

1. IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

22CT DS GOLD ALLOY

Alloy of gold, silver and copper suitable for facings and pre-formed shell crowns.

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2. HAZARDS IDENTIFICATION

These alloys are not regarded as being hazardous when subjected to normal use, however users are recommended to carry out their own risk assessment on the processes undertaken in the use of these materials.

Users should note that occupational exposure control standards exist for some of the alloys' components (see paragraph 8) and should remain aware of the need to monitor exposure if powder or fume is produced.

No toxicological data exists for gold, its alloys or salts, but it is considered to be of low acute toxicity. Alloys of the metal are commonly worn in close proximity to skin as items of jewellery with little or no recorded side effects. However in extremely rare cases, allergic reactions have been known. Chronic absorption of silver or silver bearing alloys can cause "Argyria" a blue grey discoloration of various tissues including eyes and nails. However this condition is unlikely to occur from the use of any of these alloys even if silver containing.

The alloys in powdered form may irritate the eyes and respiratory tract. Contact with the skin is unlikely to cause irritation or allergic reaction.

In the form supplied these alloys are not regarded as reactive.

3. TYPICAL COMPOSITIONS

	Au %	Ag %	Cu %	Ir %
22ct DS	91.8	3.2	5	<1

For commercial reasons, the above data may not be a complete alloy composition. However all elements of a significant content are reported.

4. FIRST AID MEASURES

Due to the non-hazardous nature of the alloys in the supplied form, no specific first aid information can be given. Care should be taken in handling sheet alloy due to potential sharp edges after cutting. In the case of any symptoms which may relate to exposure to fine powder or dust, the following actions are advised.

- Inhalation: Remove from exposure and rest in fresh air. Seek medical advice if acute.
- Ingestion: Rinse mouth with water and give water or milk to drink. Seek medical advice for large quantities.
- Eyes: Irrigate with clean water or isotonic saline solution for 5 minutes. Seek medical advice if symptoms exist.
- Skin: Wash with soap and water.

5. FIRE FIGHTING MEASURES

Not flammable. Use any extinguishing medium for surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Collect up spillage for reuse, recycling or disposal.

7. HANDLING AND STORAGE

7.1 HANDLING

If dust or fume are produced local exhaust ventilation and personal respiratory protection should be used. See 8.2.

Thin sheets of alloy may have sharp edges and should be handled with care.

7.2 STORAGE

No special storage conditions are necessary.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE CONTROLS

No exact exposure control standards have been established for this alloy, however Health and Safety Executive standards for some component elements have been established and are included here ref EH40.

Element	Fume	Dust
Gold		
Platinum		5.0 mg/m ³
Palladium		
Silver	0.1 mg/m ³	
Copper	0.2 mg/m ³	1.0 mg/m ³
Zinc		5.0 mg/m ³
Tin		
Iridium	0.1 mg/m ³	0.1 mg/m ³
Indium	0.1 mg/m ³	

8.2 PERSONAL PROTECTION

Ventilation and Respiratory Protection : To meet T.L.V requirements, efficient local exhaust ventilation or approved respirator protection must be provided wherever heating, grinding or any operation which may cause exposure to dust or fume .

Other Protective Equipment : Gloves and / or suitable protective clothing is required to prevent excessive contact between skin and dust and to prevent contact with the metal at elevated

temperatures. Face and / or eye protection is strongly recommended to prevent dust or particles entering the eyes and is regarded as essential during any operation which results in the alloy changing form.

Work / Hygiene Practices : Avoid inhalation or ingestion. Practice good housekeeping. Avoid eating and smoking in the work area. Wash thoroughly before eating and smoking.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance	Yellow Metal
Odour	No odour
pH	Not applicable
Boiling Point	No data
Melting Point	965-980 deg.c
Flash Point	Not applicable
Flammability	Not flammable
Autoflammability	Not applicable
Explosive Properties	Not explosive
Oxidizing Properties	Not oxidizing
Vapour Pressure	No data
Relative Density	No data
Solubility	Water - insoluble
Partition Coefficient	Fat - no data

10. STABILITY AND REACTIVITY

This material is supplied in a stable condition. No specific reactive hazards are known to Cookson Precious Metals.

11. TOXICOLOGICAL INFORMATION

No data is available for these alloys. In the form supplied they are not classified as hazardous and do not represent hazards.

May cause irritation from the inhalation of dust or fume. Irritation to the eyes if in contact with dust.

12. ECOLOGICAL INFORMATION

This material does not present an ecological hazard.

13. DISPOSAL CONSIDERATIONS

Return accumulated wastes and residues to a refinery for metal recovery.

14. TRANSPORT INFORMATION

Not restricted.

15. REGULATORY INFORMATION

EC Supply - Non hazardous. No risk or safety phrases as ascribed.

16. OTHER INFORMATION

This 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., Such information is given in good faith, being based on the latest information available to Cookson Precious Metals Ltd and is to the best of Cookson Precious Metals Ltd knowledge and belief, accurate and reliable at the time of preparation.. However, no representation, warranty or guarantee is made as to the accuracy, liability or completeness and Cookson Precious Metals Ltd assumes no responsibility therefore, and disclaims any liability for any loss, damage or injury whosoever arising (including in

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