

Stanlux Copper: 2000, 2700, 2800, 4500, 4600, 7500, 10000, 12000

Stanlux Pale Gold: 2000, 2700, 2800, 3500, 4500, 6500, 7500, 10000, 12000, 13000, 14000

Stanlux Rich Pale Gold: 2000, 2700, 2800, 3500, 4500, 6500, 7500, 10000, 12000, 13000, 14000

Stanlux Rich Gold: 2000, 2700, 2800, 3500, 4500, 6500, 7500, 10000, 12000, 13000, 14000

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1. IDENTIFICATION

Product identification: Bronze powder

Other ways of identification: Stanlux Copper and Stanlux Gold - Pale, Rich Pale, Rich and Ducate Gold

Recommended uses of the chemical: Decorative paints, printing inks, textile finish and masterbatch

Usage restrictions: There are no known restrictions on use.

Supplier Details:

Manufacturer: Aldoro Indústria de Pós e Pigmentos Metálicos Ltda
Av. Suécia, 570 – Distrito Industrial – Rio Claro – SP – Brasil
Tel: +55 19 3535.6400
www.aldoro.com.br

Emergency telephone number: Tel: 19 3535.6400

2. HAZARD IDENTIFICATION

Classification of the substance or mixture:

Dangerous to the aquatic environment – Acute
Dangerous to the aquatic environment – Chronic

Category 1
Category 1

Classification system used

Standard ABNT-NBR 14725. Globally Harmonized System for Classification and Labeling of Chemicals, UN.

GHS labeling elements including precautionary statements

Pictograms



Signal word

WARNING

Danger phrases

H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Precautionary phrases

PREVENTION

P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection, face protection.

EMERGENCY RESPONSE

P370 + P378 In case of fire: Use dry chemical or sand to extinguish. Never use water.
P391 Collect spilled material.

STORAGE

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P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

DISPOSITION

P501 Dispose of contents and container in accordance with local regulations.

Other hazards not resulting in a classification: No further relevant information available.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Mixture

Ingredients that contribute to the danger

Chemical identity		CAS number	Concentration range (%)
Metallic alloy	Copper	7440-50-8	70 - 99,5
	Zinc	7440-66-6	6 - 30
	Aluminium	7429-90-5	0,5 - 1,5

4. FIRST AID MEASURES

Description of first aid measures

Inhalation: Remove the victim to a ventilated area and keep him/her at rest in a position that does not hinder breathing. If he/she feels unwell, seek medical help.

Skin contact: Remove contaminated clothing. Wash skin with soap and running water. In case of skin irritation: Consult a physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. If eye irritation persists: Consult a physician.

Ingestion: Do not induce vomiting. Seek medical help.

Most important symptoms and effects, acute or delayed: No further relevant information available.

Indication of immediate medical attention and special treatments required, if necessary: No further relevant information available.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Dry chemical powder or dry sand.

Unsuitable extinguishing media: Do not use water, foam or carbon dioxide.

Specific hazards arising from the mixture: Combustion can form irritating and toxic gases such.

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Special protective measures for firefighting personnel: The use of self-contained positive pressure respiratory protective equipment and full protective clothing is recommended.

6. CONTROL MEASURES FOR SPILLS OR LEAKS

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Use personal protective equipment. Keep people away from the affected area.

For emergency service personnel:

Use full PPE, including safety glasses, protective gloves, safety shoes and appropriate protective clothing.

Environmental precautions:

Do not allow the product to reach sewage pipes or watercourses. Inform the authorities if the product reaches water resources.

Methods and materials for containment and cleaning:

Cover the product with inert and absorbent material (sand or sawdust) and remove to a suitable, dry container. Do not use water or other aqueous products. For final disposal, proceed as per Section 13 of this document.

7. HANDLING AND STORAGE

Appropriate technical measures for handling

Precautions for safe handling:

Handle in a covered, dry and ventilated place. Keep packaging closed when the product is not in use. Avoid exposure product dust. Use personal protective equipment as described in Section 8.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke in work areas. Wash hands after handling and before eating, drinking, smoking or using the bathroom.

Conditions for safe storage, including any incompatibilities

Technical measures for fire and explosion prevention:

Keep away from incompatible materials as described in Section 10.

Conditions for safe storage, including any incompatibilities:

Store in a covered, ventilated place protected from heat. Keep away from incompatible materials as described in Section 10.

Suitable packaging materials:

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Similar to original packaging.

Unsuitable packaging materials:

There are not known unsuitable material.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Control parameters

Occupational exposure limit:

Chemical Agent	LT NR 15 – Annex 11		TWA (ACGIH TLV)	
	ppm	mg/m ³	ppm	mg/m ³
Copper				1 (*)
Zinc (oxide)				2 (*)
Aluminium				1 (*)

(*) respirable

Engineering control measures: Use explosion-proof mechanical ventilation and exhaust systems to maintain atmospheric concentrations of product constituents below occupational exposure limits.

Personal protective measures

Eye/face protection: Safety glasses if there is a risk of splashing.

Skin protection: Impervious gloves.

Respiratory protection: If personal exposure cannot be controlled below applicable limits by ventilation, use a respirator suitable for organic vapors/particulates, in accordance with the Respiratory Protection Program (PPR).

Thermal hazards: No thermal hazards.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Powder solid
Color	Golden
Odor	Characteristic
Melting point/freezing point	Not available
Boiling point or initial boiling point and boiling range	Not available
Flammability	Not applicable
Lower and upper explosive/flammability limits	Not applicable
Flash point	Not applicable
Autoignition temperature	Not available
Decomposition temperature	Not available
pH	Not applicable

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Kinematic viscosity	Not available
Solubility	Insoluble in water
Partition coefficient – n-octanol/water (log value)	Not applicable
Vapor pressure	Not applicable
Density and/or relative density	0.6-1.2 (apparent)
Relative vapor density	Not applicable
Particle characteristics	Particles with a size of 5 to 60 microns. Malvern measuring instrument.

10. STABILITY AND REACTIVITY

Reactivity

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

Chemical stability

Stable under normal temperature and pressure conditions.

Possibility of dangerous reactions

Contact with incompatible materials.

Conditions to avoid

Keep away from incompatible materials.

Incompatible materials

Halogenated products, oxidizing agents, peroxides, alkalis, and acids.

Hazardous decomposition products

Does not decompose at room temperature.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Based on available data the classification criteria are not met.
Skin corrosion/irritation:	Based on available data the classification criteria are not met.
Serious eye damage/eye irritation:	Based on available data the classification criteria are not met.
Respiratory or skin sensitization:	Based on available data the classification criteria are not met.
Germ cell mutagenicity:	Based on available data the classification criteria are not met.

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Carcinogenicity: Based on available data the classification criteria are not met.

Reproductive toxicity: Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure: Based on available data the classification criteria are not met.

Specific target organ toxicity – repeated exposure: Based on available data the classification criteria are not met.

Aspiration hazard: Based on available data the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

Copper: LC₅₀ (fish, 96h): 0.665 mg/L
LC₅₀ (crustaceans, 48h): 0.044 mg/L
EC₅₀ (Algae, 96h): 0.57 mg/L

Persistence and degradability

Based on the available data, the product is expected to be persistent and degrade slowly.

Bioaccumulative potential

Not available.

Mobility in soil

The product is not expected to be mobile in soil.

Other adverse effects

No other additional information available.

13. CONSIDERATIONS ON FINAL DESTINATION

Recommended methods for final disposal:

Product and product waste are classified as hazardous and must be disposed of in accordance with federal, state and municipal legislation.

Contaminated packaging: The packaging should not be reused. Once decontaminated, it can be recycled.

14. TRANSPORTATION INFORMATION

National and international regulations

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	ADR/RID	IATA	IMDG
UN number	3077	3077	3077
Proper name for boarding	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (copper/zinc and aluminium alloy)		
Risk subclass	9	9	9
Risk number	90	90	90
Packing group	III	III	III
EmS Number	-	-	F-A, S-F
Environmental hazard	-	Yes	Yes

15. REGULATORY INFORMATION

Federal Decree No. 10,088, of November 5, 2019.

Regulatory Standard No. 26 (Safety Signage and Identification), approved by MTP Ordinance No. 2,770 of September 5, 2022 of the Ministry of Labor and Social Security.

16. OTHER INFORMATION

Important information, but not specifically described in the previous sections

This document was prepared based on current knowledge about the appropriate handling of the product and under normal conditions of use, according to the application specified on the packaging. Any other form of use of the product that involves its combination with other materials, as well as forms of use other than those indicated, are the responsibility of the user. It is warned that the handling of any chemical substance requires prior knowledge of its dangers by the user. In the workplace, it is the responsibility of the company using the product to promote the training of its employees and contractors regarding the possible risks arising from exposure to the chemical product.

Change control:

Version	Date of preparation	Changes
01	2025/06/16	Preparation
02	2025/07/07	Review items 2, 14, and 16

Subtitles and abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists;

ADR - European Agreement concerning the international carriage of dangerous goods by road;

CAS - Chemical Abstracts Service (Registration number with the American Chemical Society);

EC₅₀ - Effective concentration of the substance for 50% of individuals;

LC₅₀ - Effective concentration or lethal concentration of the substance for 50% of individuals;

IATA - International Air Transport Association;

IMDG - International Maritime Dangerous Goods Code;

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LT - Tolerance Limit;

NOAEC - No Observed Adverse Effect Level;

UN - United Nations;

TLV - Threshold Limit Value;

TWA - Time Weighted Average.

References:

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS. TLVs® and BEIs®: Based on the Documentation of the Threshold Limit Values (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Cincinnati-USA, 2023.

BRAZIL. MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Standard (NR) No. 15: Unhealthy activities and operations. Brasília, DF. Apr. 2022.

BRAZIL. MINISTRY OF LABOR AND EMPLOYMENT (MTE). Regulatory Standard (NR) No. 7: Occupational health medical control program. Brasília, DF. Jan. 2022.

ECHA CHEMICALS DATABASE. Available at: <https://chem.echa.europa.eu/>. Accessed: Jul 2025..

GESTIS - SUBSTANCE DATABASE. Available at: <<https://gestis-database.dguv.de/>>. Accessed: Jun 2025.

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS. 10th rev. ed. New York and Geneva: United Nations, 2023.