

according to Regulation (EC) No. 1907/2006

ALUDUR LA 15 n.l.

Version	Revision Date:	SDS Number:	Print Date: 08.08.2020
2.0	12.12.2019	102000025732	Date of first issue: 08.03.2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name:ALUDUR LA 15 n.l.Product code:059901XJ0

1.2 Relevant identified uses of the substance or mixture and uses advised against

This information is not available.

1.3 Details of the supplier of the safety data sheet

Company

E-mail address of person	:	msds.eckart@altana.com
responsible for the SDS		

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a dangerous substance according to GHS.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

Additional Labelling

EUH210 Safety data sheet available on request.

2.3 Other hazards

Combustible Solids

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name CAS-No. Classification Concentration	Chemical name	CAS-No.	Classification	Concentration
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		EC-No. Index-No. Registration nun	REGULATION (EC) No 1272/2008	(% w/w)
alumi	nium powder (stabilised)	7429-90-5 231-072-3 01-2119529243-	-45	>= 50 - <= 100
reacti	enamine, N-phenyl-, on products with 2,4,4- hylpentene	68411-46-1 270-128-1	Aquatic Chronic 3; H412	>= 2.5 - < 10
hydro	tha (petroleum), treated heavy; Low boili ydrogen treated naphtha		Asp. Tox. 1; H304	>= 1 - < 10
	hosphonic acid	4724-48-5 225-218-5	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT RE 2; H373	>= 1 - < 3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures				
General advice	:	Move the victim to fresh air.		
		No hazards which require special first aid measures.		
If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.		
In case of skin contact	:	Wash off immediately with soap and plenty of water.		
In case of eye contact	:	Remove contact lenses. If eye irritation persists, consult a specialist.		
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.		

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

This information is not available.



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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media : Dry sand Special powder against metal fire ABC powder Unsuitable extinguishing Carbon dioxide (CO2) media Water Foam 5.2 Special hazards arising from the substance or mixture Specific hazards during : Contact with water liberates extremely flammable gas firefighting (hydrogen). 5.3 Advice for firefighters Special protective equipment : Wear self-contained breathing apparatus for firefighting if for firefighters necessary. Further information 2 Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

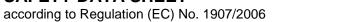
Personal precautions	:	Use personal protective equipment.
		Evacuate personnel to safe areas.
		Avoid dust formation.

6.2 Environmental precautions

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Use mechanical handling equipment. Do not use a vacuum cleaner.
		Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections





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SECTION 7: Handling and storage

7.1	Precautions for safe handling Advice on safe handling	;	Avoid dust formation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Store away from heat. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
	Advice on protection against fire and explosion	:	Provide appropriate exhaust ventilation at places where dust is formed.
	Hygiene measures	:	General industrial hygiene practice.
7.2 (Conditions for safe storage, i Requirements for storage areas and containers		uding any incompatibilities Electrical installations / working materials must comply with the technological safety standards.
	Further information on storage conditions	:	Protect from humidity and water.
	Advice on common storage	:	Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
	Further information on storage stability	:	No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
aluminium powder (stabilised)	7429-90-5	TWA (Inhalable)	10 mg/m3	GB EH40	
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate				



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	limits., Where no specific short- times the long-term exposure lin		a figure three
	TWA (Respirable)	4 mg/m3	GB EH40
Further information	The COSHH definition of a sub- any kind when present at a con mg.m-3 8-hour TWA of inhalabl dust. This means that any dust exposed to dust above these le specific WELs and exposure to limits., Where no specific short- times the long-term exposure lin	centration in air equal to or gr e dust or 4 mg.m-3 8-hour TV will be subject to COSHH if p vels. Some dusts have been these must comply with the a term exposure limit is listed, a	eater than 10 WA of respirable eople are assigned appropriate a figure three
	TWA (inhalable dust)	10 mg/m3	GB EH40
Further information	For the purposes of these limits those fractions of airborne dust undertaken in accordance with General methods for sampling a thoracic and inhalable aerosols hazardous to health includes du concentration in air equal to or inhalable dust or 4 mg.m-3 8-hd any dust will be subject to COS these levels. Some dusts have to these must comply with the a contain particles of a wide rang fate of any particular particle aff and the body response that it el particle. HSE distinguishes two termed 'inhalable' and 'respirab fraction of airborne material tha and is therefore available for de dust approximates to the fraction of the lung. Fuller definitions an MDHS14/4., Where dusts conta WEL, all the relevant limits shou short-term exposure limit is liste exposure limit should be used.	which will be collected when the methods described in MD and gravimetric analysis or re- The COSHH definition of a s st of any kind when present a greater than 10 mg.m-3 8-hou bur TWA of respirable dust. T HH if people are exposed to a been assigned specific WELs ppropriate limits., Most indus e of sizes. The behaviour, de er entry into the human respi icits, depend on the nature and size fractions for limit-setting e'., Inhalable dust approximate tenters the nose and mouth position in the respiratory tra- n that penetrates to the gas ed d explanatory material are giv- in components that have the uld be complied with., Where	sampling is HS14/4 spirable, substance at a ur TWA of his means that dust above and exposure trial dusts position and ratory system, nd size of the purposes tes to the during breathing ct. Respirable exchange region ven in ir own assigned no specific
	TWA (Respirable dust)	4 mg/m3	GB EH40
Further information	For the purposes of these limits those fractions of airborne dust undertaken in accordance with General methods for sampling a thoracic and inhalable aerosols hazardous to health includes du concentration in air equal to or inhalable dust or 4 mg.m-3 8-hc any dust will be subject to COS these levels. Some dusts have to these must comply with the a contain particles of a wide rang	which will be collected when the methods described in MD and gravimetric analysis or re The COSHH definition of a s ust of any kind when present a greater than 10 mg.m-3 8-hou our TWA of respirable dust. T HH if people are exposed to been assigned specific WELs ppropriate limits., Most indus	sampling is HS14/4 spirable, substance at a ur TWA of his means that dust above and exposure trial dusts



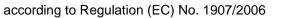
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fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
aluminium powder (stabilised)	Workers	Inhalation	Long-term local effects	3.72 mg/m3
	Consumers	Oral	Long-term systemic effects	3.95 mg/kg
	Workers	Inhalation	Long-term systemic effects	3.72 mg/m3
Benzenamine, N- phenyl-, reaction products with 2,4,4- trimethylpentene	Workers	Skin contact	Long-term systemic effects	0.62 mg/kg
	Workers	Inhalation	Long-term systemic effects	4.37 mg/m3
	Consumers	Skin contact	Long-term systemic effects	0.31 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1.09 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0.31 mg/kg
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	Workers	Skin contact	Long-term systemic effects	300 mg/kg
	Consumers	Ingestion	Long-term systemic effects	300 mg/kg
	Consumers	Skin contact	Long-term systemic effects	300 mg/kg
	Consumers	Inhalation	Long-term systemic effects	900 mg/m3
octylphosphonic acid	Workers	Skin contact	Long-term systemic effects	4 mg/kg
	Workers	Inhalation	Long-term systemic effects	0.14 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0.02 mg/kg
	Consumers	Inhalation	Long-term systemic	0.071 mg/m3





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		effects	
Predicted No Effect Concentration (F	NEC) according to	Regulation (EC) No. 19	007/2006:

Substance name	Environmental Compartment	Value
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l
Benzenamine, N-phenyl-, reaction products with 2,4,4- trimethylpentene	Fresh water	0.051 mg/l
	Marine water	0.0051 mg/l
	Fresh water sediment	9320 mg/kg
	Marine sediment	932 mg/kg
	Soil	1860 mg/kg
	clarification plant	1 mg/l
octylphosphonic acid	Fresh water	0.04 mg/l
	Fresh water sediment	0.49 mg/kg
	STP	100 mg/l
	Soil	0.075 mg/kg

8.2 Exposure controls

Personal protective equipment				
Eye protection	Safety glasses			
Hand protection Material	Protective gloves			
Remarks	The suitability for a specific workplace should be discussed with the producers of the protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed.			
Skin and body protection	Long sleeved clothing			
Respiratory protection	Use suitable breathing protection if workplace concentration requires. Breathing apparatus with filter. P1 filter No personal respiratory protective equipment normally required.			
Environmental exposure controls				

Water : The product should not be allowed to enter drains, water courses or the soil.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: pellets
Colour	: silver
Odour	: odourless
Odour Threshold	: No data available
рН	: No data available
Freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: Combustible Solids
Self-ignition	: not auto-flammable
Auto-ignition temperature	: > 600 °C
Smoldering temperature	: No data available
Decomposition temperature	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 2.7 g/cm3
Bulk density	: No data available
Solubility(ies)	

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,	Water solubility	: insoluble	
Sol	ubility in other solvents	: No data availab	le
Partition coefficient: n- octanol/water		: No data availab	le
Decomposition temperature		: No data availab	le
Viscosity, dynamic		: No data availab	le
Viscosity, kinematic		: No data availab	le
Flow time		: No data availab	le
9.2 Other information No data available			

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	: Contact with acids and alkalis may release hydrogen.
	Stable under recommended storage conditions.
	Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid	: No data available

10.5 Incompatible materials

Materials to avoid

: Acids Bases Oxidizing agents Water

10.6 Hazardous decomposition products

- Contact with water or humid : This information is not available. air
- Thermal decomposition : This information is not available.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects					
Acute toxicity					
Not classified based on available information.					
Product:					
Acute oral toxicity	:	Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method			
Components:					
aluminium powder (stabilis	sed):				
Acute inhalation toxicity	:	LC50 (Rat): > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist			
Naphtha (petroleum), hydr	otrea	ated heavy; Low boiling point ydrogen treated naphtha:			
Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg			
Acute inhalation toxicity	:	LC50 (Rat): Test atmosphere: vapour Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.			
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg			
octylphosphonic acid:					
Acute oral toxicity	:	(Rat): 500 - 2,000 mg/kg			
Skin corrosion/irritation					
Not classified based on avail	lable	information.			
Product:					
Result: No skin irritation Remarks: Based on available	e dat	a, the classification criteria are not met.			
Components:					
octylphosphonic acid:					

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Not classified based on available information.



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Product:

Result: No eye irritation Remarks: Based on available data, the classification criteria are not met.

Components:

octylphosphonic acid:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product: Remarks: No data available

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha: Remarks: Solvents may degrease the skin.

octylphosphonic acid: Remarks: No data available



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SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological	:	No data available
information		

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:			
Additional ecological information	:	No data available	

octylphosphonic acid:

Additional ecological	:	No data available
information		

SECTION 13: Disposal considerations

European Waste Catalogue European Waste Catalogue	 12 01 04 - non-ferrous metal dust and particles 10 03 21 - other particulates and dust (including ball-mill dust) containing hazardous substances
13.1 Waste treatment methods	
Product	: In accordance with local and national regulations.
Contaminated packaging	 Empty containers should be taken to an approved waste handling site for recycling or disposal. In accordance with local and national regulations.



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SECTION 14: Transport information

- 14.1 UN number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user

Remarks

Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable for product as supplied.

:

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	: Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants	: Not applicable

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of H-Statements

H228 H302 H304	:	Flammable solid. Harmful if swallowed. May be fatal if swallowed and enters airways.
H314 H318 H373	:	Causes severe skin burns and eye damage. Causes serious eye damage. May cause damage to organs through prolonged or repeated
H412		exposure if swallowed. Harmful to aquatic life with long lasting effects.



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Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Flam. Sol.	:	Flammable solids
Skin Corr.	:	Skin corrosion
STOT RE	:	Specific target organ toxicity - repeated exposure
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan): ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances: (Q)SAR - (Quantitative) Structure Activity Relationship: REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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