



Safety Data Sheet version 2.2 dated 24/5/2022

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

1.1. Product identifier

Trade name:

K-BOMBER 56

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

Fertiliser in powder. Agricultural use.

1.3. Details of the supplier of the safety data sheet

Company:

Biolchim S.p.A. - Via San Carlo 2130 - 40059 Medicina (BO) - Italy

Biolchim spa - tel 051 6971811

NZ Supplier:

Biolchim NZ Ltd – PO Box 5451, Mt Maunganui, 3150, New Zealand – Phone 027 272 0799

Competent person responsible for the safety data sheet:

biolchim@biolchim.it

1.4. Emergency telephone number

0800 764 766 (National Poison Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

HSNO Approval Number, Group Standards: HSR002571 Fertilisers (Subsidiary Hazard).

HSNO Hazard Class

6.3A Irritating to the skin

6.4A Irritating to the eye

EC regulation criteria 1272/2008 (CLP)



Warning, Eye Irrit. 2, Causes serious eye irritation.



Warning, Skin Irrit. 2, Causes skin irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H319 Causes serious eye irritation.

H315 Causes skin irritation.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P264 Wash thoroughly with water after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special Provisions:

None

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

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards:

No other hazards


SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
$\geq 12.5\%$ - < 15%	Tetrapotassium pyrophosphate	CAS: 7320-34-5 EC: 230-785-7 REACH No.: 01-2119489369-18	 3.3/2 Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water for at least 30 min.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for at least 30 min., then consult an ophthalmologist immediately. If possible, remove any contact lenses.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting.

Seek immediate medical attention.

Do not give anything that is not expressly authorized by your doctor.

In case of Inhalation:

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

First aid self-protection:

Adopt adequate precautions for the rescuer in accordance with the contents of the first aid kit (Ministerial Decree No. 388/2003)

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

There are no known specific episodes on symptoms caused by the product.

For possible effects due to product exposure, please refer to the hazard warnings in section 2.

For information on the substances contained, see sections 3 and 11.

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



Safety Data Sheet

K-BOMBER 56

In the event of an accident or discomfort, immediately consult a POISON CENTER / doctor (if possible, show the instructions for use or the safety data sheet).

Treatment:

No specific treatments related to the product are known. Contact specialized medical personnel.

For information on the substances contained, see sections 3 and 11.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder and water.

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.

Burning produces heavy smoke.

5.3. Advice for firefighters

Cool the containers with jets of water.

Always wear full fire protection equipment.

Collect the extinguishing water which must not be fed into the sewers.

Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations.

EQUIPMENT:

Normal clothing for firefighting, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN 469), flame retardant gloves (EN 659) and fire brigade boots (HO A29 or A30).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

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.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

For containment:

Collect the product for re-use, if possible, or for disposal.

For recovery or disposal, vacuum or clean and place in appropriate labeled containers.

For cleaning up:

Provide sufficient ventilation of the place affected by the leak. Disposal of contaminated material must be carried out in accordance with the provisions of section 13.

Clear spills immediately

6.4. Reference to other sections

Any information regarding personal protection and disposal is given in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle the product after consulting all the other sections of this safety data sheet.

Avoid the dispersion of the product in the environment outside the indicated uses.

Avoid contact with skin and eyes, inhalation of vapors and mists.

See also section 8 for recommended protective equipment.

- Advice on general occupational hygiene:
Do not eat, drink or smoke when using this product.
Wash hands after use
Contaminated clothing should be changed before entering eating areas.
- 7.2. Conditions for safe storage, including any incompatibilities
Keep the product in clearly labeled containers.
Store with care and attention, avoiding precarious storage.
Keep the containers closed in a well-ventilated place.
Store the containers in a dry place away from sunlight or other atmospheric agents.
Keep away from food, drink and feed.
Incompatible materials:
See the following paragraph 10.
Instructions as regards storage premises:
Cool and adequately ventilated.
- 7.3. Specific end use(s)
Refer to section 1.2

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
No occupational exposure limit available
DNEL Exposure Limit Values
Tetrapotassium pyrophosphate - CAS: 7320-34-5
Worker Industry: 17.63 mg/m³ - Worker Professional: 17.63 mg/m³ - Consumer: 4.35 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
PNEC Exposure Limit Values
N.A.
- 8.2. Exposure controls
Eye protection:
Eye glasses with side protection.
(see standard EN 166)
Protection for skin:
Disposable suit.
(see standard EN 13034)
Safety shoes.
(see standard UNI EN ISO 20345)
Protection for hands:
Suitable gloves type:
One-time gloves.
Suitable material:
NBR (nitrile rubber).
(see standard EN 374)
Wash hands before eating, drinking or smoking.
Respiratory protection:
Avoid inhaling the product.
Provide adequate ventilation. Good local ventilation and a good general air exchange system must be ensured.
Thermal Hazards:
None
Environmental exposure controls:
Use according to good working practices, avoiding to disperse the product in the environment.
Do not discharge the product into the sewers.
Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

Safety Data Sheet K-BOMBER 56

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Solid	--	--
Colour:	White	--	The product may undergo color changes that are not relevant for classification and product quality.
Odour:	Not Relevant	--	Not relevant for product classification purposes.
Melting point/freezing point:	Not Relevant	--	Melting point higher than the temperature range of use of the product.
Boiling point or initial boiling point and boiling range:	Not Relevant	--	Boiling point higher than the temperature range of use of the product.
Flammability:	Non-flammable	--	--
Lower and upper explosion limit:	N.A.	--	Not flammable.
Flash point:	N.A.	--	NOT FLAMMABLE: mixture consisting of inorganic components (Annex VII REACH) and / or non-flammable organic components.
Auto-ignition temperature:	N.A.	--	Not flammable.
Decomposition temperature:	Not Relevant	--	Decomposition temperature higher than the temperature range of use of the product.
pH (20°C):	9.2 (sol. 1% w/w)	--	--
Kinematic viscosity:	N.A.	--	solid
Solubility in water:	Soluble	--	--
Solubility in oil:	Not Relevant	--	Not relevant for classification and use of the product.
Partition coefficient n-octanol/water (log value):	N.A.	--	See paragraph 12 for values referring to individual substances.
Vapour pressure:	N.A.	--	Solid
Density and/or relative density:	1.22 Kg/dm ³	--	--
Relative vapour density:	N.A.	--	Solid
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.	--	Solid
Conductivity (25°C):	14.1 mS/cm (sol. 1% w/w)	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

Substances Information:

- N.A.
- 10.2. Chemical stability
Stable under normal conditions
Substances Information:
N.A.
- 10.3. Possibility of hazardous reactions
None
Substances Information:
Tetrapotassium pyrophosphate - CAS: 7320-34-5
The substance reacts violently with:
Oxidizing agents
Strong acids.
- 10.4. Conditions to avoid
Stable under normal conditions.
Substances Information:
N.A.
- 10.5. Incompatible materials
None in particular.
Substances Information:
Tetrapotassium pyrophosphate - CAS: 7320-34-5
Strong acids
- 10.6. Hazardous decomposition products
According to the data in our possession, no one in particular to report.
Substances Information:
N.A.

SECTION 11: Toxicological information

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

Toxicological information of the product:

K-BOMBER 56

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

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

Toxicological information of the main substances found in the product:

Tetrapotassium pyrophosphate - CAS: 7320-34-5

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 1.1 mg/l - Notes: OECD 403, EU method B.2

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg bw

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg bw - Notes: OECD 402

b) skin corrosion/irritation:

Species: Rabbit Negative - Notes: OECD 404

c) serious eye damage/irritation:

Species: Rabbit Positive - Notes: OECD 405

d) respiratory or skin sensitisation:

Species: Rat Negative - Notes: OECD 429

i) STOT-repeated exposure:

Test: NOAEL - Route: Oral - Species: Rat 500 mg/kg bw/day - Notes: OECD 408

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration \geq 0.1%

SECTION 12: Ecological information

12.1. Toxicity

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

K-BOMBER 56

Not classified for environmental hazards

Based on available data, the classification criteria are not met

Tetrapotassium pyrophosphate - CAS: 7320-34-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish \geq 100 mg/l - Duration h: 96 h - Notes: Oncorhynchus Mykiss, OECD 203

Endpoint: EC50 - Species: Daphnia 100 mg/l - Duration h: 48 h - Notes: Daphnia magna, EPA OTS 797.1300

Endpoint: EC50 - Species: Active mud \geq 1000 mg/l - Duration h: 3 h - Notes: FANGO ATTIVO, OECD 209

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72 h - Notes: Desmodesmus subspicatus, OECD 201, E-U method C.3

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 100 mg/l - Duration h: 96 h - Notes: Oncorhynchus Mykiss, OECD 203

Endpoint: NOEC - Species: Shellfish \geq 100 mg/l - Duration h: 48 h - Notes: Daphnia magna, OECD 202

Endpoint: NOEC - Species: Algae \geq 100 mg/l - Duration h: 72 h - Notes: OECD 201

Endpoint: NOEC - Species: Active mud 1000 mg/l - Duration h: 3 h - Notes: FANGO ATTIVO, OECD 209

12.2. Persistence and degradability

None

N.A.

12.3. Bioaccumulative potential

Tetrapotassium pyrophosphate - CAS: 7320-34-5

Bioaccumulation: Not bioaccumulative

12.4. Mobility in soil

N.A.



Safety Data Sheet

K-BOMBER 56

- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration $\geq 0.1\%$
- 12.7. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Do not dispose of the unused product and the container in the environment.
The dangerousness of the waste that partially contains this product must be evaluated according to the laws in force.
Disposal must be entrusted to an authorized waste management company, in compliance with national and possibly local regulations.
CONTAMINATED PACKAGING:
Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14: Transport information

This product is NOT classified as a Dangerous Good for transport in NZ; NZS 5433:2012

- 14.1. UN number or ID number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
Marine pollutant: No
N.A.
- 14.6. Special precautions for user
N.A.
- 14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
HSNO Approval Number, Group Standards: HSR002571 Fertilisers (Subsidiary Hazard).
HSNO Classification: 6.3A, 6.4A
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)
International Regulations of the transport of dangerous goods (ADR, RID, IMDG, ICAO/IATA).
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)

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)
 Regulation (EU) 2019/1148

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 mixture.

Substances for which a Chemical Safety Assessment has been carried out:

Tetrapotassium pyrophosphate

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Eye Irrit. 2, H319	Calculation method
Skin Irrit. 2, H315	Calculation method

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.

Safety Data Sheet K-BOMBER 56

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.
EPA:	Environmental Protection Authority
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HSNO:	Hazardous Substances and New Organisms.
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.
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.