# SAFETY DATA SHEET GILDING SALTS Page 1 of 11

Compilation date: 12/02/2015 Revision date: 01/10/2018 Revision No: 5

Section 1: Identification of the substance/mixture and of the company/undertaking

**1.1 Product Identifier** 

Product name:	GILDING SALTS
REACH registered number(s):	01-2119486407-29-XXXX CAS
CAS number:	151-50-8
EINECS number:	205-792-3
Index number:	006-007-00-5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: PC14: Metal surface treatment products, including galvanic and electroplating products. PC19: Intermediate. PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet		
Company Name:	ALISCO COMPANY LLP	
Address:	PO Box 6166	
	Warwick CV34 9PN	
	United Kingdom	
Telephone Number:	01926 359930	
Email:	sales@alisco.co.uk	

1.4. Emergency telephone number

Emergency telephone no:

0777 552 3332 (office hours only)

## Section 2: Hazards identification

## 2.1. Classification of the substance or mixture

Classification under CLP:	Acute Tox. 1: H300+H310+H330; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Met. Corr. 1: H290; STOT RE 1: H372; STOT SE 1: H370; -: EUH031
Most important adverse effects:	Contact with acids liberates toxic gas. May be corrosive to metals. Fatal if swallowed, in contact with skin or if inhaled Causes damage to organs (brain, heart, testes.) (All routes.). Causes damage to organs ([thyroid]) through prolonged or repeated exposure (through all routes). Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

# SAFETY DATA SHEET GILDING SALTS Page 2 of 11

### 2.2. Label elements

#### Label elements:

Hazard statements:	EUH031: Contact with acids liberates toxic gas.
	H290: May be corrosive to metals.
	H300+H310+H330: Fatal if swallowed, in contact with skin or if inhaled
	H370: Causes damage to organs (brain, heart, testes.) (All routes.).
	H319: Causes serious eye irritation.
	H372: Causes damage to organs ([thyroid]) through prolonged or repeated exposure (through all routes).
	H400: Very toxic to aquatic life.
	H410: Very toxic to aquatic life with long lasting effects.
Hazard pictograms:	GHS05: Corrosion
	GHS06: Skull and crossbones
	GHS08: Health hazard
	GHS09: Environmental



Signal words:	Danger
Precautionary statements:	P260: Do not breathe dust.
	P302+P352: IF ON SKIN: Wash with plenty of water.
	P301+P310: IF SWALLOWED: Immediately call a POISON CENTER.
	P262: Do not get in eyes, on skin, or on clothing.
	P280: Wear protective gloves/protective clothing/eye protection/face protection.
	P284: (in case of inadequate ventilation) Wear respiratory protection.
	P308+P311: IF exposed or concerned: Call a POISON CENTER or doctor.
	P361+P364: Take off immediately all contaminated clothing and wash it before reuse.
	P273: Avoid release to the environment.

#### 2.3 Other hazards

PBT:

This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

#### 3.1 Substances

Chemical identity:	POTASSIUM CYANIDE >10%
CAS number:	151-50-8
EINECS number:	205-792-3
REACH registered number(s):	01-2119486407-29-XXXX

# SAFETY DATA SHEET GILDING SALTS Page **3** of **11**

Description CAS No.	potassium dicyanoargentate 506-61-6	<1%
EC number:	208-047-0 ·	
Index number:	006-007-00-5	
Description	potassium dicyanoaurate(I)	2-5%
CAS No.	13967-50-5	
EC number:	237-748-4	
Chemical identity: CAS number: REACH registered no's:	SODIUM CARBONATE <5% 497-19-8 01-2119485498-19-XXXX	6 This product has no classification under CLP

#### 4.1 Description of first aid measures

Skin contact:	Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.
Eye contact:	Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
Ingestion:	Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.
Inhalation:	Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

### 4.2 Most important symptoms and effect, both acute and delayed

Skin contact:	There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.
Eye contact:	There may be severe pain. The eyes may water profusely.
Ingestion:	There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may
	occur. There may be loss of consciousness.
Inhalation:	There may be shortness of breath with a burning sensation in the throat. Absorption through the lungs
	can occur causing symptoms similar to those of ingestion. Convulsions may occur. There may be loss of
	consciousness.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure. Breathing may stop.

4.3 Indication of any immediate medical attention and special treatment needed.

Immediate / special treatment:Immediate medical attention is required. Treatment: Prevention of absorption and checking of<br/>vital functions only in the absence of risk to self protection! Rapid treatment with antidotes can<br/>save lives and has priority over removal of poison!

## SAFETY DATA SHEET GILDING SALTS Page 4 of 11

Section 5: Fire-fighting measures

#### 5.1 Extinguishing media

**Extinguishing media**: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

	5.2 Special hazards arising from the substance or mixture		
E	kposure hazards:	Toxic. In combustion emits toxic fumes	
	5.3. Advice for fire	e-fighters	

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes

Secti	on 6. Accidental release	e measures		
	6.1. Personal precautions, protective equipment and emergency procedures.			
	Personal precautions:	Notify the police and fire brigade immediately. Evacuapproach from downwind. If outside keep bystander Mark out the contaminated area with signs and prevonot attempt to take action without suitable protective create dust.	s upwind ent acces	l and away from danger point. ss to unauthorised personnel. Do
	6.2. Environmental precautions			
Enviror	mental precautions:	Do not discharge into drains or rivers. Alert the neigh	bourhoc	d to the presence of fumes or gas.

6.3. Methods and material for containment and cleaning up

**Clean-up procedures**: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7. Handling and storage

## SAFETY DATA SHEET GILDING SALTS Page 5 of 11

#### 7.1 Precautions for safe handling

**Handling requirements**: Avoid direct contact with the substance. Ensure there is exhaust ventilation of the area. Avoid the formation or spread of dust in the air. Do not handle in a confined space.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:Store in a cool, well ventilated area. Keep container tightly closed.Suitable packaging:Must only be kept in original packaging

7.3. Specific end use(s)

Specific end use(s): Refer to Section 1

#### Section 8. Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits			Respirable dust		
State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL	
UK	5mg/m3		5mg/m3		

**DNEL/PNEC** Values

#### POTASSIUM CYANIDE

Туре	Exposure	Value	Population	Effect
DNEL	Inhalation (Long term)	0.94 mg/cu.m	Workers	Systemic
DNEL	Inhalation (Short term)	12.5 mg/cu.m	Workers	Systemic
DNEL	Dermal (Long term)	0.14 mg/kg/day	Workers	Systemic
DNEL	Dermal (Short term)	4.03 mg/kg/day	Workers	Systemic
PNEC	Fresh water	1 μg/l		
PNEC	Marine water	1 μg/1		
PNEC	Intermittent release	5 μg/l		
PNEC	STP	50 μg/l		
PNEC	Sediment (Freshwater)	4 μg/kg		
PNEC	Sediment (Marine water)	4 μg/kg		
PNEC	Soil	7 μg/kg		

Hazardous ingredients:

POTASSIUM CYANIDE

Туре	Exposure	Value	Population	Effect
DNEL	Inhalation (Long term)	0.94 mg/cu.m	Workers	Systemic
DNEL	Inhalation (Short term)	12.5 mg/cu.m	Workers	Systemic
DNEL	Dermal (Long term)	0.14 mg/kg/day	Workers	Systemic
DNEL	Dermal (Short term)	4.03 mg/kg/day	Workers	Systemic
PNEC	Fresh water	1 μg/l	μg/l	
PNEC	Marine water	1 μg/l		

# SAFETY DATA SHEET GILDING SALTS Page 6 of 11

PNEC	Intermittent release	5 μg/l	
PNEC	STP	50 μg/l	
PNEC	Sediment (Freshwater)	4 μg/kg	
PNEC	Sediment (Marine water)	4 μg/kg	
PNEC	Soil	7 μg/kg	

8.2 Exposure controls	
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Engineering measures:	Ensure there is exhaust ventilation in the immediate area to extract dust & fumes produced by the product. A powered fume enclosure is recommended.
Respiratory protection:	Use a full face self-contained breathing respirator which must be available in case of emergency. Particle filter class P1 (EN143).
Hand protection:	Protective gloves, Use Natural Rubber, Neoprene, Butyl, PVC or Viton gloves. Splash protection: (breakthrough time > 60 minutes). The condition of gloves should be checked prior to each use. The selection of gloves should be made with consideration to working practises and the duration of exposure. To comply with EN388:2016 and 374-1:2016, min thickness 2.1mm, nitrile/PVC/Butyl/rubber.
Eye protection:	Wear Chemical Splash Safety goggles with side-shields. Ensure eye bath is to hand.
Skin protection:	Protective clothing. Wear a chemical protective suit, Laboratory coat, full length trousers and closed toe rubber or leather shoes.
Environmental:	Ensure all engineering measures mentioned in section 7 of SDS are in place. Ensure emissions from ventilation or equipment comply with environmental protection legislation

## Section 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State:	Solid
Colour:	White
Odour:	Characteristic odour
Evaporation rate:	No data available.
Oxidising:	No data available.
Solubility in water:	400 g/l @20 Deg C.
Viscosity:	No data available.
Boiling point/range°C:	No data available.
Flammability limits %: lo	wer: No data available.
Flash point <sup>°</sup> C:	No data available.
Autoflammability°C:	No data available.
Relative density: 1.56 pH	: No data available.
VOC g/I:	No data available.

Melting point/range°C:634.5 Deg Cupper:No data available.Part.coeff. n-octanol/water:log Kow: -0.25@20CVapour pressure:No data available.

9.2. Other information

## SAFETY DATA SHEET GILDING SALTS Page 7 of 11

Other information: Not applicable

Section 10. Stability and reactivity

10.1 Reactivity

**Reactivity:** 

Stable under recommended transport or storage conditions.

10.2 Chemical stability

**Chemical stability:** Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions:

In contact with water and acids releases hydrogen cyanide, which creates explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid: Heat. Hot surfaces. Flames.

**10.5 Incompatible materials** 

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes

Section 11. Toxicological Information

11.1 Information on toxicological effects

#### **Toxicity Values:**

Route	Species	Test	Value	Units
DERMAL	RBT	LD50	6.6	mg/kg
ORAL	RAT	LD50	6.8	mg/kg

### Hazardous ingredients:

#### POTASSIUM CYANIDE

DERMAL	RBT	LD50	6.6	mg/kg
ORAL	RAT	LD50	6.8	mg/kg

## SAFETY DATA SHEET GILDING SALTS Page 8 of 11

#### **Relevant hazards for product:**

Hazard	Route	Basis
Acute toxicity (ac. Tox. 2)	INH DRM ING	Hazardous: calculated
Acute toxicity (ac. Tox. 1)	OPT INH DRM	Hazardous: calculated
STOT- single exposure		Hazardous: calculated
STOT- repeated exposure		Hazardous: calculated

### Symptoms / routes of exposure

Skin contact:	There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.
Eye contact:	There may be severe pain. The eyes may water profusely.
Ingestion:	There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.
Inhalation: There may be shortness of breath with a burning sensation in the throat. Absorption through can occur causing symptoms similar to those of ingestion. Convulsions may occur. There may consciousness.	
Delayed / imme	diate effects: Immediate effects can be expected after short-term exposure. Breathing may stop.
Other informat	on: May cause nausea, headache, dizziness and intoxication.

Sectio	Section 12. Ecological Information	
	12.1 Toxicity	

#### **Ecotoxicity values:**

Species	Test	Value	Units
Chlamydomonas sp.	10 day NOEC	0.1	Mg/l
Chironomus riparius	48H EC50	12.4	μg/l
Three-spined stickleback	96H LC50	98.8-103.8	μg/l
Activated sludge	3H IC50	5.3	Mg/l

### Hazardous ingredients:

### POTASSIUM CYANIDE

Activated sludge	3H IC50	5.3	Mg/I
Chironomus riparius	48H EC50	12.5	μg/l
Chlamydomonas sp	10day NOEC	0.1	Mg/l
Three-spined stickleback	96H LC50	98.8-103.8	μg/l

12.2 Persistence and degradability

Persistence and degradability:

Biodegradable

## SAFETY DATA SHEET GILDING SALTS Page 9 of 11

stance.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal operations:	Transfer to a suitable container and arrange for collection by specialised disposal company.
<b>Recovery operations:</b>	Not applicable.
Waste code number:	06 03 11
Disposal of packaging:	Hazardous. Do not re-use containers. Arrange for collection by specialised disposal company.
NB:	The user's attention is drawn to the possible existence of regional or national regulations regarding disposal

Sectio	on 14: Transport information	
	14.1 UN Number	
	UN Number:	UN1680
	14.2 UN proper shipping nam	ie
	Shipping Name:	POTASSIUM CYANIDE, SOLID
	14.3 Transport hazard class(e	25)
	Transport Class:	6.1

# SAFETY DATA SHEET GILDING SALTS Page **10** of **11**

14.4 Packing group			
Packing Group:	1		
14.5 Environmental Hazards			
Environmentally hazardous:	Yes	Marine pollutant:	Yes
14.6 Special precautions for	user		
Special precautions:	No special precautions.		
Tunnel code:	C/E		
Transport category:	1		
14.7 Transport in bulk accor	rding to Annex II of MAR	POL73/78 and the IBC Co	de
Transport in bulk:	NOT APPLICABLE		

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: NOT APPLICABLE

### **15.2 Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier

Section 16. Other information		
	Other information	

Other information:	according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU)
	2015/830
	* indicates text in the SDS which has changed since the last revision.
Phrases used in s.2 and s.3:	EUH031: Contact with acids liberates toxic gas.
	H290: May be corrosive to metals.
	H300+H310+H330: Fatal if swallowed, in contact with skin or if inhaled

# SAFETY DATA SHEET GILDING SALTS Page **11** of **11**

H370: Causes damage to organs ({{{0|||message=<or state all organs affected, if known>|||filter=(\_)?ORGAN\_.+}}) ({{{1||message=<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>||filter=(\_)? EXP\_ROUTE\_.+}}). H372: Causes damage to organs ({{{0||message=<or state all organs affected, if known>||filter=(\_)?ORGAN\_.+}}) through prolonged or repeated exposure ({{{1|| message=<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>||filter=(\_)?EXP\_ROUTE\_.+}}). H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.