

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Distributor:	COLORDESIGN S.r.l. Via T. Tasso, 7 25086 REZZATO REZZATO (BS) - ITALY
Trade Name:	Colordesign Bleaching Powder
Type of product and use:	Hair bleaching powder.
Revision Date:	01/01/2009

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

Generic Composition:

The bleaching powder ingredients are: mineral persulfates, metasilicates, silica, soaps, gums and inert materials.

Composition dangerous compounds

The compound is classified as dangerous as to section 3.

Dangerous ingredients to human Healthy and Safety

Chemical name	EINECS N°	%	CAS N°	Symbols	R Phrases
Potassium Persulfate	231-781-8	25 -50	7727-21-1	Xn HARMFUL O OXIDIZING	R8, R22, R42/43
Ammonium Persulfate	231-786-5	10-25	7727-54-0	Xn HARMFUL O OXIDIZING	R8, R22, R36/37/38
Sodium Metasilicate	229-912-9	10-25	6834-92-0	C CORROSIVE	R34, R37
Sodium Silicate	215-687-4	1-5	1344-09-8	Xi IRRITANT	R37/38, R41
Sodium Persulfate	231-892-1	10-25	7775-27-1	Xn HARMFUL O OXIDIZING	R8, R22, R36/37/38
Tetrasodium EDTA	200-788-1	< 1	64-02-8	Xn HARMFUL	R22, R36, R52/53
Sodium Lauryl Sulfate	205-788-1	< 1	151-21-3	Xn HARMFUL	R20/22, R37/38, R41

Dangerous ingredients for the compounds do not classified dangerous for 1999/45/CE: N.A.

Classification by art 4 and 6 as per directive 67/548/CE

The integral text of R phrases is in the 16 section.

SECTION 3: HAZARDS IDENTIFICATION

Classification of hazard

X _n	HARMFUL
O	OXIDIZING

Specific risks for man and environment

R7	May cause fire
R22	Harmful if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R42/43	May cause sensitisation by inhalation and skin contact

Main chemical-physical dangers

With moisture can take place an exothermic reaction an possible spontaneous combustion.

Negative effects

For Healthy: Irritating to eyes, skin and mucous.

For Environment: Do not put into the drainage system.

Connected Symptoms to correct/incorrect use: see section 4

Other Danger: in sensible people can cause an allergic reaction.

SECTION 4: FIRST AID MEASURES

- 4.1 Inhalation:** Immediately remove to fresh air. If asthma develops, get medical attention.
- 4.2 Skin:** rinse immediately with water. Wash the contaminated clothes before using them again. Should allergic reactions develop, consult a dermatologist.
- 4.3 Eye:** flush with plenty of water immediately. Remove contact lenses if used. Immediately get medical attention.
- 4.4 Ingestion:** rinse the mouth without swallowing. Immediately get medical attention.

SECTION 5: FIREFIGHTING MEASURES

- 5.1 Suitable extinguishing media:** water, water spray, CO₂, foam. Water or water spray has to be used until complete extinguishing.
- 5.2 Not Suitable extinguishing media:** None. Some extinguishing media (chemical powders, sand, earth, etc.) can be not much active before the product content oxidizing that stoke the combustion.
- 5.3 Specific dangerous and hazardous decomposition products:** In case of big fires the product can make toxic and corrosive gases/vapours of ammonia, sulphur dioxide (SO₂) and sulphur trioxide (SO₃).
- 5.4 Fire-fighting Equipment:** In case of big fires, wear breathing apparatus and complete protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal protection:** wear protective clothing.
- 6.2 Environmental precautions:** local exhausting is needed to avoid production of irritating dust concentrations. Avoid penetration of the product into the soil/earth. If the product reaches watercourses and/or the drainage system, advise the proper authorities.
- 6.3 Measures of cleaning up spillage:** maintain good manufacturer hygiene. Avoid contact with skin, eyes and clothes. In case of contact, wash immediately with water. Clean any spillage and pick up mechanically; dispose of in accordance with local and national regulations.

SECTION 7: HANDLING & STORAGE

- 7.1 Handling:** Avoid localized friction and overheating into product. Provide accurate dust captation and adequate ventilation/aspiration in working areas. Avoid the formation of electro-static charges.
- 7.2 Storage:** Store in a cool (below 30°C) and dry areas. Avoid contamination and avoid the presence of reducing agents like lotions and permanent waves. Discard any unused mixture with developer or bleaching lotions, since the container may break. AVOID humid organic materials such as paper towel, wood, clothes, etc..., which could induce spontaneous combustion. Protect from heat and sunlight; store in places far from rain and humidity; never store outdoor.
- 7.3 Specific use:** Only professional use

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Exposition Limit Values:

Potassium Persulfate	TLV-TWA 0,10 mg/m3
Ammonium Persulfate	TLV-TWA 1 mg/m3
Sodium Persulfate	TLV-TWA (UK) 1 mg/m3
Sodium metasilicate	TLV-TWA 10mg/m3
Sodium silicate	TLV-TWA 12mg/m3

8.2 Exposition Monitoring

8.2.1 Professional Exposition Monitoring: Precautionary measures: exhaust ventilation is required where the products are stored and/or handled. Keep far from food, drink and animal feeding stuff.

- a) Respiratory protection: not requested for normal use; you may wear a paper mask for powders. Avoid inhalation. When containers are open, protect the face. For prolonged exposures, wear a mask for harmful powders.
- b) Hands protection: wear protective gloves.
- c) Eye protection: Protective goggles. Avoid contact.
- d) Skin protection

8.2.2 Checking of environmental exposition: Not requested. See section 6.2.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance	powder
Colour	White, Blue or Violet
Odour	Characteristic
9.2 Important information for Healthy, Safety and Environmental	
pH (aqueous dispersion 1g/100ml)	10,3 – 11,3
Melting point	n.a.
Boiling point	n.a.
Inflammability point	> 65°C
Inflammability	> 65°C
Explosive property	n.d.
Oxidizing property	yes
Vapour tension	n.a.
Bulk density	0,9 ± 0,1 g/ml
Solubility	partially soluble in organic solvents
Solubility in water	partially soluble
Coefficient of distribution into n-octanol/Water	n.d.
Viscosity	n.a.
Vapour density	n.a.
9.3 Further information	
Decomposition temperature	> 65°C
% Persulfates	about 60
% Metasilicate	about 10

SECTION 10: STABILITY & REACTIVITY

The product does not undergo decomposition if handled in accordance with regulations. The product is stable in security conditions, up to 65°C; above this temperature it slowly starts to decompose, releasing small quantities of oxygen and ammonia. At approximately 150°C decomposition becomes fast and self-accelerating, and generates oxygen which can give rise to relevant fires.

Humidity is a very important factor, because the product moisture – when not kept under control and not stable – can considerably lower the decomposition temperature.

10.1 Conditions to avoid: heat, moisture, reducing agents such as waving lotions. Avoid impacts. Do not subject to friction. May build electrostatic charges.

10.2 Incompatibilities: acids, alkali, metals, burning and combustible materials. Do not use metallic bowls or stirrers.

10.3 Hazardous decomposition products: corrosive gases/vapours; toxic gases/vapours of sulphur oxides (SO_x), ammonia, nitrogen oxides (NO_x) and ozone.

SECTION 11: TOXICOLOGICAL INFORMATION

This product contains ingredients that may present health hazards. These ingredients are irritating to skin and mucous membranes of the eyes and respiratory system. They may trigger asthmatic attacks in sensitive individuals. They may induce skin sensitization and respiratory hypersensitivity.

Effects of chronic exposure: for purpose of chronic exposure under the OSHA Hazard Communication Standard, this is an untested mixture.

Target organs: skin, respiratory system.

Route of entry: inhalation, ingestion and skin.

General medical conditions, aggravated by exposure, will be related to the primary toxic (pharmacological) effect of this material; pre-existing dermatitis would be likely to get worse by a skin irritant; bronchitis is aggravated by irritant gases of particulates in the air.

11.2 Toxicological information of raw materials

The list below reports the toxicities of the main ingredients:

Potassium Persulfate	LD50 (oral rat) = 805 mg/kg
Ammonium Persulfate	LD50 (oral rat) = 820 mg/kg rat, inhalation >2,95 mg/l/4h rabbit, cutaneous >2.000mg/kg
Sodium Persulfate	LD50 (oral rat) = 895 mg/kg
Sodium Metasilicate	LD50 (oral rat) = 1125 mg/kg

Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting, diarrhoea.

Further information: if used properly, further health hazards are not known, nor predictable.

SECTION 12: ECOLOGICAL INFORMATION

Always follow good hygienic work practices. Avoid product dispersion in the environment.

12.1 Ecotoxicity

Toxicity in water of persulfates

EC50(72h) 83,7 (toxicity on bacteria)

EC50(48h) 120 mg/l (daphnia)

LC50(96h) 76,3 mg/l (toxicity on fish)

German classification of risk for waters: WGK 1 – slightly dangerous.

12.2 Mobility: n.d.

12.3 Persistence and degradability n.d.

12.4 Bio-accumulate potential n.d.

12.5 PBT evaluation n.d.




12.6 Further harmful effects n.d.

SECTION 13: DISPOSAL CONSIDERATION

Waste Treatment

Do not dispose of the product together with domestic waste. Do not let it enter the drainage system. Disposal should be in accordance with all applicable local and state regulations.

SECTION 14: INFORMATION ON TRASPORT

UN No: 1479		
Road/railway transport		ADR/RID Class: 5.1 - Oxidizing flammable solid Packaging group: III Proper shipping name: Oxidizing solid, N.O.S. (Potassium Persulfate, Ammonium persulfate, etc.)
Marine transport		IMO/MDG Class: 5.1 Packaging group: III EmS number: F-A, S-Q Proper shipping name: Oxidizing solid, N.O.S. (Potassium persulfate, Ammonium persulfate, etc.) Marine Pollutant: NO
Air transport		ICAO/IATA Class: 5.1 Packaging group: III Proper shipping name: Oxidizing solid, N.O.S. (Potassium persulfate, Ammonium persulfate, etc.)

SECTION 15: REGULATORY INFORMATION

Classification according to CEE directives:		
Symbols	X _n O	HARMFUL OXIDIZING
R phrases	R7 R29 R36/37/38 R42/43	May cause fire Harmful if swallowed Irritating to eyes, respiratory system and skin May cause sensitization by inhalation and skin contact
S phrases	S2 S7/8 S15 S24/25 S46	Keep out of reach of children Keep container tightly close and dry keep away from heat Avoid contact with skin and eyes If swallowed, seek medical advice immediately and show this container or label

SECTION 16: ADDITIONAL INFORMATION

The integral text of R phrases	
R7	May cause fire
R 8	Contact with combustible material may cause fire
R20/22	Harmful by inhalation and if swallowed

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R22	Harmful if swallowed
R34	Causes burns
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R37	Irritating to respiratory system
R37/38	Irritating to respiratory system and skin
R41	Risk of serious damage to eyes
R42/43	May cause sensitisation by inhalation and skin contact
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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