

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

SECTION 1. IDENTIFICATION

Product name : STAPA HYDROXAL E 4 Aluminum Paste
 Product code : 046344CR0

Manufacturer or supplier's details

Company name of supplier : ECKART America Corporation
 Address : 830 East Erie Street
 Painesville OH 44077
 Telephone : 866-458-7837
 (440) 954-7600
 Telefax : (440) 354-6224
 e-mail adresse : info.eckart.america.oh@altana.com
 Emergency telephone : **CHEMTREC:** 800-424-9300
CHEMTREC: 1-703-527-3387 (International)

NCEC:

(contract no. ECKART29003-NCEC)
 US: +1 866 928 0789 (Toll free)
 Canada: +1 800 579 7421 (Toll Free)
 Mexico: +52 55 5004 8763

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity : Category 2
 - repeated exposure

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements : **Prevention:**
 P260 Do not breathe dust.
Response:

STAPA HYDROXALE 4 Aluminum Paste

Version 2.2	Revision Date: 12/15/2025	SDS Number: 102000028766	Date of last issue: 10/28/2020 Date of first issue: 03/27/2018
----------------	------------------------------	-----------------------------	---

P314 Get medical advice/ attention if you feel unwell.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients which must be listed on the label:
1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-
Phosphonic acid, P-octyl-

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Aluminum	7429-90-5	>= 50 - < 70
1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-	95-38-5	>= 5 - < 10
Phosphonic acid, P-octyl-	4724-48-5	>= 1 - < 5
Octadecanoic acid	57-11-4	>= 1 - < 5

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	:	Take the victim into fresh air. Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance.
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. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Remove contact lenses.

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

If swallowed	:	Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	:	None known.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Dry sand Special powder against metal fire
Unsuitable extinguishing media	:	Carbon dioxide (CO2) ABC powder Water Foam
Specific hazards during fire fighting	:	Contact with water liberates extremely flammable gas (hydrogen). Do not allow run-off from fire fighting to enter drains or water courses.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Evacuate personnel to safe areas. Use personal protective equipment. Use personal protective equipment. Avoid dust formation. Remove all sources of ignition.
General advice	:	The product should not be allowed to enter drains, water courses or the soil. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
The product should not be allowed to enter drains, water courses or the soil.
- Methods and materials for containment and cleaning up : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Use mechanical handling equipment.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Do not flush with water.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Earthing of containers and apparatuses is essential.
Take measures to prevent the build up of electrostatic charge.
Use explosion-proof equipment.
- Avoid dust formation.
Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Keep away from heat and sources of ignition.
Avoid dust formation.
Ensure adequate ventilation.
Avoid formation of respirable particles.
Do not breathe vapors/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Store in original container.
Keep containers tightly closed in a cool, well-ventilated place.
Keep container closed when not in use.
Keep away from sources of ignition - No smoking.
No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Electrical installations / working materials must comply with

STAPA HYDROXALE 4 Aluminum Paste

Version 2.2 Revision Date: 12/15/2025 SDS Number: 102000028766 Date of last issue: 10/28/2020
 Date of first issue: 03/27/2018

Technical measures/Precautions
 Materials to avoid

: the technological safety standards.
 : Protect from humidity and water.
 Do not allow to dry.
 : 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Aluminum	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (total dust)	15 mg/m ³	OSHA Z-3
		TWA (total)	10 mg/m ³	NIOSH REL
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-3
		TWA (respirable fraction)	15 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable particulate matter)	1 mg/m ³	ACGIH
		TWA	5 mg/m ³ (Aluminum)	NIOSH REL
		TWA (Total)	15 mg/m ³ (Aluminum)	OSHA P0
		TWA (Respirable fraction)	5 mg/m ³ (Aluminum)	OSHA P0
		TWA (total dust)	15 mg/m ³ (Aluminum)	OSHA Z-1

STAPA HYDROXALE 4 Aluminum Paste

Version 2.2 Revision Date: 12/15/2025 SDS Number: 102000028766 Date of last issue: 10/28/2020
 Date of first issue: 03/27/2018

		TWA (respirable fraction)	5 mg/m ³ (Aluminum)	OSHA Z-1
		TWA (Total dust)	15 mg/m ³ (Aluminum)	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³ (Aluminum)	OSHA P0
		TWA (welding fumes)	5 mg/m ³ (Aluminum)	NIOSH REL
		TWA (pyro powders)	5 mg/m ³ (Aluminum)	NIOSH REL
		TWA (Respirable particulate matter)	1 mg/m ³ (Aluminum)	ACGIH
		TWA (Fumes)	5 mg/m ³	OSHA P0
		TWA (powder)	5 mg/m ³ (Aluminum)	OSHA P0
Octadecanoic acid	57-11-4	TWA	10 mg/m ³	ACGIH
		TWA (Inhalable particulate matter)	10 mg/m ³	ACGIH
		TWA (Respirable particulate matter)	3 mg/m ³	ACGIH

Personal protective equipment

Respiratory protection : Use suitable breathing protection if workplace concentration requires.

Hand protection
 Material : Solvent-resistant gloves (butyl-rubber)

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Recommended preventive skin protection Skin should be washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection	:	Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	:	Long sleeved clothing Safety shoes Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Pasty solid
Color	:	silver
Odor	:	characteristic
Odor Threshold	:	No data available
pH	:	substance/mixture is non-soluble (in water)
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	100 °C
Flash point	:	> 100 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Combustible Solids
Auto-flammability	:	not auto-flammable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative density	:	No data available
Density	:	1.3 - 2.0 g/cm ³
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Explosive properties	:	Not explosive Vapors may form explosive mixture with air.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Reacts with alkalis, acids, halogenes and oxidizing agents. Contact with acids and alkalis may release hydrogen. Mixture reacts slowly with water resulting in evolution of hydrogen. Vapors may form explosive mixture with air. Stable under recommended storage conditions.
Conditions to avoid	:	Do not allow to dry. Heat, flames and sparks.
Incompatible materials	:	Acids Bases Oxidizing agents Highly halogenated compounds

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Components:****1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-:**

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

Phosphonic acid, P-octyl-:

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg

Skin corrosion/irritation**Components:****1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-:**

Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

Phosphonic acid, P-octyl-:

Result: Corrosive after 3 minutes to 1 hour of exposure

STAPA HYDROXALE 4 Aluminum Paste

Version 2.2 Revision Date: 12/15/2025 SDS Number: 102000028766 Date of last issue: 10/28/2020
Date of first issue: 03/27/2018

Serious eye damage/eye irritation**Components:****1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-:**

Result: Irreversible effects on the eye

Phosphonic acid, P-octyl-:

Result: Irreversible effects on the eye

Respiratory or skin sensitization**Carcinogenicity****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

STOT-repeated exposure**Components:****1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-:**

Assessment: May cause damage to organs through prolonged or repeated exposure.

Phosphonic acid, P-octyl-:

Target Organs: Kidney

Assessment: May cause damage to organs through prolonged or repeated exposure.

Further information

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-:**

STAPA HYDROXALE 4 Aluminum Paste

Version 2.2	Revision Date: 12/15/2025	SDS Number: 102000028766	Date of last issue: 10/28/2020 Date of first issue: 03/27/2018
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M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 1

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Phosphonic acid, P-octyl-:

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Other adverse effects

No data available

Components:

Phosphonic acid, P-octyl-:

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to a licensed waste management company.

In accordance with local and national regulations.

Contaminated packaging :

Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

In accordance with local and national regulations.

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

Aluminum	7429-90-5
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Pennsylvania Right To Know

Aluminum	7429-90-5
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Water	7732-18-5
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1H-Imidazole-1-ethanol, 2-(8-heptadecen-1-yl)-4,5-dihydro-	95-38-5
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California Prop. 65



WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

Aluminum	7429-90-5
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California Permissible Exposure Limits for Chemical Contaminants

Aluminum	7429-90-5
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The ingredients of this product are reported in the following inventories:

DSL	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-3 / TWA	:	8-hour time weighted average

AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; 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

STAPA HYDROXALE 4 Aluminum Paste

Version	Revision Date:	SDS Number:	Date of last issue: 10/28/2020
2.2	12/15/2025	102000028766	Date of first issue: 03/27/2018

Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 12/15/2025

The information provided in this Material 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.

US / Z8