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

1.1. Product identifier

1.1.1. Trade name: Polytanol

1.1.2. Active substance: Calcium phosphide (18% w/w)

EC No: 215-142-0 CAS No: 1305-99-3

CIPAC No: 505

REACH Registration number: The active substance is

considered in accordance with Article 15, Section 1 of Regulation

(EC) No 1907/2006 as registered.

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

1.2.1. Relevant identified uses

Use Category Description:

Life cycle stage PW: Widespread use by professional workers

C: Consumer use (Home garden and allotment)

Sectors of use SU1: Agriculture

Technical function Plant protection product (fumigants for controlling voles and

moles)

1.2.2. Uses advised against

not known

1.3. Details of the supplier of the safety data sheet

Chemische Fabrik Wülfel GmbH & Co. KG

Hildesheimer Straße 305, D-30519 Hanover, Germany Phone.: 0049 511 98496-0, Fax: 0049 511 98406-40

E.mail address of the person responsible for

Safety Data Sheet: cfw@wuelfel.de

Web: www.wuelfel.de

1.4. Emergency telephone number

00 49 511 98496-0 (Office hours: Monday - Thursday 8 o'clock

a.m. to 4 o'clock p.m.)

or

Poison control center north (Bremen, Hamburg, Lower Saxony,

Schleswig-Holstein)

Tel.: 00 49 551 19 24 0 (24h emergency call)

SECTION 2: Hazards identification

2.1 Classification of the mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP Regulation)

Water-react. 1, H260 Acute Tox. 3, H301

Acute Tox. 1, H330 (see subsection 11.1.1.)

Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, RTI, H335 Aquatic Acute 1, H400

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2.2. Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard-determining substances for labelling: calcium phosphide (tricalcium diphosphide), calcium oxide (calcium monoxide)

Hazard pictograms









GHS02

GHS05

GHS06

GHS09

Signal word: Danger

Hazard statements:

H260: In contact with water releases flammable gases which may ignite spontaneously.

H301: Toxic if swallowed.

H330: Fatal if inhaled. (see subsection 11.1.1.)

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

Supplemental Hazard information (EU):

EUH029: Contact with water liberates toxic gas.

EUH032: Contact with acids liberates very toxic gas.

EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

Prevention:

P102: Keep out of reach of children.

P223: Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P233: Keep container tightly closed.

P261: Avoid breathing dust/fume/ gas/mist/vapours/spray.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

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

Reaction:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P335+P334: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

P304+P340+P310: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eve irritation persists: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention. P362+P364: Take off contaminated clothing and wash before reuse. P370+P378: In case of fire: Use dry sand or dry powder for extinction.

Storage:

P402+P404: Store in a dry place. Store in a closed container.

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Disposal:

P501: Dispose of contents/container to the hazardous waste site or the manufacturer.

2.2.2. Regulation (EU) No 547/2011 (Labelling requirements for plant protection products)

Safety phrases according to Annex III

- SP 1: Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
- SPo 1: After contact with skin, first remove product with a dry cloth and then wash the skin with plenty of water.
- SPo 2: Wash all protective clothing after use.
- SPo 4: The container must be opened outdoors and in dry conditions.
- SPe 3: To protect aquatic organisms/non-target plants/non-target arthropods/insects respect an unsprayed buffer zone of (distance to be specified) to non-agricultural land/surface water bodies.
- SPe 6: To protect birds/wild mammals remove spillages.

2.3. Other hazards

See subsections 15.1.1. and 15.1.2.

The mixture does not meet the PBT / vPvB criteria as an inorganic substance according to Annex XIII of the REACH Regulation.

SECTION 3: Composition/information on ingredients

3.1. Substances

The product does not represent a pure chemical substance.

3.2. Mixtures

Component	CAS	EC No	REACH	Content	CLP Reg	Julation
	No		Registration	w/w %	Hazard class,	Hazard
			No		hazard	statements
					category	
calcium phosphide	1305-	215-	The active	18	Water-react.	H260
(tricalcium	99-3	142-0	substance is		1	
diphosphide)1)			considered in		Acute Tox. 2	H300
			accordance		Acute Tox. 3	H311
			with Article 15,		Acute Tox. 1	H330
			paragraph 1		Eye Dam. 1	H318
			of		Aquatic	H400
			Regulation		Acute 1	
			(EC) No			Suppl.
			1907/2006		M-Factor =	Hazard
			(REACH		100	statement
			regulation) as			Code(s):
			registered.			EUH029
						EUH032
calcium phosphate	7758-	231-	01-	≤ 45	not classified a	s hazardous
(tricalcium	87-4	840-8	2119490077-		according	g to the
bis(orthophosphate)) ²⁾			34		CLP Reg	julation
calcium oxide	1305-	215-	01-	≤ 35	Skin Irrit. 2	H315
(calcium monoxide) ²⁾	78-8	138-9	2119475325-		Eye Dam. 1	H318
			36		STOT SE 3	H335

¹⁾ Harmonised classification (see Table 3 (Appendix VI) of Regulation No (EC) 1272/2008).

²) See the ECHA's classification and labelling inventory (C&L inventory).

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3.3. Additional information

The text of H statements, which was not mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first-aid measures

4.1.1. General informations

Remove all contaminated clothing.

The victim is to bring to fresh air, lie down comfortably, loosen tight clothing.

4.1.2. In case of eye contact

Rinse widely opened eye for several minutes under running water. Is advisable to use a eyewash. Remove contact lenses, if present and easy to do. Further treatment by an ophthalmologist.

4.1.3. In case of skin contact

Affected parts of the body wash immediately with plenty of soap and water, seek medical attention if necessary.

4.1.4. Following ingestion

Immediately drink sips of water. Inform the doctor. Possibly gastric lavage.

4.1.5. Following inhalation

a) Inhalation of low gas volumes:

Fresh air, possibly oxygen respiration or inhalation of a glucocorticoid-containing aerosols (eg Ventolair ®). The function of circulation, lungs, liver and kidneys is observed. If in doubt consult a doctor.

b) After intense inhalation of dust or gas:

Remove victim to fresh air, apply artificial respiration if necessary. Extreme caution when resuscitation by donation of breath! Necessarily call a doctor to the place of accident!

4.1.6. Self-protection of the First Aider

Avoid contact with substance still present.

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

Prolonged latency is expected with phosphine intoxication. Respiratory paralysis can appear in certain cases even after 24 hours.

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

The vital function is to control, if necessary, perform a shock treatment, artificial respiration with respiratory failure and a one extrathoracic heart massage for cardiac arrest or ventricular fibrillation. Administer symptomatic treatment of cramp attacks, high dosage of corticoids if impending lung oedema, electrolyte balance if necessary, possibly hospitalization.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: dry sand, dry carbon dioxide, Class C fire extinguishers Unsuitable extinguishing media: water, foam

5.2. Special hazards arising from the substance or mixture

In contact with water, the substance can ignite.

5.3. Advice for fire-fighters

On contact with water in closed rooms can develop an explosive Hydrogen phosphide/air-mixture (s. also subsection 5.2).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing, skin and eye contact are through goggles and

gloves to prevent and, where appropriate respiratory protection. It is to ensure good ventilation.

6.2. Environmental precautions

Polytanol (calcium phosphide) may not be discharged into drains or waterways.

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6.3. Methods and material for containment and cleaning up

The contents of leaking packages must be decant to equivalent containers, not tightly close. Granules sweep up and remove mechanically. It should not be stirred up dust.

Granules should be filled into suitable containers and these do not close tightly, because contamination with moisture is likely.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Follow the safety instructions in subections 2.2.1., and 2.2.2., respectively!

Before using container tightly closed, after removing the substance container tightly closed again.

7.2. Conditions for safe storage, including any incompatibilities

The product is always dry and stored only in the original package.

The product should be stored in remote locations of dwellings, in well ventilated areas, separate from foodstuffs, beverages and animal feedstocks.

Recommended storage temperature: -5 ° C to +30 ° C.

Take notice of TRGS 510 "Storage of hazardous substances in non-stationary containers" (in Germany).

Note on joint storage:

See Section 7 and Table 7.2 in the TRGS 510 "Storage of hazardous substances in non-stationary containers". (in Germany)

Hints for protection against fire and explosion:

Keep away from sources of ignition, do not smoke.

Storage class: 4.3 (Substances which, in contact with water, emit flammable gases), in Germany

7.3. Specific end uses

Plant protection product (Fumigants) - Rodenticide

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure limits

Substance name	CAS No	value / unit of measurement
Hydrogen phosphide (IUPAC: Phosphane)	7803-51-2	0.1 ml/m³ (0.1 ppm) 0.14 mg/m³
Calcium oxide	1305-78-8	1 mg/m ³ (respirable fraction)

8.1.2. DNEL/PNEC-Values

DNEL (systemic) The data of calcium phosphate and calcium oxide are taken from REACH registration dossiers. The entries for calcium phosphide and hydrogen phosphide are taken from the DAR calcium phosphide. Route Substance Worker General population Calcium phosphate 4.07 mg/m³ 3.04 mg/m³ Inhalation (long-term Calcium oxide no sufficiently accurate data available exposition) Calcium phosphide A DNEL is not A DNEL is not available. available. AOEL (systemic): 0.030 mg/kg bw/d

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Hydrogen phosphide AOEL (systemic): 0.042 µg/l air (0.03 ppm) DNEL (local) The information has been taken from the REACH registration dossier of calcium oxide. Route Substance Worker General population Inhalation (long-term exposition) Inhalation (short-term exposition) PNEC The data of calcium phosphate and calcium oxide are taken from REACH registration dossiers. Substance Calcium phosphate Calcium oxide Freshwater Seawater Sediment (Freshwater) Sediment (Seawater) NOBEL (systemic): 0.042 µg/l air (0.03 ppm) A DNEL is not available.						
DNEL (local) The information has been taken from the REACH registration dossier of calcium oxide. Route Substance Worker General population Inhalation (long-term exposition) Inhalation (short-term exposition) PNEC The data of calcium phosphate and calcium oxide are taken from REACH registration dossiers. Substance Calcium phosphate Calcium oxide Freshwater Seawater Sediment (Freshwater) Sediment (Seawater) One of calcium oxide (0.03 ppm) Horizontal population 1.0 mg/m³ 4.0 mg/m³ 4.0 mg/m³ Calcium oxide are taken from REACH registration dossiers. Calcium oxide One oxide oxide are taken from REACH registration dossiers. One oxide oxide oxide are taken from REACH registration dossiers. Substance Calcium oxide oxid		Hydroge	en phosphide	AOEL (syste	emic):	A DNEL is not
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Sediment (Freshwater) no sufficiently accurate data sediment (Seawater) no sufficiently accurate data available available	Freshwater					0.37 mg/l
Sediment (Seawater) available available	Seawater					0.24 mg/l
Sediment (Seawater) available available	Sediment (Freshwater)		no sufficiently a	accurate data	no suffi	iciently accurate data
047.4 // 31.1	Sediment (Seawater)		availa			•
Soil	Soil			817	7.4 mg/kg soil dw	

8.2. Exposure controls

8.2.1 Personal protective equipment

8.2.1.1 Eye / Face protection

Tightly fitting protective goggles required.

8.2.1.2 Respiratory protection:

Short-term, respiratory filter device with gas/ particle filter B2 - P2.

8.2.1.3 Skin protection

Chemical protective gloves, e.g. consisting of PVC or PE (Check for damage before use), Penetration time (value for permeation: Level 6, > 480 min, EN 374)

8.2.2 General health and safety measures

Avoid unnecessary contact with the product.

Wash hands after work, change contaminated clothing.

While using do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value / Description
Appearance	red-brown to dark brown granules
Odour	carbide similar
Odour threshold	0.01 – 0.1 ppm (person-specific)
pH (20 °C)	12.6, according to OECD Test Guideline
	122, spontaneous decomposition in water,
	formation of calcium hydroxide
Melting point or melting range	about 1600 °C (DAR Calcium phosphide)
Initial boiling point and boiling range	not known (DAR Calcium phosphide)
Flash point	not applicable, since solid
Evaporation rate	not measurable, since vapor pressure is very
	low
Flammability (solid)	non-flammable according to EC test method

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	A.10 (DAR Calcium phosphide)
	Note the information in subsection 9.2.
Upper/lower flammability or	see information in subsection 9.2.
explosive limits:	
Vapour Pressure (20 °C)	<1.0 * 10 ⁻⁵ hPa (EC test method A.4,
	application of the Antoine equation)
Vapour density	not determinable, since vapor pressure very
	low
Density:	2.5 g / cm³ (at 20 ° C), determined according
	to EC test method A.3
Bulk density:	1.35 g / cm³ (at 20 ° C), determined
_	according to CIPAC method MT 186
Solubilities	
Solubility in water	spontaneous decomposition in water
Partition coefficient: n-octanol/water	not determinable, since spontaneous
(log K _{OW})	decomposition in water
Auto-ignition temperature	no auto-ignition up to 400 ° C (EC test
	method A.16, DAR Calcium phosphide)
Decomposition temperature	not determined, since not relevant for use as
	bait
Viscosity	not applicable, since stable solid
Explosive properties	not applicable, since stable inorganic solid
	(insensitive to heat, impact or friction,
	contains no chemically unstable or high
	energetic groups)
Oxidising properties	not applicable, all components contain no
	oxidizing acting molecule groups

9.1.2 Additional relevant properties of substance group

The decomposition with water or even with the humidity as well as acids, which produces very toxic hydrogen phosphide (phosphane) and diphosphane (formerly called diphosphine), the latter ignites spontaneously in contact with atmospheric oxygen.

The lower explosive limit of hydrogen phosphide is 1.79% by volume, the upper explosive limit at 100% vol. The ignition temperature is about 100 ° C.

9.2. Other safety information

none

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with water and acids under heat formation to form hydrogen phosphide (phosphane) and diphosphane. The latter ignites spontaneously in air.

10.2. Chemical stability

In the dry state or in a dry environment, the substance is stable.

10.3. Possibility of hazardous reactions

See sub-section 10.1.

10.4. Conditions to avoid

The contact with water and acids must be avoided.

10.5. Incompatible materials

Water, acids and strong oxidizing agents.

10.6. Hazardous decomposition products

With water and acids are formed hydrogen phosphides, which are highly toxic and extremely flammable. For fires can form phosphorus pentoxide, which reacts with moisture to form phosphoric acid.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Acute toxicity

Acute oral toxicity

LD₅₀ (oral, rat): 72.32 mg / kg body weight (OECD Guideline 401)

This value is experimentally determined for a product with a content of 17.6% w/w calcium phosphide.

Acute dermal toxicity

For the acute dermal toxicity using the read-across-approach (reference substance: Aluminium phosphide (content: 85%): LD $_{50}$ (dermal, rat) = 461.2 mg / kg body weight, see DAR aluminum phosphide, Annex B .6, p.205-206, (2007))

is calculated a LD_{50} (dermal, rat) of 3423,3 mg/kg body weight for Polytanol $^{\circ}$ with 18% w/w calcium phosphide.

This value considerably exceeds the classification limit of 2000 mg / kg body weight by the CLP regulation.

This result indicates that a toxic hazard to the user through the product by absorption through the skin is unlikely.

Acute inhalative toxicity

From the outgassed hydrogen phosphide:

LC₅₀ (rat): 0.090 mg / I air in 4 hours (63.5 ppm) according to OECD guideline 403.

Note: Polytanol is only used outdoors by incorporation into the vole and mole holes. The gas is heavier than air and develops over a long period of time (1-2 hours) in the holes.

Hydrogen phosphide is slightly heavier than air (see table).

Gas	Weight per liter at
	20 ° C and 1013 hPa
hydrogen phosphide	1.417 g/L
(phosphane, formerly called	
phosphine)	
air	1.204 g/L

For this reason, the bulk of the resulting gas remains in the underground vole paths. Only small amounts of hydrogen phosphide released into the ambient air.

This results in a dilution so strong that a danger to the user may be excluded.

Model calculations performed (EU project EUBEES 2: J. Larsen, emission scenario document for biocides used as rodenticides, Danish EPA, 2003) provide a concentration ($C_{lokal\ (air)}$) of 0,08 mg/m³ (0,06 ppm) ppm hydrogen phosphide in the ambient air. This value is noticeably below the value of the OEL of 0.14 mg/m³ (0.1 ppm), see also subsection 8.1.1.

11.1.2 Skin corrosion/irritation

Causes irritation of the skin.

This result derives from the effect of the forming calcium dihydroxide in a humid environment. (using the analogy principle and the read across-approach according ECHA - Guidance on information requirements and chemical safety assessment, Chapter R.6: QSARs and grouping of chemicals, May 2008).

11.1.3 Eye damage/irritation

Causes serious eye damage.

This result derives from the effect of the forming calcium dihydroxide in a humid environment. (see subsection 11.1.2).

11.1.4 Sensitisation to the respiratory tract

There are currently no indications to this effect.

11.1.5 Skin sensitisation

There are currently no indications to this effect.

11.1.6 Germ cell mutagenicity

There are currently no indications to this effect.

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11.1.7 Carcinogenicity

There are currently no indications to this effect.

11.1.8 Reproductive toxicity

There are currently no indications to this effect.

11.1.9 Specific target organ toxicity (single exposure)

Dust of the product may irritate the respiratory tract.

After inhalation, local respiratory irritation may be due to the alkaline calcium dihydroxide resulting from the moisture of the mucous membranes, resulting from both inhaled calcium phosphide and calcium oxide dust.

The Scientific Committee on Occupational Exposure Limits (SCOEL) rates calcium dihydroxide (Ca(OH)₂) as irritating to the respiratory system (SCOEL / SUM / 137, February 2008).

The classification follows the classification of calcium dihydroxide in ECHA's C & L inventory.

11.1.10 Specific target organ toxicity (repeated exposure)

There are currently no indications to this effect.

11.1.11 Aspiration hazard

There are currently no indications to this effect.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity:

Application of the read-across principle: Aluminum phosphide as substance analogous to Calcium phosphide (see DAR Aluminium phosphide, Vol 3, Annex B, Section 5, B.9, November 2007).

Hydrogen phosphide (phosphane) (Fish: *Oncorhynchus mykiss*): 96 h LC₅₀ = $4.68 \mu g/l$ Aluminium phosphide (Algae: *Selenastrum capricornutum*): 72 h EC₅₀ = $58 \mu g/l$

12.2. Persistence and degradability

Polytanol developed rapidly in a moist environment Hydrogen phosphide. Phosphates, which are formed in soil by oxidative processes have a fertilizing effect.

12.3. Bioaccumulative potential

Since Polytanol decomposed in an aqueous or moist environment, it has no bioaccumulation potential.

12.4. Mobility in soil

Depends on the water solubility of the phosphates in the soil formed.

12.5. Results of PBT and vPvB assessment

Not applicable to inorganic substances.

12.6. Other adverse effects

Not toxic to bees.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Residues of the product should not be stored in closed containers or disposed of in the trash cans, because they can form an explosive gas-air mixture. In the containers can build up a lot of pressure.

Do not contaminate ponds, waterways or ditches with chemical or used container.

The sealed container is to be delivered to the nearest collection point for hazardous waste.

Packaging:

Empty containers are disabled and conveyed to recycling.

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SECTION 14 : Transport information

14.1. **UN** number

1360

14.2. UN proper shipping name

ADR/RID/ADN:

CALCIUMPHOSPHID

IMDG-Code

CALCIUM PHOSPHIDE

IATA-DGR

Calcium phosphide

14.3. Transport hazard class(es)

4.3 (Substances which, in contact with water, emit flammable gases) and

6.1 (Toxic substances)





14.4. Packing group

I (Substances presenting high danger)

14.5. Environmental hazards

Environmentally hazardous substance:

ADR/RID/ADN/IMDG-Code/IATA-DGR: yes (see subsections 21.1., and 12.1)



Marine Pollutant: yes (see sub-sections 2.1.1., 12.1. and Annex III of MARPOL)

14.6. Special precautions for user

See Sections 6 - 8, 10 and 12

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Does not apply, it is a solid product and is not a bulk good.

14.8. Additional information

ADR Tunnel restriction code (E)

Delivery by post: banned

SECTION 15: Regulatory information

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

15.1.1 EU regulations

Safety Data Sheet:

Regulation (EC) No 1907/2006 (REACH), Annex II (SDS) is amended by Annex of Regulation (EU) 2015/830.

Classification and labelling:

Regulation (EC) No 1272/2008 (CLP (EU-GHS)

Plant Protection:

Regulation (EC) No 1107/2009

Regulation (EU) No 540/2011, as amended by Regulation (EU) No 541/2011

(The active substance calcium phosphide is registered under No. 261 in the table of Part A) Seveso III

Directive 2012/18/EU

H2 ACUTE TOXIC, Category 2; E1 Hazardous to the Aquatic Environment in Category Acute1;

O2 Substances and mixtures which in contact with water emit flammable gases, Category 1;

O3 Substances or mixtures with hazard statement EUH029

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15.1.2 Basic national regulations (Germany)

Plant Protection Act (PflSchG)

Law to protect against hazardous substances (Chemicals Act (ChemG))

Regulation to protect against hazardous materials (GefStoffV)

Regulation banning the marketing of hazardous substances (ChemVerbotsV)

Ordinance on facilities for handling substances that are hazardous to water (AwSV) of 18 April 2017.

Water hazard class (WGK) 3 (highly hazardous to water), see AwSV, Annex 1, subsections 4.2 and 4.4.

The product is registered according to §16e Chemicals Act (ChemG) at the Federal Institute for Risk Assessment (BfR).

The BfR product number is 7429335.

15.2. Chemical Safety Assessment:

DAR Calcium phosphide (November 2006, August 2008).

This document meets all the requirements that are set out in Annex I of the REACH Regulation for the Chemical Safety Report (CSR). The authorized active substance calcium phosphide is identical to the commercial product Polytanol.

SECTION 16: Other information

16.1. Indication of changes to version 1.2

Subsection 4.1.4. - Updated with regard to the measures to be taken when swallowed.

Subsection 16.3. - Actualization

16.2. Codes of hazard classes and hazard statements

a) hazard classes and categories in subsection 2.1.1.

Water-react. 1 - Substance or mixture which in contact with water emits flammable gas,

Category 1

Acute Tox. 1 - Acute toxicity, Category 1
Acute Tox. 3 - Acute toxicity, Category 3
Skin Irrit. 2 - Skin irritation, Category 2

Eye Dam. 1 - Serious eye damage, Category 1

STOT SE 3, RTI - Specific target organ toxicity - single exposure, Category 3, Respiratory

Tract Inhalation

Aquatic Acute 1 - Hazardous to the aquatic environment, acute, Category 1

b) Hazard statements under Regulation (EC) No 1272/2008, the text of which was not specified in section 3

H260: In contact with water releases flammable gases which may ignite spontaneously.

H300: Fatal if swallowed.

H311: Toxic in contact with skin.

H330: Fatal if inhaled.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

EUH029: Contact with water liberates toxic gas.

EUH032: Contact with acids liberates very toxic gas.

16.3. Literature and sources

Directives and Regulations

Regulation (EC) No 1107/2009, was last amended by Regulation (EU) 2018/605

Regulation (EG) Nr. 1907/2006 (REACH), was last amended by Regulation (EU) 2018/2005

CLP (EU-GHS)-Verordnung (EG) Nr. 1272/2008, was last amended by Regulation (EU)

Regulation (EU) No 547/2011, was last amended by Regulation (EU) No. 519/2013

Directive 2012/18/EU (Seveso III)

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Calcium phosphide

Conclusion regarding the peer review of the pesticide risk assessment of the active substance calcium phosphide, EFSA Scientific Report (2008) 183, 1-59 (http://www.efsa.europa.eu/en/efsajournal/doc/183r.pdf)

Aluminium phosphide

Conclusion regarding the peer review of the pesticide risk assessment of the active substance aluminium phosphide, EFSA Scientific Report (2008) 182, 1-78

(http://www.efsa.europa.eu/en/scdocs/doc/182r.pdf)

REACH Registration Dossier:

Calcium phosphate (REACH Registration Number: 01-2119490077-34)
Calcium oxide (REACH Registration Number: 01-2119475325-36)

16.4. Methods in accordance with Chapter 2, Article 9, of Regulation (EC) No 1272/2008 to assess the information that has been used for the purpose of classification

Physical hazards: evaluation of test data (water reactivity)

Health and environmental hazards: evaluation of animal testing and application of "read across" principle

16.5. Abbreviations and acronyms

ADN Accord européen relatif au transport international des marchandises

dangereuses par voie de navigation intérieure - European Agreement concerning the International Carriage of Dangerous Goods by Inland

Waterways

ADR Accord européen relatif au transport international des marchandises

Dangereuses par Route - European arrangements about the international

transport of dangerous goods on the streets.

AOEL Acceptable Operator Exposure Level

bw body weight

CAS Chemical Abstracts Service

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling, Packaging

d day

DAR Draft Assessment Report
DNEL Derived No Effect Level

dw dry weight

ECHA European Chemicals Agency
EFSA European Food Safety Authority

EC European Community
EN European Standards
EU European Union

GHS Globally Harmonized System of Classification, Labelling and Packaging of

Chemicals

IATA-DGR International Air Transport Association-Dangerous Goods Regulation IBC-Code International code for the construction and the equipment of ships

for the transport of dangerous goods as bulk goods.

IMDG-Code International Maritime Code for Dangerous Goods IUPAC International Union of Pure and Applied Chemistry

LC Lethal Concentration

LD Lethal Doses

MARPOL Maritime Pollution Convention

OECD Organisation for Economic Co-operation and Development

PBT Persistent, Bioaccumulative, Toxic

PE Polyethylene PVC Polyvinyl chloride

REACH Regulation, Evaluation and Authorization of Chemicals

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RID Règlement concernant le transport International ferroviaire de

marchandises Dangereuses - Regulation for the international

transport of dangerous goods in the rail transport.

RTI Respiratory Tract Inhalation

TRGS Technical Rules for Hazardous Substances

UN United Nations

vPvB very persistent and very bioaccumulative

16.5 Further information

This information is based on our present knowledge, they do not constitute an assurance of product properties and establishes no contract legal rights.

Polytanol is approved by the Federal Office of Consumer Protection and Food Safety under the number 5278-00/00 (professional application), 5278-00/01 (application home garden und allotment) until 31.08.2020 as plant protection product.