



SAFETY DATA SHEET

Sapphire Plus

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

1.1. Product identifier

Product name Sapphire Plus
Product number 7519/21838

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

Identified uses Detergent. Cleaning agent.

1.3. Details of the supplier of the safety data sheet

Supplier Cole & Wilson Ltd
Nabbs Lane Chemical Works
Nabbs Lane
Slaithwaite
Huddersfield
HD7 5AT
01484 842353
info@coleandwilson.com

1.4. Emergency telephone number

Emergency telephone (DE) Giftnotruf Berlin +49 30 19240 (24h erreichbar)
(DE) Giftnotruf Berlin +49 (0)30 30686 790
(CH) STIZ, tel. 145
(CH) Centre suisse d'information toxicologique: +41.(0)1.251.51.51
(AT) Vergiftungsinformationszentrale: +43 1 40 400 2222
worldwide: <http://www.who.int/ipcs/poisons/centre/directory/en>
(FR) INRS 01 45 42 59 59 CENTRE ANTI-POISON DE NANCY +33 (0)3 83 32 36 36

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Met. Corr. 1 - H290
Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) C;R34. Xi;R37.

2.2. Label elements

Pictogram



Signal word Danger

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Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.
Precautionary statements	P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/container in accordance with national regulations.
Contains	DISODIUM METASILICATE, Alcohols, C13-15, branched and linear, ethoxylated, SODIUM HYDROXIDE
Detergent labelling	5 - < 15% non-ionic surfactants, 5 - < 15% phosphates, < 5% optical brighteners
Supplementary precautionary statements	P234 Keep only in original container. P260 Do not breathe vapour/spray. P261 Avoid breathing vapour/spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P310 Immediately call a POISON CENTER/doctor. P312 Call a POISON CENTER/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P406 Store in corrosive resistant/... container with a resistant inner liner.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DISODIUM METASILICATE		30-50%
CAS number: 6834-92-0	EC number: 229-912-9	REACH registration number: 01-2119449811-37-XXXX
Classification	Classification (67/548/EEC or 1999/45/EC)	
Met. Corr. 1 - H290	C;R34 Xi;R37	
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
STOT SE 3 - H335		
SODIUM CARBONATE		30-50%
CAS number: 497-19-8	EC number: 207-838-8	REACH registration number: 01-2119485498-19-XXXX
Classification	Classification (67/548/EEC or 1999/45/EC)	
Eye Irrit. 2 - H319	Xi;R36	

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Alcohols, C13-15, branched and linear, ethoxylated		5-15%
CAS number: 157627-86-6		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302	Xn;R22. Xi;R41. R52/53.	
Eye Dam. 1 - H318		
Aquatic Chronic 3 - H412		
SODIUM HYDROXIDE		1-5%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX
Classification	Classification (67/548/EEC or 1999/45/EC)	
Met. Corr. 1 - H290	C;R35	
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Get medical attention if any discomfort continues. Move affected person to fresh air at once.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. DO NOT induce vomiting. Get medical attention immediately. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Give milk instead of water if readily available.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention promptly if symptoms occur after washing. Chemical burns must be treated by a physician.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Severe irritation of nose and throat. Burns to mucous membranes
Ingestion	May cause chemical burns in mouth and throat. May cause stomach pain or vomiting. Diarrhoea.
Skin contact	Burning pain and severe corrosive skin damage.
Eye contact	Severe irritation, burning and tearing. Corneal damage.

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

Notes for the doctor	Treat symptomatically. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards No unusual fire or explosion hazards noted.

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Hazardous combustion products Does not decompose when used and stored as recommended.

5.3. Advice for firefighters

Protective actions during firefighting If risk of water pollution occurs, notify appropriate authorities. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers. Provide adequate ventilation. Neutralise spilled material with diluted hydrochloric acid. Do not touch or walk into spilled material. Inform authorities if large amounts are involved.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Corrosive storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

DISODIUM METASILICATE

Short-term exposure limit (15-minute): 2 mg/m³

SODIUM CARBONATE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ resp.dust

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

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WEL = Workplace Exposure Limit

SODIUM CARBONATE (CAS: 497-19-8)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Workers - Inhalation; Long term local effects: 10 mg/m ³

PENTASODIUM TRIPHOSPHATE (CAS: 7758-29-4)

DNEL	Workers - Dermal; Short term systemic effects: 0.375 mg/kg bw/day Workers - Inhalation; Short term systemic effects: 0.661 mg/m ³ Workers - Dermal; Long term systemic effects: 0.375 mg/kg bw/day Workers - Inhalation; Long term systemic effects: 0.661 mg/l General population - Dermal; Short term systemic effects: 0.375 mg/kg dw General population - Inhalation; Short term systemic effects: 0.66 mg/kg bw/day General population - Oral; Short term systemic effects: 0.75 mg/kg dw General population - Oral; Long term systemic effects: 0.75 mg/kg bw/day General population - Inhalation; Long term systemic effects: 0.661 mg/m ³ General population - Dermal; Long term systemic effects: 0.375 mg/kg bw/day
PNEC	- Fresh water; 0.005 mg/l - Marine water; 0.005 mg/l - Intermittent release, Fresh water; 0.05 mg/l - Sediment (Freshwater); 0.19 mg/kg - Soil; 0.14 mg/kg

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL	Consumer - Inhalation; Long term local effects: 10 mg/m ³ Workers - Inhalation; Long term local effects: 10 mg/m ³ Industry - Inhalation; Long term local effects: 1 mg/m ³
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

No specific ventilation requirements.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Wear protective gloves made of the following material: Butyl rubber. Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC).

Other skin and body protection

Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of skin contact. Impervious footwear must be worn.

Hygiene measures

Do not eat, drink or smoke when using this product.

Respiratory protection

Use Dust Masks to BS2091 Type B or equivalent. Particulate filter, type P2.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Granules.
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Colour	Yellow. Brown.
Odour	Odourless.
pH	pH (diluted solution): 12.5-13.5 @ 1 %
Solubility(ies)	Soluble in water.

9.2. Other information

Other information	Not available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Acids.
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10.2. Chemical stability

Stability	Avoid the following conditions: Avoid contact with acids.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid contact with water. Avoid contact with the following materials: Avoid contact with acids.
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10.5. Incompatible materials

Materials to avoid	Strong acids.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	7,309.94152047
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Inhalation	May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
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Ingestion	May cause chemical burns in mouth, oesophagus and stomach. Swallowing concentrated chemical may cause severe internal injury.
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Skin contact	Causes severe burns.
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Eye contact	This product is strongly corrosive. Causes severe skin burns and eye damage. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight. Immediate first aid is imperative.
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Toxicological information on ingredients.

DISODIUM METASILICATE

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 5,001.0 mg/kg)

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Species	Rat
ATE dermal (mg/kg)	5,001.0
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	- NOAEL >159 mg/kg/day, , Rat
Reproductive toxicity - development	Developmental toxicity: - NOAEL: >200 mg/kg/day, , Mouse
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 227 mg/kg/day, Oral, Rat NOAEL 260 mg/kg/day, Oral, Mouse

SODIUM CARBONATE

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	2,800.0
Species	Rat
ATE oral (mg/kg)	2,800.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	2,001.0
Species	Rabbit

Alcohols, C13-15, branched and linear, ethoxylated

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	500.0
Species	Rat

SECTION 12: Ecological Information

Ecotoxicity The product contains a substance which is very toxic to aquatic organisms. The levels of environmentally hazardous materials are below the limit that would cause the preparation to be classified as Dangerous to the Environment.

12.1. Toxicity

Toxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

Ecological information on ingredients.

DISODIUM METASILICATE

Acute toxicity - fish	LC ₅₀ , 96 hours: 124 (24h - Brachydanio rerio) mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 300 (24h) mg/l, Daphnia magna

SODIUM CARBONATE

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Acute toxicity - fish	LC ₅₀ , 96 hours: 300 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 200-227 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: >2420 mg/l, Algae

Alcohols, C13-15, branched and linear, ethoxylated

Acute toxicity - fish	LC ₅₀ , 96 hours: 1-10 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1-10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 1-10 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC ₁₀ , : >1000 mg/l, Activated sludge
Chronic toxicity - aquatic invertebrates	NOEC, : >0.1-<1 mg/l,

SODIUM HYDROXIDE

Acute toxicity - fish	LC ₅₀ , 96 hours: 35-189 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 40-240 mg/l, Daphnia magna EC ₅₀ , 48 hours: 40 mg/l, Crustaceans

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility Not applicable.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 14: Transport information

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Road transport notes TREM CARD: LX2

14.1. UN number

UN No. (ADR/RID) 3262

14.2. UN proper shipping name

Proper shipping name (ADR/RID) CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. containing Sodium Hydroxide and Disodium Trioxosilicate

Proper shipping name (IMDG) CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. containing Sodium Hydroxide and Disodium Trioxosilicate

Proper shipping name (ICAO) CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. containing Sodium Hydroxide and Disodium Trioxosilicate

Proper shipping name (ADN) CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. containing Sodium Hydroxide and Disodium Trioxosilicate

14.3. Transport hazard class(es)

ADR/RID class 8

Transport labels



14.4. Packing group

ADR/RID packing group II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Water hazard classification The surfactants contained in this preparation have been classified as biodegradable.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments Revision is in accordance with Commission Regulation (EC) No 1272/2008

Sapphire Plus

Revision date	25/02/2015
Revision	2
Supersedes date	25/04/2013
SDS number	7519/21838
Risk phrases in full	R22 Harmful if swallowed. R34 Causes burns. R35 Causes severe burns. R36 Irritating to eyes. R37 Irritating to respiratory system. R41 Risk of serious damage to eyes. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard statements in full	H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.