

SAFETY DATA SHEET

Cartridge, blank, cal. 9 mm P.A. Knall

created: 16.09.2019
Version: 1.0

1. Material-/preparation- and company designation

- 1.1 Information in respect to the product:
Brand name: cartridge, blank, cal. 9 mm P.A. Knall
(applicable for the products Walther 4.1341 and Perfecta Titan 4.1321)
- 1.2 Details in respect to manufacturer/supplier: Umarex GmbH & Co. KG
Street: Donnerfeld 2
Nationality mark/postal code/place: D-59757 Arnsberg/Germany
- 1.3 Information available from:
Telephone: +49 (0) 2932 – 638-01
Emergency calls: +49 (0) 2932 – 638-01

2. Composition/details of the components

- 2.1 General description
Cartridge for weapons, consisting of a metal cartridge case with primer and propellant charge and also a plastic cover. The cartridge contains the potentially hazardous components (primer and propellant charge) which have been hermetically sealed from the environment, they can only be released by destroying the product.
- 2.2 Chemical characterization of dangerous components
- 2.2.1 Propellant charge
- | CAS-no. | mass per cartridge:
designation | max. 160 mg
contents (approx.): |
|-----------|------------------------------------|------------------------------------|
| 9004-70-0 | nitrocellulose | 92% |
| 55-63-0 | nitro-glycerine | 8% |
- 2.2.2 Primer components (in the primer cap): SINOXID mass per cartridge max. 23 mg
- | CAS-no. | designation | contents (approx.) |
|------------|------------------------------------|--------------------|
| | <u>Priming substances:</u> | 32% |
| 15245-44-0 | lead trinitroresorcinate | |
| 109-27-3 | tetrazine | |
| | <u>Oxidants:</u> | 52% |
| 10022-31-8 | barium nitrate | |
| 1309-60-0 | lead oxide | |
| | <u>Reducing agent + additives:</u> | 16% |
| 1345-04-6 | antimony sulphide | |
| | additives | |
- 2.3 Danger signs/R-sets:
Propellant charge E, T+ 2-11-23/24/25-27-33
Primer E, T 61-3-20/22-33-62
- 2.4 Additional advice:
In packed condition, the cartridges do not represent a considerable hazard. When used according to their purpose, no health hazards will appear.

3. Potential hazards

- 3.1 General:
Trajectory and flight direction of cartridges ignited outside weapons are not known.
- 3.2 Designation of hazards:
Heat or blow against the primer cap and strong mechanical load which may cause damage to the cartridge case or mechanical attempts to remove the primer cap may lead to an immediate ignition.

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3.3 Special hazards for humans and environment: see item 6

4. First aid measures

(not applicable for intact cartridges)

4.1 General advice:

Medical help is required if symptoms such as irritation of the respiratory system occur following the inhalation of combustion gases. Dexamethasone spray is to be inhaled.

4.2 After inhalation: see item 4.1

4.3 After skin contact: Affected skin sections are to be cleaned with water and soap. Polluted clothing is to be removed at once.

4.4 After eye contact: Rinse with plenty of water for at least 15 minutes. Consult medic if irritation continues.

4.5 After swallowing: Rinse mouth and then drink plenty of water (applies only to conscious persons). Do not cause vomiting without medical assistance. Seek medical advice.

5. Measures for firefighting

5.1 Suitable extinguishing agents are water or dry powder, used from a safe distance.

5.2 unsuitable extinguishing agents because of safety reasons: n/a

5.3 Special hazards caused by the substance or its preparation, its combustion products or Released gases:
When the cartridge is ignited, these substances are abruptly generated.
For generated combustion products/gases refer to item no. 10.4
The inhalation of combustion gases is to be prevented.

5.4 Special protective equipment for firefighting:
Protective gloves, face protection and helmet and also respirator.

5.5 Additional advice:

5.5.1 The cargo is on fire:
Firefighting with all available means, but only from a protected place.
There is no danger of a mass explosion.
Warn non-participants, call Fire brigade and police as soon as possible.

5.5.2 Measures when the surroundings are on fire:
Remove vehicle from the source of the fire.
Use all available equipment to fight the fire.
Prevent the cargo from catching fire.

6. Measures following unintentional release

6.1 Measures in respect to persons:
A propellant charge released (removed) from a cartridge is very poisonous when exposed to the skin and is poisonous when inhaled or swallowed. It is easily inflammable and there is danger of explosion. In low layers and when not compressed they will quickly burn down.
The primer is potentially very explosive.
Inhalation of dust, skin contact and ignition dangers such as friction, blow, heat and electrostatic charge are to be prevented under all circumstances.

Transport accidents:

Secure road, warn other road users., keep unauthorized persons away from accident site and inform them of the danger. Keep ignition sources and naked fire away, smoking is prohibited.

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- 6.2 After unintentional release:
Secure surrounding area and keep unauthorized persons away, warn them in respect to danger of ignition, erect warning signs. Call the police.
- 6.3 Measures to protect the environment:
Collect scattered cartridges by hand and let authorized persons dispose of them. Released substances contained in them are carefully to be swept away and are to be neutralized in a specially marked water container. The affected area is then to be damp-cleaned. Prevent substances from getting into the ground, in waters, into the sewerage system or into the underground water.

7. Handling and storage

- 7.1 Handling:
- 7.1.1 Advice for safe handling:
Keep cartridges away from heat sources and naked fire.
Do not throw cartridges and do not apply force to squeeze them, do not open them, neither mechanically nor thermally.
Caution – primer is sensitive against blows!
Sale is only permitted for unopened original packaging.
Only to be fired from certain admitted weapons.
- 7.1.2 Advice in respect to protection against fire and explosion.
Do not smoke.
Keep away ignition sources and naked fire.
- 7.2 Storage:
- 7.2.1 Storage conditions:
Only to be stored in dispatch packaging admitted by transport regulations, storage in suitable storage rooms only. Keep them cool and dry. The optimal storage temperature is 20° degrees centigrade. Protect goods from theft and unauthorized removal.
- 7.2.2 Advice in respect to mutual storage/prohibition of mutual storage:
Do not store these goods together with inflammable and fire-promoting substances.
- 7.2.3 Additional information in respect to storage conditions:
Storage group: 1.4
Compatibility group: S

8. Exposition limit and personal protective equipment

- 8.1 Additional advice in respect to the design of technical installations:
When used in rooms, these rooms must be admitted for the purpose and must be well aired (suitable room-/object air extraction system). The rooms are to be damp-cleaned in regular intervals. The AGW value in respect to adherence of sufficient room-/object air extraction are to be supervised.
- 8.2 Related substances with limiting values in respect to workplace:
- | | |
|----------------------------------|--|
| AGW value for carbon monoxide: | 35 mg/m ³ |
| AGW value for nitrous gases: | 9.5 mg/m ³ |
| AGW value for lead compounds: | 0.1 mg/m ³ |
| AGW value for barium compounds: | 0.5 mg/m ³ |
| General limiting value for dust: | 3 mg/m ³ for respirable fraction (A-dust)
10 mg/m ³ for inhalable fraction (E-dust) |
- 8.3 Personal protective equipment:
- | | |
|---|---|
| General protective and hygienic measures: | Do not smoke, eat or drink, maintain order and cleanliness. |
| Respirator: | not required |
| Hand protection: | not required |
| Eye protection: | not required |
| Body protection: | not required |
| Ear protection: | wear ear defenders if noise level exceeds 85 dB(A) |

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9. Physical and chemical properties

- 9.1 General information:
 Appearance: cartridge
- 9.2 Safety-relevant data:
 Inflammability: blow-sensitive
 Ignition temperature: approx. 160° degrees centigrade

Remark: Further physical data n/a.

10. Stability and reactivity

- 10.1 Conditions to be avoided/dangerous reactions:
 Heat or blow onto the primer cap will lead to the ignition of single cartridges.
- 10.2 Substances to be avoided:
 The contact with acids, alkaline solutions, oils and aromatic carbon hydrides is to be avoided.
- 10.3 Reaction products/ gases released following a reaction
 The cloud following a reaction contains carbon monoxide and nitric gases. The deposits contain lead and barium compounds.

11. Information in respect to toxicology

Classification relevant LD/LC 50 –values: n/a

12. Information in respect to ecology

No ecological problems are to be expected when the product is handles and used properly.

13. Information in respect to disposal

- 13.1 Recommendation:
 Fully ignited cartridges may be disposed of as normal waste, they are not dangerous waste.
- 13.2 Further advice:
 Unfired cartridges which cannot be used for their original purpose any more are to be handed over to authorized persons in adherence to the local regulations, item 14 of the dangerous goods regulations is especially to be adhered to.
 AVV waste key no. (according to waste list order - AVV): 16 04 01 "ammunition" (dangerous waste)

14. Transport details

- 14.1 UN designation/correct technical designation/proper shipping name:
 PATRONEN FÜR WAFFEN, MANÖVER
 CARTRIDGES FOR WEAPONS, BLANK
- 14.2 Classification code and UN number:
 1.4 S, UN 0014
- 14.3 Packaging regulations/instructions:
 Permissible packaging according to packaging regulations:
 According to ADR/RID/IMDG code: P130
 According to ICAO-TI/IATA-DGR: 130
 Inside: container made of cardboard or not required respectively
 Between: not required
 Outside: Design-approved, verified and admitted crate of packaging group II, e.g. a crate made of cardboard (4G)

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- 14.4 Mass details:
 - Net mass of explosive substance per cartridge: approx. 0.18 g
 - Total mass per cartridge: approx. 5 g
- 14.5 Further details:

According to sub-section 1.1.3.6 ADR there are no limits in respect to shipment.
 In this respect, the shipment documents are to contain the following conditions: BEFOERDERUNG OHNE UEBERSCHREITUNG DER IN UNTERABSCHNITT 1.1.3.6 FESTGESETZTE FREIGRENZEN". ((Shipment without exceeding the limits laid down in sub-section 1.1.3.6))
 Shipment according to ICAO-TI/IATA-DGR in the hold of passenger aircraft and freight aircraft is permitted.

15. Regulations

- 15.1 Marking according to the EU guidelines:
 - EG/R sets: n/a
 - EG/S sets: n/a
- 15.2 National regulations:

Subject to the dangerous goods order (GefStoffV) in its current version.
 Subject to German firearms law.
 Requirements to storage rooms according to the German explosives act (SprengG) in accordance with the second amendment to the SprengG (2. SprengV) regarding the explanation to § 1 section 3 no. 2 of the BGV B5 "explosive substances – general regulations".

16. Other specific information

- 16.1 Product-specific amendments:
 - National:

The cartridges have been admitted by the Proof House according to the valid regulations, they are subject to marking obligation and have been released according to the C.I.P. regulations.
 - International:

The passing on to other persons, the receipt and the handling are subject to the regulations valid in the appropriate country.
- 16.2 Data sheet made by the following department: product safety
 Contact person: G.-D. Kuenstler +49 (0) 2932-638-458
- 16.3 Remarks in respect to update: new version
- 16.4 Other advice:

The information provided in this safety data sheet represents the current level of knowledge in respect to our products. The safety data sheet serves as a product description in respect to handling and safety-relevant requirements. It does not contain any binding commitments in respect to product properties laid down in the contract. This safety data sheet was made by an IT system and is therefore not signed.