

**Stanlux Paste:** 100, 120, 130, 130P, 140, 150, 152, 166, 200, 220, 260, 261, 266, 280, 1100, 1120, 1130, 1200, 1420, 1600, 1700, 1750, 1770, 1770/60, 2000.

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## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Identification of the product

Aluminium paste (Stanlux Paste and Stanlux Silver)

### 1.2 Main recommended uses

Paints

### 1.3 Company's identification

Manufacturer: Aldoro Indústria de Pós e Pigmentos Metálicos Ltda.  
Av. Suécia, 570 – Distrito Industrial – Rio Claro – SP – BRAZIL  
Phone: 19 3535.6400  
Fax: 19 3527.0330  
E-mail: aldoro@aldoro.com.br

### 1.4 Emergency Phone

Tel: 19 3535.6400

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the mixture, following the ABNT NBR 14725-2:2019 standard.

Flammable solid	Category 1
Skin corrosion/irritation	Category 3
Toxicity for specific organisms-targets – Single exposure	Category 3
Acute aquatic toxicity	Category 3
Chronic aquatic toxicity	Category 3

### 2.2 Labeling elements, as per the GHS

Hazard pictograms



Signal word

Danger

Hazard Statements

H228 Flammable solid.  
H316 Causes mild skin irritation.  
H335 May cause irritation in the respiratory tract.  
H336 May cause sleepiness or dizziness.  
H412 Harmful to water organisms, with long term effects.

Precautionary statements

P210 Keep far from heat/sparks/flames/hot surfaces. Do not smoke.  
P240 Connect the container and the receiving container to ground, while the

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transfer of the product.

P241 Use explosion proof electrical, ventilation and lighting equipment.

P261 Avoid inhaling dusts, smokes, gases, mists, vapors and aerosols.

P271 Use only in open air or well ventilated places.

P273 Avoid releasing in the environment.

P280 Use protection gloves, protection clothes, eye protection and face protection equipment.

P304 + P340 IN CASE OF INHALATION: Take the person to a well-ventilated place and keep him/her in rest in a position that facilitates breathing.

P312 In case of sickness contact the TOXICOLOGICAL INFORMATION CENTER or a Physician.

P332 + P313 IF SKIN irritation occurs: Get medical advice/attention.

P370 + P378 In case of fire: For firefighting use carbon dioxide, chemical power or sand. Never use water.

P403 + P233 Keep in a well-ventilated place. Keep the container well closed.

P405 Keep in a locked place.

P501 Dispose the content and the container in a duly regulated and licensed place, as per the Federal, State and Municipal Legislations.

## 2.3 Other hazards

The material may liberate vapors that form rapidly flammable mixtures. The building up of vapors may light up and/or explode in case of ignition.

## 3. COMPOSITION AND INFORMATION ON THE INGREDIENTS

### 3.1 Characterization of the product

Mixture

### 3.2 Ingredients

Common, technical chemical name	CAS Number	Concentration range (%)
Aluminium powder	7429-90-5	58 - 72
Mineral spirit	64742-47-8	26 - 35
High aromatic	64742-95-6	2 - 7

**Dangerous components contained in the following ingredients:** Mineral spirit and high aromatic.

Common, technical chemical name	CAS Number	Concentration Range (%)
Cumene	98-82-8	< 1,1
Nonane	111-84-2	1 - 5
Pseudocumene (1,2,4-trimethylbenzene)	95-63-6	< 32
Xylenes	1330-20-7	< 2,2

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## 4. FIRST AID MEASURES

### 4.1 Description of the first aid actions

**Inhalation:** Remove the victim from the contaminated area. In case of respiratory arrest, administer artificial respiration. Provide medical attention.

**Skin contact:** Take the contaminated clothes off. Wash the skin with plenty of water and soap. In case of skin irritation: See a doctor.

**Contact with the eyes:** Wash immediately with current water for 15 minutes (at least). See a doctor if the irritation persists.

**Ingestion:** Do not induce vomiting. Look for a medical help.

**4.2 Most important, serious or late effects and symptoms:** Exposure to vapors concentrations above the recommended exposure levels may cause problems in the central nervous system with head ache, nausea, dizziness, mental disorder, loss of conscience and sleepiness; eye and respiratory track irritation.

**4.3 Indications on urgent medical care and necessary special treatments:** No other relevant information available.

## 5. FIRE FIGHTING MEASURES

### 5.1 Fire extinguishing means

**Most suitable fire extinguishing means:** Carbon dioxide, chemical powder or dry sand. Use initially carbon dioxide or chemical powder. If aluminium particles (pyrophoric metal) ignite, sand should be used to cover the product surface. The burnt material should only be removed after completely cool.

**Not appropriate fire extinguishing means:** Do not use water or foam.

**5.2 Specific hazards of the mixture:** The material may liberate vapors that will form rapidly flammable mixtures. The building up of vapors may light up and/or explode in case of ignition.

**5.3 Protection means of the fire fighting team:** We recommend the use of respiratory protection equipment of the autonomous type, with positive pressure and full protection clothes.

## 6. CONTROL MEASURES FOR SPILLING OR LEAKING

### 6.1 Personnel precautions, protection equipment and emergency procedures.

Use individual protection equipment. Move away the persons from the affected area. Eliminate fire and explosion risks removing or deactivating possible sources of ignition.

### 6.2 Environment precautions

Do not allow the product to reach the sewer system or any water streams. Inform the authorities if the product reaches water resources.

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### 6.3 Methods and materials for containment and cleaning

Cover the product with inert and absorbing material (sand or sawdust) and remove to a dry container. Do not use water or other aqueous products. The residues shall be disposed as per the federal, state or local regulations.

### 6.4 References to other sections

See Section 7 for information on the safe handling. See Section 8 for information on individual protection equipment. See Section 13 for information on the disposal.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for a safe handling

Handle in a covered, dry and ventilated place. It may be necessary mechanical ventilation and local exhaust. Keep the containers closed when the product is not being used. Avoid exposure to product vapors. Use individual protection equipment as described in Section 8.

Avoid skin, eye and clothes contact. Wash your hands after handling and before eating, drinking, smoking or using the restroom.

The facilities and the equipment shall be duly grounded to avoid building up of static charge. All electric equipment used shall be explosion proof. Do not smoke.

### 7.2 Safe storage conditions, including any incompatibility

Store in a covered, dry and ventilated place. Keep away from ignition sources. This product may react dangerously with incompatible materials, as described in Section 10.

## 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

### 8.1 Control parameters:

#### Limits of occupational exposure:

Chemical Agent	LT NR 15 – Annex 11		TWA (ACGIH)	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Aluminium				1 (*)
Mineral spirit			200	
High aromatic			400 (**)	
Cumene	39	190	50	
Nonane			200	
Pseudocumene (1,2,4-Trimethylbenzene)			25	
Xylenes	78	340	100	

(\*) breathable dust

(\*\*) LEO-TWA

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**8.2 Measures for engineering control:** Use explosion proof mechanical ventilation and exhaustion systems, to maintain the atmospheric concentrations of the constituents of the product, below the occupational exposure limits.

**General measures of hygiene and protection:** Avoid contact with skin, eyes and clothes. Use good hygiene practices. Wash your hands before coffee breaks and at the end of the day, and before eating, drinking, smoking or when using the rest room. Keep the emergency eye washing equipment and shower close to the working area.

**8.3 Measures of personal protection:** The selection of individual protection equipment changes in accordance to the exposure conditions and to the application, handling, concentration and ventilation practices. Data on the selection of protection equipment when using this material are supplied below, and are based on the normal use thereof.

**Eye protection:** Safety goggles with lateral protection.

**Skin and body protection:** Waterproof gloves or protection creams.

**Respiratory protection:** Mask with filter to protect against organic vapors.

**Thermal hazards:** Not applicable under normal use conditions.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

\* Relative to mineral spirit (MS) and high aromatic (HA)

### 9.1 Data on the basic physical and chemical properties.

Physical state	Paste solid
Color	Gray
Odor	Characteristic
pH	Not applicable
Melting point (°C)	* MS N/A HA -48,4
Boiling point / range (°C)	* MS 157-204 HA 156-175
Flash point (°C)	* MS 45 (ASTM D-56) HA 40 (ASTM D-56)
Evaporation rate (butyl acetate = 1)	* MS N/A HA N/A
Flammability (solid; gas)	Flammable
Lower/upper limit of explosiveness (%)	* MS 0,7-6,0 HA 0,7-6,6
Vapor pressure	* MS 0,2 KPa (1,5 mmHg) at 20°C HA 2,1 mmHg at 25°C
Vapor density (air=1)	* MS 4,8 HA 4,14-4,15
Density	0,8-1,2 (apparent)
Solubility in water (% mass)	Insoluble
Partition coefficient – n-octanol/water	* MS N/A HA N/A
Auto-ignition temperature (°C)	* MS 259 HA 491,5
Decomposition temperature (°C)	* AG N/A NF N/A
Viscosity	Not applicable

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Non-reactive under normal conditions of use, storage and transport.

### 10.2 Chemical stability

Stable under normal conditions of temperature and pressure.

### 10.3 Possibility of dangerous reactions

When in contact with water it may liberate hydrogen gas, which is highly flammable.

### 10.4 Conditions to be avoided

Keep away from heat and ignition sources and of incompatible substances.

### 10.5 Incompatible materials

Acids, alkali, oxidizing agents and water.

### 10.6 Dangerous products derived from the decomposition

Does not decompose at room temperature.

## 11. TOXICOLOGICAL INFORMATION

Relative to \*mineral spirit (MS) \*\* high aromatic (HA)

### Acute toxicity:

\* Elevated temperatures or mechanical action may form vapors, mist or fumes which may be irritating to the eyes, nose, throat or lungs.  
\*\* Not available.

### Skin corrosion/irritation:

\* May dry the skin, causing irritation and dermatitis.  
\*\* Causes skin irritation with redness, pain and dryness.

### Serious eye injuries/eye irritation:

\* May cause mild, short duration, discomfort in the eyes.  
\*\* Causes serious eye irritation with redness and pain.

### Light discomfort respiratory or skin sensitization:

\* No respiratory or skin sensitization effects are expected.  
\*\* Not available.

### Mutagenicity in germination cells:

\* Not expected to be a germ cell mutagen.  
\*\* Not available.

### Carcinogenicity:

\* Not expected to be a carcinogenic.  
\*\* Not available.

### Toxicity to reproduction:

\* Not expected to be a reproductive toxicant.  
\*\* Not available.

### Toxicity for specific organs-targets – single exposure:

\* May cause drowsiness or dizziness.  
\*\* It may cause irritation of the respiratory tract and can cause coughing and sneezing.

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**Toxicity for specific organs-targets – repeated exposure:**

\* Not expected to cause organ damage from long-term or repeated exposure.

\*\* Not available.

**Aspiration danger:**

The aspiration of small amounts into the lungs, through ingestion or vomit, may cause chemical pneumonia or lung edema.

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

Aluminium paste is noxious to water organisms.

**Aluminium powder:** It is not expected to be harmful to aquatic organisms.

**Mineral spirit:** Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**High aromatic:** Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### 12.2 Persistence and degradability

**Aluminium powder:** It is not considered as biodegradable.

**Mineral spirit:** Easily degradable and with the possibility of fast degrading in air.

**High aromatic:** Readily biodegradable. Not lasting effects.

### 12.3 Bioaccumulation potential

**Aluminium powder:** The product does not contain substances considered bioaccumulative.

**Mineral spirit:** Indeterminate.

**High aromatic:** Not bioaccumulative.

### 12.4 Mobility in the soil:

The aluminium paste should show low mobility, for being a paste like solid material.

### 12.5 Other adverse effects:

No other relevant information available.

## 13. CONSIDERATIONS ON THE FINAL DISPOSAL

### 13.1 Recommended methods for the final disposal:

Residues should be disposed for proper treatment, following its characteristics (such as, coprocessing and incineration) and following the present applicable laws and regulations. Do not dispose in the sewer system, in rivers, lakes and water sources.

Contaminated packaging: The packaging material should not be reused. When decontaminated, it may be destined to recycling.

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## 14. TRANSPORT INFORMATION

	ANTT	IATA	IMDG
<b>UNO number</b>	1325	1325	1325
<b>Proper name for shipping</b>	FLAMMABLE SOLID, ORGANIC, N.E. (aluminium powder and petroleum hydrocarbon)		
<b>Risk subclass</b>	4.1	4.1	4.1
<b>Risk number</b>	40	40	40
<b>Packaging group</b>	II	II	II
EmS Number	-	-	F-A, S-G
Environment danger	-	-	Yes

## 15. REGULATORY INFORMATION

Federal Decree Nr. 2.657, of July 3<sup>rd</sup>, 1998 (Promulgates the Nr. 170 OIT Convention, relative to Safety in the Use of Chemical Products at Work).

Standard ABNT-NBR 14725:2012.

Law Nr. 12.305, of August 2<sup>nd</sup>, 2010 (Establishes the National Policy for Solid Wastes).

Decree Nr. 7.404, of December 23<sup>rd</sup>, 2010 (Regulates Law Nr. 12.305, of August 2<sup>nd</sup>, 2010).

Ministerial Decree Nr. 229, of May de 24<sup>th</sup>, 2011 – Amends the Nr. 26 Regulating Standard.

## 16. OTHER INFORMATION

This MSDS was written based upon the data of our suppliers of raw-materials and upon the present knowledge on the proper handling of the product under normal use conditions, following the application mentioned in section 1. Any other form of use of the product that involves its combination with other materials, besides forms of use different from the mentioned ones will be the responsibility of the user. We hereby warn that the handling of any chemical substance requires the previous knowledge of its danger by the user. The user company is responsible to provide, at the work place, the training of its employees and other persons in respect to the possible risks derived from the exposure to the chemical product.

### Captions and acronyms:

ACGIH – American Conference of Governmental Industrial Hygienists.

ANTT – Agência Nacional de Transporte Terrestre (National Ground Transport Agency) - Brazilian regulations.

CAS – Chemical Abstracts Service.

GHS – Globally Harmonized System of Classification and Labelling of Chemicals.

IATA – International Air Transport Association.

IMDG – International Maritime Dangerous Goods – Code.

LT – Limite de Tolerância (Tolerance Limit) - Brazilian regulations.

N/A – Not Available.





# Material Safety Data Sheet



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NR – Norma Regulamentadora (Regulating Standard) - Brazilian regulations.

TWA – Time Weighted Average.