

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Revision:2020-01-01

According to EEC91/155

Version 3.3.1

SECTION 1:

Identification of the substance/mixture and of the company/undertaking

·**Product identifier:**Aluminum silver powder

·**Trade name:**S104130

·**Relevant identified uses of the substance or mixture and uses advised against**
This information is not available.

·**Application of the substance/the preparation:**Pigment

·**Manufacturer Name:**Hong Kong Sunflower Group

·**Manufacturer factory address:**Xinhua Industrial Park,Huadu
District,Guangzhou,China

·**Zip Code:**510812

·**Telephone:**+86 20 8689 2123

·**Telefax:**+86 20 8689 2123

·**E-mail address:**info@sunflower-group.com

SECTION 2: Hazards identification

Hazard class and label elements of the product according to GHS(the sixth revised edition):

GHS Hazard Class

Flammable Solids Category1

GHS Label Elements

Pictogram



Signal Word Danger

Hazard Statements

H228 Flammable solid

Precautionary Statements

Prevention

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P210	Keep away from heat,hot surfaces,sparks,open flames and other ignition sources.No smoking.
P240	Ground and bond container and receiving equipment
P241	Use explosion-proof[electrical/ventilating/lighting]equipment
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	Not applicable
Storage	Not applicable
Disposal	Not applicable

SECTION 3:Composition/information on ingredients

·Mixture

·Description:Mixture of substances listed below with nonhazardous additions.

Component	Concentration (weight percent,%)	CAS No.	EC No.
Isopropyl alcohol	1-3	67-63-0	200-661-7
Aluminium	93-97	7429-90-5	231-072-3
Silicon	2-4	7631-86-9	231-545-4

SECTION 4:First aid measures

Description of first aid measures

General advice	Move the victim to fresh air. Do not leave the victim unattended. Move out of dangerous area. Show this 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.

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- In case of skin contact** Wash off immediately with soap and plenty of water.
If skin irritation persists,call a physician.
If on skin,rinse well with water.
If on clothes,remove clothes.
- In case of eye contact** Immediately flush eye(s) with plenty of water.
Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
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.

Most important symptoms and effects,both acute and delayed.

This information is not available.

Indication of any immediate medical attention and special treatment needed.

This information is not available.

SECTION 5:Firefighting measures

•Extinguishing media:

Special powder for metal fires.Do not use water.

•Personal precautions,protective equipment and emergency procedures

Wear protective equipment.Keep unprotected persons away.

Remove persons from danger area.

Avoid formation of dust.

•For safety reasons unsuitable extinguishing agents:

Water

Carbon dioxide

•Special danger:No further relevant information available.

SECTION 6:Accidental release measures

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Personal precautions,protective equipment and emergency procedures

Personal precautions:Evacuate personnel to safe areas.

Use personal protective equipment.

Remove all sources of ignition.

Use personal protective equipment.

Avoid dust formation.

Environmental precautions

Environmental precautions:Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains
inform respective authorities.

Methods and materials for containment and cleaning up

Methods for cleaning up: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

Precautions for safe handling

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 vapours/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.

Advice on protection against fire and explosion:

Keep away from open flames,hot surfaces and sources of ignition.Earthing of containers and apparatuses is essential.

Avoid dust formation.

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Hygiene measures:

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

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.

Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations/working materials must comply with the technological safety standards.

Further information on storage conditions:

Protect from humidity and water. Do not allow to dry.

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.

Other data: No decomposition if stored and applied as directed.

SECTION 8: Exposure controls/personal protection

Control Parameters

Occupational Exposure Limit Values

Component	Country/Region	Limit Value-Eight Hours		Limit Value-Short Term	
		ppm	mg/m ³	ppm	mg/m ³
Isopropyl alcohol 67-63-0	USA-OSHA	1000	1900	-	-
	South Korea	1000	1900	-	-
	Ireland	-	-	1000	-
	Germany(AGS)	500	960	1000	1920
	Denmark	1000	1900	2000	3800
	Australia	1000	1880	-	-

Aluminium 7429-90-5	USA-OSHA	-	15	-	-
	South Korea	-	10	-	-
	Ireland	-	1	-	-
	Germany(AGS)	-	4	-	-
	Denmark	-	5	-	10
	Australia	-	10	-	-
Silicon dioxide 7631-86-9	USA-OSHA	-	10	-	-
	South Korea	-	1	-	-
	Ireland	-	6	-	-
	Germany(AGS)	-	4	-	-
	Denmark	-	2	-	4
	Australia	-	2	-	-

Biological Limit Values

No information available

Monitoring Methods

- 1、 EN 14042 Workplace atmospheres.Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 2、 GBZ/T 160.1-GBZ/T 160.81-2004 Determination of toxic substances in workplace air(Series standard).

Personal protective equipment

Eye protection:

Wear face-shield and protective suit for abnormal processing problems.

Hand protection Material:Solvent-resistant gloves

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 breakthrough time which are provided by the supplier of the gloves.Also take into consideration the specific local conditions under which the

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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.

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.

Respiratory protection:

Use suitable breathing protection if workplace concentration requires.

Environmental exposure controls

General advice:

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9:Physical and chemical properties

Appearance	Silver powder
Odor Threshold	No information available
Melting Point/Freezing Point(°C)	No information available
Flash Point(°C)(Closed Cup)	Not applicable
Flammability	Not combustible
Vapor Pressure(MPa)	Not applicable
Relative Density(Water=1)	No information available
n-Octanol/Water Partition Coefficient	No information available
Decomposition Temperature(°C)	No information available
Particle characteristics	No information available
Odor	No information available
pH	No information available
Initial Boiling Point and Boiling Range(°C)	> 35

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Evaporation Rate	Not applicable
Upper/lower explosive limits[%(v/v)]	Upper limit:No information available;Lower limit:No information available
Relative Vapour Density(air=1)	Not applicable
Solubility	No information available
Auto-Ignition Temperature(°C)	No information available
Kinematic Viscosity(mm² /s)	Not applicable

SECTION 10:Stability and reactivity

·Chemical stability:

No decomposition if used according to specifications.

No decomposition if used and stored according to specifications.

·Incompatibilities:acids,alkali,anhydride,halogens,oxidizing agents,corrosives and chemicals

·Polymerization:nonoccurrence

·Hazardous decomposition products:No dangerous decomposition products known

SECTION 11:Toxicological information

·Acute Toxicity

Component	CAS No.	LD₅₀(Oral)	LD₅₀(Dermal)	LC₅₀(Inhalation,4th)
Isopropyl alcohol	67-63-0	7060mg/kg(Rat)	No information available	39mg/L(Mouse)

Skin Corrosion/Irritation

No information available

Serious Eye Damage/Irritation

No information available



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Skin Sensitization

No information available

Respiratory Sensitization

No information available

Germ Cell Mutagenicity

No information available

Carcinogenicity

CAS No.	Component	IARC	NTP
67-63-0	Isopropyl alcohol	Category 1	Not Listed
7429-90-5	Aluminium	Not Listed	Not Listed
7631-86-9	Silicon dioxide	Category 3	Not Listed

Reproductive Toxicity

No information available

Reproductive Toxicity(Additional)

No information available

STOT-Single Exposure

No information available

STOT-Repeated Exposure

No information available

Aspiration Hazard

No information available

SECTION 12:Ecological information

Acute Aquatic Toxicity

Component	CAS No.	Fish	Crustaceans	Algae
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Aluminium	7429-90-5	LC ₅₀ :1.55mg/L (96h)(Fish)	No information available	No information available
Isopropyl alcohol	67-63-0	LC ₅₀ :11000mg/L (96h)(Fish)	EC ₅₀ :9950mg/L (48h)	No information available

Chronic Aquatic Toxicity

No information available

Others

Persistence and Degradability No information available

Bioaccumulative Potential No information available

Mobility in Soil No information available

Isopropyl alcohol does not meet the criteria for PBT and vPvB according to Regulation(EC)No 1907/2006,annex XIII.

Results of PBT and vPvB Assessment

Aluminium does not meet the criteria for PBT and vPvB according to Regulation(EC)No 1907/2006,annex XIII.

Silicon dioxide does not meet the criteria for PBT and vPvB according to Regulation(EC)No 1907/2006,annex XIII.

SECTION 13:Disposal considerations

Waste treatment methods

Product:	Do not dispose of waste into sewer. 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.
In accordance with local and national regulations.

SECTION 14:Transport information

Transporting Label



Marine pollutant	None
UN Number	1309
UN Proper Shipping Name	Aluminium Powder,Coated
Transport Hazard Class	4.1
Transport Subsidiary Hazard Class	None
Packing Group	II

SECTION 15:Regulatory information

International Chemical Inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Isopropyl alcohol	✓	✓	✓	✓	✓	✓	✓	✓	✓
Aluminium	✓	✓	✓	✓	✓	✓	✓	✓	✗
Silicon dioxide	✓	✓	✓	✓	✓	✓	✓	✓	✓

【EINECS】 European Inventory of Existing Commercial Chemical Substances.

【TSCA】 United States Toxic Substances Control Act Inventory.

【DSL】 Canadian Domestic Substances List.

【IECSC】 China Inventory of Existing Chemical Substances.

【NZIoC】 New Zealand Inventory of Chemicals.

【PICCS】 Philipines Inventory of Chemicals and Chemical Substances.



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【KECI】 Existing and Evaluated Chemical Substances.

【AICS】 Australia Inventory of Chemical Substances.

【ENCS】 Existing And New Chemical Substances.

Note

“√”Indicates that the substance included in the regulations.

“×”That no data or included in the regulations.

SECTION 16:Other information

·DISCLAIMER OF LIABILITY

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