

AP-502 Aluminum, General Purpose Neutral Cure Silicone

Version: 1.1 (US)

Date of print: 07/15/2020

Date of last alteration: 01/15/2020

1. Product and company identification

1.1 Identification of the substance or preparation:

Commercial product name: AP-502 GP Aluminum

Industrial.
Sealants

Use of substance / preparation

1.2 Company/undertaking identification:

Manufacturer/distributor: Titan Distribution, LLC.
Adhesion Products

Customer information:

Titan Distribution, LLC.
22290 Challenger Drive
Elkhart IN 46514
USA

InfoLine:
Tel (574) 970-8425, Fax (574) 970-8428
Hours of operation:
Monday - Friday, 8 am to 5 pm (eastern standard
time) Corporate website: www.titansc.com

Emergency telephone no. (24h): (800) 855-3924 (CHEMTEI, USA)

Transportation emergency:

This SDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (GHS):

No labeling according to GHS required.

2.3 Other hazards

The product hydrolyses under formation of ethanol (CAS-Nr. 64-17-5). Ethanol is classified concerning both physical and health hazards. The hydrolysis rate and consequently the relevance for the hazard profile of the product is strongly dependent on the specific conditions.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation)

Chemical characteristics

Polydimethylsiloxane and auxiliary+crosslinker

3.2 Information on ingredients:

Type	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	128446-60-6	3-Aminopropyl(methyl) silsesquioxanes, ethoxy-terminated	>=1.0	<3.0	
INHA	919-30-2	3-Aminopropyltriethoxysilane	>=0.1	<1.0	

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Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. *** **Note:** C1 - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) in amounts above $\geq 0.1\%$.

4. First-aid measures

4.1 General information:

Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

4.2 After inhalation

Material cannot be inhaled under normal conditions. No special treatment required.

4.3 After contact with the skin

After skin contact wipe off excess material with cloth or paper. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water. If contact with skin, immediately flush skin with plenty of water for at least 15 min.

4.4 After contact with the eyes

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Get medical attention if irritation occurs.

4.5 After swallowing

If swallowed, give victim several glasses of water. If swallowed, do not induce vomiting. Get medical attention if symptoms occur.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:	Method:
Flash point	not applicable	
Boiling point / boiling range	not applicable	
Lower explosion limit (LEL)	not applicable	
Ignition temperature.....	> 400 °C (> 752 °F)	(DIN 51794)

5.2 Fire and explosion hazards:

Hazardous combustion products: toxic gases

5.3 Recommended extinguishing media:

alcohol-resistant foam , carbon dioxide , water-mist , or sand

5.4 Unsuitable extinguishing media:

water jet

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Hazardous decomposition products: toxic gases

5.6 Fire fighting procedures:

Use respiratory protection independent of recirculated air.

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6. Accidental release measures

6.1 Precautions:

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. If material is released indicate risk of slipping. Do not walk through spilled material.

6.2 Containment:

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up

Scoop up large quantities after dusting surfaces with sand or Fuller's earth to prevent sticking. Sweep or scrape up the spilled material and place in an appropriate chemical waste container. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Apply sand or other inert granular material to improve traction.

6.4 Further information:

Exhaust vapours. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

7. Handling and storage

7.1 Handling

Precautions for safe handling:

Ensure adequate ventilation. Must be syphoned off in situ. Keep away from incompatible substances in accordance with section 10. Observe information in section 8.

Precautions against fire and explosion:

Product may release ethanol. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

7.2 Storage

Conditions for storage rooms and vessels:

Observe local/state/federal regulations.

Advice for storage of incompatible materials:

Observe local/state/federal regulations.

Further information for storage:

Store in a dry and cool place. Protect against moisture. Store container in a well ventilated place.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

No special ventilation required.

8.2 Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace:

CAS No.	Substance	Type	mg/m ³	ppm	Dust fract.
64-17-5	Ethanol	OSHA PEL	1,900.0	1,000.0	

Re Ethanol (CAS no. 64-17-5): STEL is 1000 ppm; carcinogenicity: A3 (ACGIH).

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8.3 Personal protection equipment (PPE)

Respiratory protection:

Respiratory protection is not normally required. When working with product in rooms without ventilation: A NIOSH approved air purifying respirator equipped with universal multi-contaminant multi-gas/vapor cartridges is recommended if overexposure to chemical vapors could occur.

Hand protection:

Recommendation: protective gloves .

Eye protection:

Safety glasses with side shields.

Other protective clothing or equipment:

Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

Physical state: liquid
 Form: paste
 Colour: aluminum
 Odour.....: alcoholically

9.2 Safety parameters

Property:	Value:	Method:
Melting point / melting range	not applicable	
Boiling point / boiling range	not applicable	
Flash point	not applicable	
Ignition temperature.....	> 400 °C (> 752 °F)	(DIN 51794)
Lower explosion limit (LEL)	not applicable	
Vapour pressure.....	not determined	
Density.....	1.03 g/cm ³ at 23 °C (73 °F)	(ISO 1183-1 A)
Water solubility / miscibility.....	insoluble	
pH-Value.....	not applicable	
Viscosity (dynamic).....	ca. 800000 mPa.s at 23 °C (73 °F)	(Brookfield)

9.3 Further information

Odour limit.....: no data available
 Thermal decomposition.....: not applicable

10. Stability and reactivity

10.1 General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.2 Conditions to avoid

Moisture, heat, open flames, and other sources of ignition.

10.3 Materials to avoid

Reacts with water, basic substances and acids. The reaction takes place with the formation of ethanol.

10.4 Hazardous decomposition products

By hydrolysis: ethanol . Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

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11. Toxicological information

11.1 Information on toxicological effects

11.1.1 General information

Data derived for the product as a whole are of higher priority than data for single ingredients.

11.1.2 Acute toxicity

Product details:

Route of exposure	Result/Effect	Species/Test system	Source
Oral	LD50: > 2000 mg/kg	Rat	Conclusion by analogy
dermal	LD50: > 2000 mg/kg	Rat	Conclusion by analogy

11.1.3 Skin corrosion/irritation

Assessment:

Based on the available data a clinically relevant skin irritation hazard is not expected. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact.

Product details:

Result/Effect	Species/Test system	Source
not irritating	Rabbit	Conclusion by analogy

11.1.4 Serious eye damage / eye irritation

Assessment:

Based on the available data a clinically relevant eye irritation hazard is not expected. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact.

Product details:

Result/Effect	Species/Test system	Source
not irritating	Rabbit	Conclusion by analogy

11.1.5 Respiratory or skin sensitization

Product details:

Route of exposure	Result/Effect	Species/Test system	Source
dermal	not sensitizing	Guinea pig; Buehler Test	Conclusion by analogy OECD 406

11.1.6 Germ cell mutagenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.7 Carcinogenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Reproductive toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

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11.1.9 Specific target organ toxicity (single exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Specific target organ toxicity (repeated exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.11 Aspiration hazard

Assessment:

Based on the physical-chemical properties of the product no aspiration hazard must be expected.

11.1.12 Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Data on substances:

Product of hydrolysis (Ethanol):

Ethanol (64-17-5) is readily absorbed at all exposure routes. Ethanol may cause irritation of eyes and mucosa, trigger dysfunction of the central nervous system and cause nausea as well as dizziness. Chronic exposure to high amounts of ethanol may cause damage to liver and central nervous system.

12. Ecological information

12.1 Toxicity

Assessment:

The environmental hazard classification of this material is concluded by data available for the ingredients and the leachable amount of biocide in simulation tests in water. No expected damaging effects to aquatic organisms.

Product details:

Result/Effect	Species/Test system	Source
LC50: > 100 mg/l	Fish (96 h)	Expert judgement
EC50: > 100 mg/l	Daphnia magna (48 h)	Expert judgement

12.2 Persistence and degradability

Assessment:

Silicone content: biologically not degradable. Separation by sedimentation.

Data on substances:

Product of hydrolysis (Ethanol):

Ethanol is readily biodegradable.

12.3 Bioaccumulative potential

Assessment:

Polymer component: Bioaccumulation is not expected to occur.

12.4 Mobility in soil

Assessment:

Silicone content: Insoluble in water.

12.5 Results of PBT and vPvB assessment

No data available.

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12.6 Other adverse effects

none known

13. Disposal considerations

13.1 Product disposal

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.2 Packaging disposal

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation.....: Not regulated for transport

14.2 Transport by sea IMDG-Code

Valuation.....: Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation.....: Not regulated for transport

15. Regulatory information

15.1 U.S. Federal regulations

TSCA SNUR (Significant New Use Rule):

Final Rule. Restriction: Release to surface waters at 10 ppb or greater.

TSCA 12(b) Export Notification:

CAS No.	Chemical	Reporting required under TSCA
128446-60-6	3-Aminopropyl(methyl) silsesquioxanes, ethoxy-terminated	One time export notification under TSCA 5(a) (2) required.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

This product does not present any SARA 311/312 hazards.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants):

CAS No.	Chemical	Upper limit wt. %
67-56-1	Methanol	<=0.0079

15.2 U.S. State regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

This material does not contain any chemicals known to the State of California to cause cancer.

California Proposition 65 Reproductive Toxins:

67-56-1 Methanol

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Massachusetts Substance List:

112945-52-5 Silica, amorphous, fumed

New Jersey Right-to-Know Hazardous Substance List:

112945-52-5 Silica, amorphous, fumed

Pennsylvania Right-to-Know Hazardous Substance List:

112945-52-5 Silica, amorphous, fumed

15.3 Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

Japan.....	: ENCS (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
New Zealand.....	: NZIoC (New Zealand Inventory of Chemicals): This product is not listed or in compliance with the substance inventory.
Australia.....	: AICS (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory.
Canada.....	: DSL (Domestic Substance List): This product is not listed or in compliance with the substance inventory.
Philippines.....	: PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
United States of America (USA).....	: TSCA (Toxic Substance Control Act Chemical Substance Inventory): All components of this product are listed as active or are in compliance with the substance inventory.
Taiwan.....	: TCSI (Taiwan Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.
European Economic Area (EEA).....	: REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.
South Korea (Republic of Korea).....	: AREC (Act on Registration and Evaluation of Chemicals; "K-REACH"): General note: in case of registration obligations for substances or polymers imported into Korea or manufactured within Korea these are fulfilled by the supplier mentioned in section 1. The registration obligations for substances or polymers imported into Korea by customers or other downstream users must be fulfilled by the latter.

16. Other information

16.1 Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

WACKER restricts the use of its products inside the human body or in contact with bodily fluids and mucosa. For further details

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please review our Health Care Policy on www.wacker.com. WACKER may cancel any delivery obligation(s) if the Health Care Policy is not observed.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists	ppm - Parts per Million
DOT - Department of Transportation	SARA - Superfund Amendments and Reauthorization Act
hPa - Hectopascals	STEL - Short Term Exposure Limit
mPa*s - Milli Pascal-Seconds	TSCA - Toxic Substances Control Act
OSHA - Occupational Safety and Health Administration	TWA - Time Weighted Average
PEL - Permissible Exposure Limit	WHMIS - Canadian Workplace Hazardous Materials Identification System

Flash point determination methods	Common name
ASTM D56	Tagliabue (Tag) closed cup
ASTM D92, DIN 51376, ISO 2592.....	Cleveland open cup
ASTM D93, DIN 51758, ISO 2719.....	Pensky-Martens closed cup
ASTM D3278, DIN 55680, ISO 3679	Setaflash or Rapid closed cup
DIN 51755.....	Abel-Pensky closed cup

16.3 Conversion table:

Pressure:..... : 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa
 Viscosity:..... : 1 mPa*s = 1 centipoise (cP)