the area and collect the product by industrial vacuum cleaner. Recover the product to re-use, if possible, or disposal the product to avoid dust formation.

**6.4 Reference to other sections**

See sections 8 and 13.

**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**

**7.1.1** Use the product and work in well-ventilated environments. Avoid dust inhalation. Prevent accidental spills.

**7.1.2** Do not eat, drink or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering areas where you eat.

**7.2 Conditions for safe storage, including any incompatibilities**

Store the product in a covered and dry place in original sealed packaging. Always close the packaging after partial use of the product.

**7.3 Specific end use(s)**

There is no specific end uses.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

Exposure limits: TLV total dust 10 mg/m<sup>3</sup>/8h TWA - TLV breathable dust 3 mg/m<sup>3</sup>/8h TWA.

**8.2 Exposure controls**

**Individual protection measures (personal protective equipment)**

**Eye/face protection** Use safety goggle.

**Skin protection Hand protection:** Use gloves (depending on the means of exposure to the substance) and suitable clothing.

**Respiratory protection:** Wear a dust mask. (EN 149:2001 – FFP2).

**Environmental exposure controls**

Keep away from drains, surface water and groundwater.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Physical state	<i>Solid (powder)</i>
Average particle size	From 2.8 to 25 µm (d <sub>50</sub> Sedigraph Micromeritics)
Specific surface area	From 0.5 to 9 m <sup>2</sup> /g (B.E.T.)
Colour	<i>White</i>
Odour	<i>odorless</i>
Odour threshold	<i>not applicable</i>
pH	<i>about 9 (10 g in 100 ml H<sub>2</sub>O, 20°C)</i>
Melting point/freezing point	<i>not applicable</i>
Initial boiling point and boiling range	<i>not applicable</i>
Flash point	<i>non-flammable</i>
Evaporation rate	<i>not applicable</i>
Flammability	<i>non-flammable</i>
Upper/lower flammability or explosive limits	<i>not applicable</i>
Vapour pressure	<i>not applicable</i>
Vapour density	<i>not applicable</i>
Relative density	<i>2,42 g/cc</i>
Solubility(ies)	<i>Low (0.00009 g/l at 20 °C)</i>
Partition coefficient: n-octanol/water	<i>not applicable</i>
Auto-ignition temperature	<i>not applicable</i>
Decomposition temperature	<i>200°C (thermogravimetric analysis)</i>
Viscosity	<i>not applicable</i>
Explosive properties	<i>not explosive</i>
Oxidising properties	<i>non-oxidizing</i>

**9.2 Other information**

There is no additional information.

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

This material is not reactive under normal ambient conditions. Reacts with acid.

**10.2 Chemical stability**

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**10.3 Possibility of hazardous reactions**

Exothermic reaction with: Mineral acids

**10.4 Conditions to avoid**

None

**10.5 Incompatible materials**

Mineral acids

**10.6 Hazardous decomposition products**

None.

**11. TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute toxicity**

Oral: LD50 (ratto) > 5000 mg/kg  
Inhalation: LC50 (ratto) > 2.3 mg/l  
Dermal: Nessun effetto.

**Skin corrosion/irritation**

Method OECD Guideline 404 (mouse) – Not irritating.

**Serious eye damage/eye irritation**

Method OECD Guideline 405 (rabbit) - Not irritating.

**Respiratory or skin sensitisation**

Method OECD Guideline 406 (porpoise)– not sensitizing.

**Mutagenicity geminal cells**

Shall not be classified as germ cell mutagenic.

**carcinogenicity**

It is not classified as a carcinogen.

**Reproductive toxicity**

Fertility impairment (oral/dermal): NOAEL > 90 mg Al/kg (rat; lack of pre-natal and neonatal developmental toxicity); based on read-across from Al chloride  
Developmental toxicity (oral/dermal/inhalation): NOAEL > 266 mg Al/kg (rat, lack of embryo/toxicity and teratogenicity); based on Aluminium hydroxide

**specific target organ toxicity (STOT) - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

**specific target organ toxicity (STOT) - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

**Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

**11.2 Symptoms related to the physical, chemical and toxicological characteristics****If swallowed**

Data are not available.

**If in eyes**

Data are not available.

**If inhaled**

Data are not available.

**If on skin**

Data are not available.

**11.3 Other information**

None.

**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Product name	Test	NOEC Result	Species	Exposure
Aluminium hydroxide	Fish - OECD TG 203	>100mg/l	Salmo trutta	pH 8
	Daphnia - OECD TG 202	>100mg/l	Daphnia Magna	pH 8
	Algae - OECD TG 201	>100mg/l	Selenastrum Capricornutum	pH 8

**12.2 Persistence and degradability**

None

**12.3 Bioaccumulative potential**

Does not significantly accumulate in organisms.

**12.4 Mobility in soil**

Data are not available.

**12.5 Results of PBT and vPvB assessment**

Data are not available.

**12.6 Other adverse effects**

None.

**13. DISPOSAL CONSIDERATIONS**

**13.1 Methods of waste treatment**

Collect the waste and its packaging into a suitable container. Consult the appropriate local waste disposal expert about waste disposal.

**Disposal via wastewater - relevant information**

Do not empty into drains.

**13.2 Relevant provisions relating to waste**

The allocation of waste identity numbers/waste descriptions must be carried out according to the catalogue of waste, specific to the industry and process.

**13.3 Remarks**

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

**14. TRANSPORT INFORMATION**

**14.1 UN number**

Not relevant.

**14.2 UN proper shipping name**

Not relevant.

**14.3 Transport hazard class(es)**

Not relevant.

**14.4 Packing group**

Not relevant.

**14.5 Environmental hazards**

Not dangerous.

**14.6 Special precautions for user**

None.

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not relevant.

**15. REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance**

**Relevant provisions of the European Union (EU)**

● **Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)**

Not listed.

● **Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)**

Not listed.

● **Regulation 850/2004/EC on persistent organic pollutants (POP)**

Not listed.

● **Restrictions according to REACH, Annex XVII**

Not listed.

● **List of substances subject to authorisation (REACH, Annex XIV)**

Not listed.

**Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

Not listed.

**Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

Not listed.

**Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

Not listed.

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance.

**16. OTHER INFORMATION**

**Abbreviations and acronyms**

<b>Abbr.</b>	<b>Descriptions of used abbreviations</b>
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived No-Effect Level
EINECS	European Inventory of Existing Commercial Chemical Substances
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	very Persistent and very Bioaccumulative

**Precautionary statement:**

**P305+P351+P338**

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

**P304+P340**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**GENERAL BIBLIOGRAPHY:**

- 1 Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- 2 Regulation (EC) No. 1272/2008 (CLP, EU GHS)

**User's notes:**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. This in review board (see indication footer) supersedes and replaces any previous edition. The review was necessary for the adaptation of Regulation (EC card) n. 830/2015.