



SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : S 11609
Product Name : SILVER OXIDE

Manufacturer / supplier identification

Company : NICE Chemicals (P) Ltd. , Cochin , India
Tel - 0484 2800212 , 2802755

Contact For Information : Tel . No. – 0484 2802536 Fax : 0484 2802483
Emergency Telephone No.: 0484 2801583 Tele fax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No : 20667-12-3 EC Index No. : 007-096-00-9
Molar mass : 231.74 EC –No. : 243-957-1
Molecular Formula : Ag₂O

3. HAZARDS IDENTIFICATION

Contact with combustible material may cause fire. Risk of serious damage to eyes. Risk of explosion if heated under confinement.

4. FIRST AID MEASURES

After skin contact : Wash off with plenty of water . Remove contaminated clothing.
After eye contact : Rinse out with plenty of water with the eyelid held wide open.
After inhalation : Fresh air.
After swallowing : Make victim drink plenty of water, induce vomiting, Summon doctor.

5. FIRE – FIGHTING MEASURES

Suitable extinguishing media : In adaption to materials stored in the immediate neighbourhood.

Special risks : Fire-promoting . Keep away from combustible materials.

Other information : Non- combustible.

6. ACCIDENTAL RELEASE MEASURES

Person-related precautionary measures : Avoid substance contact.

Procedures for cleaning /absorption : Take up dry. Forward for disposal. Clean up affected area .Avoid generation of dusts.

7. HANDLING AND STORAGE

Handling : No further requirements.

Storage : Tightly closed . Protected from light. Protected from



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air. Separately or together with other oxidising substances onlt
and away from sources of ignition and heat . Cool (below + 15oC).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection : Require when dusts are generated.
Eye protection : Required
Hand protection : Required

Protective clothing should be selected specifically for the working
place, depending on concentration and quantity of the hazardous
substances handled. The resistance of the protective clothing to
chemicals should be ascertained with the respective supplier.

Industrial hygiene : Change contaminated clothing. Wash hands
after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Solid
Colour	:	brown to dark brown
Odour	:	Odourless
pH value	:	Not available
Melting temperature	:	Not available
Boiling temperature	:	Not available
Ignition temperature	:	Not available
Flash point	:	Not available
Explosion limits lower	:	Not available
Upper	:	Not available
Relative vapour density	:	Not available
Density (20°C)	:	7.14 g/cm ³
Bulk density	:	950 kg/m ³
Solubility in water (20°C)	:	0.0016 g/l
Thermal decomposition	:	>200 °C

10. STABILITY AND REACTIVITY

Conditions to be avoided : No information available.
Substance to be avoided : Aluminium ,magnesium,
hydrogen sulfide, phosphorus, sulfur, ammonia, ammonium
compounds, hydrazine and derivatives, carbon monoxide and
alkali metals.
Hazardous decomposition products : No information available.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD₅₀ (oral, rat): 2820 mg/kg.
Subacute to chronic toxicity : Checks into the substance have so far not
disclosed any investigations concerning possible teratogenic effects.

Further toxicological information: The following applies to
practically insoluble silver compounds : long –term inhalation or



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ingestion can result in a persistent discoloration (grey to blue) of

the skin and mucous membranes (argyria).

Hazardous properties cannot be excluded, but are relatively improbable due to the compounds poor water solubility.

Further data : The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION

Ecotoxic effects : Due to the poor solubility of the product, no harmful effects on plants and/or aquatic organisms are to be expected when handled and used with due care and attention . The following applies to silver compounds in general : biological effects: silver ions toxic for aquatic organisms: bacteria : *Ps. putida* toxic as from 0.006 mg/l ; protozoa : *U. parduczi* toxic as from 0.1 mg/l ; arthropods : *D. daphnia* EC 50 : 0.004 mg/l ; algae: *M. aeruginosa* toxic as from 0.0007 mg/l; *Sc.quadricauda* toxic as from 0.009 mg/l .

Further ecologic data : No ecological problems are to be expected when the product is handled and used with due care and attention.

13. DISPOSAL METHOD

There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations . We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste .

Disposal in compliance with official Regulations. Handle contaminated packaging as in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled

14. TRANSPORT INFORMATION :

GGVS/GGVE class : 5.1 Number and letter : 27 b
Transport over land ADR/RID class : 5.1 Number and letter : 27 b
ADR/RID & GGVS/GGVE Name of material : 1479 SILVER OXIDE

Sea transport IMDG : IMDG class : 5.1 UN-NO.: 1479 Packaging group : 11
Ems : 5.1-11 MFAG : 760,4.3
Correct technical name : SILVER OXIDE

Air transport : ICAO/IATA : 5.1 UN/ID-No. : 1479 Packaging group : 11
ICAO-TI and IATA-DGR Correct technical name : SILVER OXIDE

15. REGULATORY INFORMATION

Labelling according to EC Directives
Symbol : O Oxidizing
Xi Irritant.



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R- Phrases : 8-41-44 Contact with combustible material may cause fire .
Risk of serious damage to eyes. Risk of explosion
if heated under confinement.

S-phrases : 26-39 In case of contact with eyes, rinse immediately
with plenty of water and seek medical advice .
Wear eye face protection.

Water pollution class : 1 (slightly polluting substance) (own classification)

16. OTHER INFORMATION

Reason for alteration
Change in transport classification.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.