

1	Identification of the preparation and the supplying Company	<p>1.1 TALUNEX</p> <p>1.2 Aluminium Phosphide Solid, TB (Tablet). For use only in the control of rabbits, moles and rats outdoors</p> <p>1.3 Killgerm Chemicals Ltd, Wakefield Road, Ossett, West Yorkshire, WF5 9AJ. Tel: +44 (0)1924 268450 Fax: (0)1924 265033 Email: technical@Killgerm.com</p> <p>1.4 Emergency telephones. For advice on medical emergencies, fires, spillages or chemical hazard only – phone 0870 190 6777. National Poisons Information Service 0870 600 6266. Killgerm Chemicals Ltd, 01924 268452 (Office hours)</p>																																													
2	Hazards identification	<p>Dangerous for the environment. Symbol: N</p> <p>Highly flammable. Symbol: F</p> <p>Very toxic. Symbol: T+</p> <hr/> <p>Physical/Chemical hazard:- Contact with water liberates highly flammable gas.</p> <p>Human Health hazards:- Very toxic if swallowed. Contact with water liberates very toxic gas. Contact with acids liberates very toxic gas. Repeated exposure may cause liver, kidney and lung damage.</p> <p>Environmental hazard:- Very toxic to aquatic organisms.</p>																																													
3	Composition and information on ingredients	<p>Aluminium phosphide preparation with ignition-inhibiting additives.</p> <table border="1" data-bbox="511 556 1494 777"> <thead> <tr> <th>Ingredient</th> <th>Concentration</th> <th>Symbol</th> <th>R-phrases</th> <th>CAS-No.</th> </tr> </thead> <tbody> <tr> <td>Aluminium phosphide</td> <td>57%</td> <td>T+, F, N</td> <td>R15/29-21-28-32-50</td> <td>20859-73-8</td> </tr> <tr> <td colspan="5">Generated ingredients</td> </tr> <tr> <td>Hydrogen phosphide (Phosphine)</td> <td>0.1ppm, 0.14mg/m³ (Long-term exposure)</td> <td></td> <td></td> <td>7803-51-2</td> </tr> <tr> <td></td> <td>0.2ppm, 0.28mg/m³ (Short-term exposure)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Ammonia</td> <td>25ppm, 18mg/m³ (Long-term exposure)</td> <td></td> <td></td> <td>7664-41-7</td> </tr> <tr> <td></td> <td>35ppm, 25mg/m³ (Short-term exposure)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Carbon dioxide</td> <td>5000ppm, 9150mg/m³ (Long-term exposure)</td> <td></td> <td></td> <td>124-38-9</td> </tr> <tr> <td></td> <td>15000ppm, 27400mg/m³ (Short-term exposure)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Ingredient	Concentration	Symbol	R-phrases	CAS-No.	Aluminium phosphide	57%	T+, F, N	R15/29-21-28-32-50	20859-73-8	Generated ingredients					Hydrogen phosphide (Phosphine)	0.1ppm, 0.14mg/m ³ (Long-term exposure)			7803-51-2		0.2ppm, 0.28mg/m ³ (Short-term exposure)				Ammonia	25ppm, 18mg/m ³ (Long-term exposure)			7664-41-7		35ppm, 25mg/m ³ (Short-term exposure)				Carbon dioxide	5000ppm, 9150mg/m ³ (Long-term exposure)			124-38-9		15000ppm, 27400mg/m ³ (Short-term exposure)			
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4	First Aid measures	<p>Inhalation: in case of headache, dizziness, feeling of constriction, difficult breathing and nausea immediately leave the danger zone and seek fresh air; consult a physician; inhale products for an acute treatment following exposition of smoke gas (eg a beclometosone (Ventolair ®) spray).</p> <p>Eye contact: remove preparation with fluff-free cloth; rinse with plenty of water and apply eye drops only after no more powdery residues are visible.</p> <p>Skin contact: remove preparation by brushing; only then use water for cleansing.</p> <p>Special aids required for first aid measures: have methyl prednisolon (application by physician) and products for acute treatment following exposure to smoke gas (eg a beclometosone (Ventolair ®) spray) available.</p>																																													
5	Fire-fighting measures	<p>Suitable extinguishing media: the product itself does not burn; extinguish fires in the vicinity with dry sand or powder and then with CO2</p> <p>Extinguishing media that must not be used for safety reasons: water, extinguishers containing water</p> <p>Special hazards from the substance itself, its combustion products or from its vapours: in case of fires hazardous combustion gases are formed: caustic phosphoric acid aerosols (phosphoric pentoxide)</p> <p>Special protective equipment for fire fighting : respiratory equipment, see para 8 below</p>																																													
6	Accidental release measures	<p>Personal precautions: In the event of major spillage evacuate room immediately. Contact an expert immediately (phone emergency number in para 1.4, above). Provide adequate ventilation. Wear suitable protection. Self-contained breathing apparatus with full face shield. Keep away from sources of ignition.</p> <p>Environmental precautions: Prevent dispersion. Collect spilled material. Keep it dry. Store in a safe place. Prevent entry to sewers and public waters. Make provisions to collect extinguishing water after fires. In the event of major spillage contact an expert immediately. Notify authorities if product enters sewers or public waters.</p> <p>Methods for cleaning up: Prevent dispersion. Clean up the remainder carefully. Do not use water for cleaning. Remove as chemical waste, according to national or local legislation.</p>																																													
7	Handling and storage	<p>General: Read label before use. Handle, store and use only in accordance with the label, this safety data sheet and training.</p> <p>Handling: When using, do not eat, drink or smoke. Wear suitable protective clothing, gloves, eye/face protection. Keep away from water. Keep away from sources of ignition. Keep away from open flame and sparks. Keep under lock and key in such a way that only experts have access to the product.</p> <p>Storage: Store in a frost-free, dry, cool, well-ventilated area. Keep in fireproof place. According to national or local legislation. Do not store together with other products. Keep away from water and acids. Keep away from ambient humidity. Keep locked up and out of reach of children. Keep away from food, drink and animal feeding stuffs. Follow HSE guidelines on storage.</p> <p>Packaging material: Store in original packaging only.</p> <p>Empty containers: Empty completely. Up-end the flask and tap out any residues into burrow system and bury. (Residue however small, should not be left exposed on the surface). See paragraph 13 for disposal and waste control arrangements.</p>																																													

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8	Exposure controls and personal protection	<p>Engineering measures: Provide adequate ventilation.</p> <p>Hygiene measures: When using, do not eat, drink or smoke. Wash hands and other exposed areas with soap and water before leaving work. Shower after work. Wear clean working clothes every day.</p> <p>Workplace Exposure Limits: See Heading 3 (Information on ingredients)</p> <p>Personal Protection</p> <p>-Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment e.g. Full Face Mask with B2P3 filter.</p> <p>-Skin protection Wear suitable protective clothing, e.g. disposable, lightweight, washable cotton or blended cotton overalls.</p> <p>-Hand protection Use synthetic rubber gloves.</p> <p>-Eye protection In the event of possible exposure: combined eye and respiratory protection.</p> <p>-Ingestion When using, do not eat, drink or smoke.</p>
9	Physical and chemical properties	<p>Appearance: Grey pellets</p> <p>Physical state: Tablets</p> <p>Colour: Grey</p> <p>Odour: Garlic</p> <p>pH value: Not applicable</p> <p>Solubility in water: Reacts violently with water (decomposition)</p> <p>Relative vapour density (air=1): Not applicable</p> <p>Self ignition °C: This product contains ignition-inhibiting additives.</p> <p>Physical properties: Decomposes on contact with moist air or water. Phosphine will be formed.</p> <p>Flash point (°C): Not applicable</p> <p>Log P octanol/water at 20°C: Not applicable</p>
10	Stability and reactivity	<p>Stability: Stable under normal circumstances.</p> <p>Hazardous decomposition products: Burning may produce e.g.: Phosphine. Phosphoric acid. Phosphorus oxides.</p> <p>Hazardous reactions: Reacts violently with water liberating highly flammable gases. Subsequently fire/explosion hazard.</p> <p>Materials to avoid: Water. Acids.</p> <p>Other information: Handle carefully. Uncontrolled development of hydrogen phosphide can cause fires.</p> <p>Conditions to avoid: Open flame. Sparks.</p> <p>Hazardous polymerisation: Will not occur.</p>
11	Toxicological information	<p>On product: Very toxic if swallowed. No data available.</p> <p>Rat inhalation LC50 [mg/l/4h]: Phosphine: 0.015</p> <p>Other toxicological information: Contact with water liberates toxic gas: Phosphine</p> <p>On ingredients: See Heading 3 (Information on Ingredients).</p>
12	Ecological information	<p>On product: Very toxic to aquatic organisms</p> <p>Ecological effects information: Phosphine decomposes in the atmosphere within 5 – 28 hours.</p> <p>LC50-96H-Rainbow trout mg/l: Phosphine : 0.0097</p> <p>EC50-48H-Daphnia Magna mg/l: Phosphine : 0.2</p>

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13	Disposal considerations	<p>Waste disposal procedures: Keep dry. Prevent dispersion. Remove waste product to a suitable incinerator. According to national or local legislation.</p> <p>Waste residues: Fire hazard. Keep waste separate. Remove as chemical waste, according to national or local legislation. Render residues safe by the method described in HSE guidance note:- "Fumigation" HSG251.</p> <p>Empty packaging: Use all contents of the flasks. Empty flasks can be re-sealed only for transport to waste storage area. Do not store or reseal part used flasks.</p> <p>Waste treatment methods: All pesticides must be disposed of as hazardous waste. Never wash out empty flasks with water. Once pest control activity has been completed, ensure that all residues of product are removed. Empty the flasks completely at site of use by upending and tapping the flask so that any remaining powder residue is deposited in the treatment burrow or run. Check that the flask is visibly empty. If residue remains, repeat upending and tapping until fully removed. Ensure that the empty flask is kept dry. Tap out any residues from the applicator at the site of use as for the flasks.</p> <p>Product/packaging disposal: Disposal of waste flasks: Handle and store empty flasks as if they still contained product. Flasks must never be rinsed or cleaned. Screw the cap back onto the empty flask loosely (this action should only be carried out prior to transporting to designated storage area, flasks should NOT be re-capped if they still contain tablets, ensure that all product is used during the pest control treatment), this will help to ensure that any gas generated within the flask during transport from the treatment area is contained. Place the flask into a suitable bag. Label the bag and place the written confirmation that the waste treatment methods have been completed, date and sign. Seal the bag using tie wraps. Once at designated storage area and prior to waste collection, whilst wearing a full-face respirator with appropriate gas filter cartridge (which meets P3 standard for particulates) or SCBA (contact your PPE supplier for advice on suitable PPE and RPE) and whilst wearing suitable gloves and skin protection such as rubber/PVC gloves and coveralls, remove the flask from the sealed bag. Remove caps, taking care and pointing flask away from face and other people, as any generated gas may be present. Invert the flasks on a mesh shelf in a secure caged area until all gas has vented from the flask. We recommend venting the flasks for 48 hours. Once venting is complete, re-cap flask and replace into and seal the plastic bag. Record on the written confirmation that the flasks have been vented. Store in a designated secure storage area until collection by a licensed waste-disposal contractor. The written confirmation should include the name of the waste disposal contractor and the date they were contacted to collect the flask.</p> <p>EWC codes: European Waste Catalogue codes:- Packaging containing residues or contaminated by Talunex – 15 01 10* hazardous waste. Consign using a consignment note for hazardous waste. Redundant Talunex stock, damaged containers, transport casualties – 20 01 19*. Pesticides. Consign using a consignment note for hazardous waste.</p>
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14	Transport information	<p>Road-/rail transport acc. to ADR/RID: Class: 4.3, UN 1397, PG: 1 Description of goods: Aluminium phosphide, mixture Labels: Dangerous when wet 4 = main risk Toxic = subsidiary risk Orange placard on vehicle: above 20 kgs net weight Remarks: limited quantities acc. to chapter 3.4 not possible</p> <p>Sea transport acc. to IMDG-Code Class: 4.3 UN-No.: 1397 Packing Group I Proper shipping name: ALUMINIUM PHOSPHIDE, MIXTURE Labels: Dangerous when wet 4 = main risk Toxic = subsidiary risk Marine pollutant: no EmS-Code: F-G, S-N</p> <p>Air Transport acc. to IATA-DGR/ICAO-TI Sea Transport and packaging instructions: 487 (IATA 53rd Ed.) Proper shipping name: Aluminium phosphide Remarks: max. weight 1 kg/inner packaging, 15 kg/outer packaging cargo aircraft only</p> <p>Transport by barge acc. to ADN/ADNR see road transport.</p>
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15 Regulatory information

- This preparation has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009: CHIP 4. These implement the Dangerous Preparations Directive-99/35/EC. This Safety Data Sheet complies with CHIP 4 requirements and the Safety Data Sheets Directive 91/155/EEC (as amended by Directives 93/112/EC and 2001/58/EC).
- Restricted to professional users.
- Refer to other relevant measures such as the Health and Safety at Work etc Act 1974 and the COSHH regulations and guidance.
- The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation.
- This product is approved under The Control of Pesticides Regulations (as amended) 1986. MAPP no. 14608. (Amendment no 3098 of 2012). PCS no. 91379.

Symbols: F, T+, N

Warning phrases

R Phrase(s) : R15/29 – Contact with water liberates toxic, extremely flammable gases.
: R28 – very toxic if swallowed.
: R21 – Harmful in contact with skin
: R32 – Contact with acids liberates very toxic gas.
: R50 – Very toxic to aquatic organisms.

S Phrase(s) : 1/2 - Keep locked up and out of reach of children.
: 3/9/14/49 Keep only in the original container in a well ventilated place. Away from humidity, water and acids
: 30 – **Never** add water to this product.
: 36/37 - Wear suitable protective clothing and gloves.
: 45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
: 60 This material and/or its container must be disposed of as hazardous waste
: 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Additional: Skin and hair must be brushed free of residues in a well-ventilated place after contact and always after work and before washing, eating, drinking or going out in the rain.

Additional information: Packaging must not be reused.

16 Other information

LEGEND:

n.a. = not applicable
n.t. = not tested
n.v. = not available
WEL = Workplace Exposure Limit

Use only in accordance with label instructions.

Operatives using this product should be trained in its use.

The information in this data sheet should be considered when undertaking a risk assessment under the COSHH regulations.

This data sheet does not constitute a COSHH assessment.

The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the handling, storage and transportation of the preparation. The information provided in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted by Killgerm Chemicals Limited for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature.

Talunex is a registered trade mark of Killgerm Group Limited.

This issue updates the previous one in respect of paragraphs 7 & 13 – handling, disposal and waste control information.