

GREENFLOC[®] 213A

1. Identification of the substance/preparation and of the company

Identification of the product

Product name: **Greenfloc 213A** anionic flocculant

Manufacturer/supplier identification

HYDRA 2002 Research, Development and Consulting Ltd.

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2. Composition/information on ingredients

Starch derivative, starch phosphate

CAS-No.: 11120-02-8

OH⁻-groups of the native starch – (C₆H₁₀O₅)_n – are partly substituted by [PO₄]³⁻-groups (DS≈0,03).

3. Hazards identification

According to the results of the study No.2415/1991/OÉTI (National Institute of Food-Hygiene and Nutrition) the material should be enlisted in the practically non toxic category.

4. First aid measures

After inhalation: fresh air.

After skin contact: wash off water.

After eye contact: rinse out with water.

After swallowing (large amounts): consult doctor if feeling unwell.

5. Fire-fighting measures

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

Special risks: Combustible. Danger of dust explosion.

6. Accidental release measures

Person-related precautionary measures: Avoid generation of dusts; do not inhale dusts.

Procedures for cleaning/absorption: Clean up affected area. Avoid generation of dusts. Wet floor may be slippery when material is present.

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. Dry. No further requirements. At +5°C-+25°C.

8. Exposure control/personal protection

Personal protective equipment

Respiratory protection:	required when dusts are generated.
Eye protection:	required.
Hand protection:	use recommended.
Industrial hygiene:	Wash hands after working with substance. Change contaminated clothing.

9. Physical and chemical properties

Form:	powder
Colour:	pale yellow
Odour:	odourless
pH value:	pH=7 in 100 g/L H ₂ O slurry
Melting point:	not available
Boiling point:	not available
Ignition temperature:	~ 400 °C
Flash point:	not available
Explosion limits	lower: not available upper: not available
Density:	not available
Bulk density:	500-700 kg/m ³
Solubility in water:	insoluble in cold water, after swelling partially soluble in hot water.
Thermal decomposition:	~ 200 °C

10. Stability and reactivity

Conditions to be avoided

Strong heating (decomposition)

Substances to be avoided

Strong oxidising agents, strong acids

Hazardous decomposition products

No information available.

11. Toxicological information

Acute toxicity

LD₅₀ value is higher than 5.0 g/body mass kg (both in male and female rats).

Further toxicological information

Possible effects: After skin contact slight irritation
Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

No toxic effects are to be expected when the product is handled appropriately.

The product should be handled with care usual when dealing with chemicals.

Approved flocculant for food industry (2415/1991/OÉTI) and for drinking water treatment (OTH-2748/2003).

12. Ecological information

Biological degradation: Readily biodegradable.

Ecotoxic effects: Unlikely to cause harmful effects.

No ecological problems are to be expected when the product is handled and used with care and attention.

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations.

Packaging:

Packaging must be disposed of in compliance with the respective national regulations.

14. Transport information

Not subject to transport regulations.

15. Regulatory information

Labelling according to EC Directives:

Symbol: -

R-phrases -

S-phrases -

The information contained here 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.