

Safety data sheet according to Regulation
(EU) n. 2020/878

Edition: 2
Revision: 7
Date of revision: 16/9/2025

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

1.1. Product identifier

Identification of the substance:

Trade name: AP 810 - 810-A - 810 K - 810 K5 - 810 P
Chemical name: Decabromodiphenyl Ethane

CAS number: 84852-53-9
EC number: 284-366-9
REACH registration no.: 01-2119474877-18-0009

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

Recommended use:

Flame retardant.

Uses advised against:

Any use other than those recommended.

1.3. Details of the supplier of the safety data sheet

EVERKEM S.r.l.
Via Gioacchino Murat, 23
20159 Milano
Tel. +39-0267076513
Fax. +39-0267076516

Competent person responsible for the safety data sheet:
tecnico@everkem.it

1.4. Emergency telephone number

National Poisons Information Service (NPIS) - ENGLAND and SCOTLAND
111
National Poisons Information Service (NPIS) - WALES
0845 46 47

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as hazardous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

This substance has no PBT, vPvB or endocrine disrupting properties
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Identification of the substance:
Chemical characterization: AP 810 - 810-A - 810 K - 810 K5 - 810 P
CAS number: 84852-53-9
EC number: 284-366-9
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REACH registration no.: 01-2119474877-18-0009

3.2. Mixtures

Not Applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

In case of eye contact: rinse with water keeping eyelids opened. Consult the doctor.

In case of skin contact: remove immediately contaminated clothes, wash skin with water and soap.

In case of inhalation: bring the person in the open air, keep warm and let rest.

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
For non emergency personnel:
Wear personal protection equipment.
Do not breathe product powder and avoid contact with skin and eyes
See protective measures under point 7 and 8.
For emergency responders:
Fist-gloves.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
- 6.3. Methods and material for containment and cleaning up
For containment:

For cleaning up:

Dispose or recover the collected material according to local and/or national laws and regulations.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Do not eat, drink or smoke when using this product.
- 7.2. Conditions for safe storage, including any incompatibilities
Store in a dry, cool and well-ventilated place. Keep containers tightly closed. Protect from contamination.
Avoid producing and accumulating dust.
Keep away from heat, flame and sparks.
Keep away from food, drink and feed.
Incompatible materials:
Keep away from acids.
See also paragraph 10.
Instructions as regards storage premises:
Adequately ventilated premises.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters

No occupational exposure limit available
 DNEL Exposure Limit Values
 Decabromodiphenyl Ethane - CAS: 84852-53-9
 Consumer: 80 mg/kg - Exposure: Human Oral - Frequency: Short Term (acute)
 Consumer: 80 mg/kg - Exposure: Human Oral - Frequency: Long Term (repeated)
 Worker Industry: 6 mg/m³ - Worker Professional: 6 mg/m³ - Consumer: 70 mg/m³ -
 Exposure: Human Inhalation - Frequency: Long Term (repeated)
 PNEC Exposure Limit Values
 Decabromodiphenyl Ethane - CAS: 84852-53-9
 Target: Fresh Water - Value: 110 mg/l
 Target: Freshwater sediments - Value: 100 mg/kg
 Target: Marine water sediments - Value: 10 mg/kg
 Target: Soil (agricultural) - Value: 156 mg/kg
 Target: Microorganisms in sewage treatments - Value: 2500 mg/l

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Suitable protective clothes.

Protection for hands:

Protective gloves.

Respiratory protection:

Particle filter device (DIN EN 143).

Thermal Hazards:

None

Environmental exposure controls:

Avoid spillage in waterways. Do not discharge into surface water or into the drainage system.

Avoid spilling in the environment in general.

Appropriate engineering controls:

Ensure adequate ventilation and extraction of work areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Solid	--	--
Colour:	White	--	--
Odour:	Odorless	--	--
Melting point/freezing point:	350°C	--	--
Boiling point or initial boiling point and boiling range:	Not defined/ Not available	--	--
Flammability:	Not Applicable	--	--
Lower and upper explosion limit:	Not defined/ Not available	--	--
Flash point:	Not defined/ Not available	--	--
Auto-ignition temperature:	Not defined/ Not available	--	--

Decomposition temperature:	Not defined/ Not available	--	--
pH:	Not defined/ Not available	--	--
Kinematic viscosity:	Not Applicable	--	--
Solubility in water:	Not defined/ Not available	--	--
Solubility in oil:	Not defined/ Not available	--	--
Partition coefficient n-octanol/water (log value):	3.55	--	--
Vapour pressure:	Not defined/ Not available	--	--
Density and/or relative density:	2.67 g/cm ³ (20°C)	--	--
Relative vapour density:	Not defined/ Not available	--	--
Particle characteristics:			
Particle size:	Not Applicable	--	--

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Keep away from heat, flame and sparks.
Avoid producing and accumulating dust.

10.5. Incompatible materials

Oxidizing and reducing agents.
Acids.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂)
Hydrogen bromide (HBr)

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the substance:

Decabromodiphenyl Ethane - CAS: 84852-53-9

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

Test: LD50 - Route: Oral - Species: Mouse > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

11.2. Information on other hazards

Endocrine disrupting properties:

This substance has no endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Not Applicable

12.2. Persistence and degradability

Not Applicable

12.3. Bioaccumulative potential

Not Applicable

12.4. Mobility in soil

Not Applicable

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

This substance has no endocrine disrupting properties

12.7. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number or ID number
Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name
Not Applicable

14.3. Transport hazard class(es)
Not Applicable

14.4. Packing group
Not Applicable

14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user
Not Applicable

14.7. Maritime transport in bulk according to IMO instruments
Not Applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the substance.

SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of
Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical
Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of
Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport
Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"
(ICAO).

IMDG: International Maritime Code for Dangerous Goods.

AP 810 - 810-A - 810 K - 810 K5 - 810 P

INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.