# VOLUNTARY SAFETY INFORMATION

## 1. Identification of the substance/mixture and of the company/undertaking

- 1.1Product identifier:Anvil primer caps SINOXID4,45 mm, 5,33 mm, 8,02 mm, 8,43 mm
- 1.2 Identified uses: The article is intended for professional use.
- Details of the supplier of the safety data sheet: 1.3 Manufacturer: RUAG Ammotec GmbH Street: Kronacher Str. 63 Postal code / City: 90765 Fürth Country: Germany Telephone: +49 911 7930 0 Telefax: +49 911 7930 680 E-mail (competent person): sicherheitsdatenblaetter.ammotec@ruag.com Information contact: +49 911 7930 289 (technical support)
- 1.4 Emergency telephone number: +49 911 7930 0

### 2. <u>Hazards identification</u>

- 2.1 Classification of the substance or mixture:
- 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:
  - Hazard classes and hazard categories: Expl. 1.4, H204
- 2.2 Label elements:
- 2.2.1 Labelling according Regulation (EC) No 1272/2008 [CLP]:

Hazard pictograms:

Signal word:	Warning	
Hazard statements:	H204	Fire or projection hazard.
Precautionary statements:	P210	Keep away from heat, hot surfaces, sparks, open flames and other
		ignition sources. No smoking.
	P234	Keep only in original container.
	P250	Do not subject to grinding/shock//friction.
	P280	Wear protective gloves/protective clothing and eye/face protection.
	P370+P380	In case of fire: Evacuate area.
	P374	Fight fire with normal precautions from a reasonable distance.
	P401	Store in accordance with: national regulations

2.3 Other hazards:

This article contains hazardous substances or mixtures not intended to be released under normal or reasonably foreseeable conditions of use.

2.3.1 Adverse physicochemical effects:

This article can be ignited by heat, sparks, flames or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

2.3.2 Adverse human health effects and symptoms: The dismantling of the article is prohibited. Please observe in any case the safety information.

Remark								Material No. *	
			Name	Date	Doc-Typ	Document	Part	Version	Page
RUAG	Protection notices DIN ISO 16016	Created	RTWIRO	28.06.2016	ZSD	1003901	EN0	03	1/7
		Released	RTWIRO	28.06.2016	230	1002901	EINU	03	1/7

# 3. <u>Composition/information on ingredients</u>

### 3.1 Mixtures:

Substance name	EG-No.	REACH-Reg No.	Index-No.	CAS-No.	Concen- tration	Classification accordin No 1272	
					(%)	Hazard classes/ Hazard categories	Hazard statements
Lead styphnate	239-290-0	01- 2119543737- 30-0000	609-019-00-4	15245-44-0	1 – 10	Unst. Expl. Repr. 1A Acute Tox. 4 STOT RE 2 Aquatic acute 1 Aquatic chronic 1	200 360Df 302, 332 373 400 410
Barium nitrate	233-020-5	unknown	056-002-00-7	10022-31-8	1 – 10	Ox. Sol. 2 Acute Tox. 4	272 302, 332
Antimony(III)- sulphide	215-713-4	01- 2119951854- 28-0000	051-003-00-9	1345-04-6	0 – 10	Carc. 2	351
Lead dioxide	215-174-5	unknown	082-001-00-6	1309-60-0	0 – 3	Ox. Sol. 3 Repr. 1A Acute Tox. 4 STOT RE 2 Aquatic acute 1 Aquatic chronic 1	272 360Df 302, 332 373 400 410

### 3.2 Remark:

Further ingredients are below the cut-off values according to regulation (EC) 1272/2008 or possess only physicochemical properties.

Full text of H- and EUH-phrases: see section 16.

### 4. First aid measures

#### 4.1 General information:

First aid measures only required by release of ingredients or generation of decomposition products. Medical treatment necessary.

- 4.2 Following inhalation: In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. Apply cortisone spray at early stage.
- 4.3 Following skin contact: After contact with skin, wash immediately with soap and plenty of water.
- 4.4 Following eye contact: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
- 4.5 Following ingestion: If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.
- 4.6 Self-protection of the first aider: First aider: Pay attention to self-protection!

#### 4.7 Notes for the doctor:

If decomposition products are inhaled the following symptoms can occur: Unconsciousness, Impaired consciousness, Cyanosis (blue coloured blood), Vomiting, Cardiac arrhythmias, Headache, Spasms, Circulatory collapse, Dizziness, Impairment of vision, Nausea

#### Treatment:

Supervise the blood circulation. Regulation of the blood circulation, possible shock treatment. Where appropriate artificial ventilation.

In the case of bluish discoloration (lips, earlobes, finger nails) give oxygen as soon as possible.

In the case of lung irritation: Primary treatment by using Corticoid spray, e.g. Auxiloson spray, Pulmicortdosage-spray (Auxiloson and Pulmicort are registered trademarks).

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FOLLOWING THE SAFETY DATA SHEET FORMAT ACCORDING TO REGULATION (EC) NO. 1907/2006 (REACH)

# 5. <u>Fire-fighting measures</u>

- 5.1 Suitable extinguishing media: Water and extinguishing powder from safe distance at fire in the surroundings.
- 5.2 Extinguishing media which must not be used for safety reasons: not applicable.
- 5.3 Hazardous combustion products: In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO2), Nitrous gases (NO<sub>X</sub>)
- 5.4 Special protective equipment for fire-fighters: Wear a self-contained breathing apparatus and chemical protective clothing.
- 5.5 Additional information: Do not inhale explosion and combustion gases. Co-ordinate fire-fighting measures to the fire surroundings. Do not allow run-off from fire-fighting to enter drains or water courses. Move undamaged containers from immediate hazard area if it can be done safely.

## 6. Accidental release measures

- 6.1 Personal precautions: Avoid generation of dust. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. 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.
- 6.3 Methods and material for containment and cleaning up: Suitable material for taking up: Water Take up mechanically, placing in appropriate containers for disposal. Avoid generation of dust.

## 7. Handling and Storage

- 7.1 Precautions for safe handling:
- 7.1.1 Advices on safe handling:

It is recommended to design all work processes always so that the following is excluded: Inhalation of dust/particles, skin contact, eye contact, depositing of dust. Working places should be designed allow cleaning at any time. Wear personal protection equipment (refer to section 8).

7.1.2 Measures to prevent fire:

The product is: explosive. Keep away from sources of ignition - No smoking. Handle with care - avoid bumps, friction and impact. Wear anti-static footwear and clothing. Take precautionary measures against static discharges.

- 7.1.3 Measures to prevent aerosol and dust generation: Provide adequate ventilation as well as local exhaustion at critical locations.
- 7.1.4 Advices on general occupational hygiene
   When using do not eat, drink, smoke, sniff.
   Wash hands before breaks and after work.
   Take off immediately all contaminated clothing.

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- 7.2 Conditions for safe storage, including any incompatibilities:
- 7.2.1 Technical measures and storage conditions: Storage temperature: - 10 °C (14 °F) to + 40 °C (104 °F) Recommended storage temperature: + 20 °C (68 °F) Relative air humidity: max. 70 %
- 7.2.2 Requirements for storage rooms and vessels: Keep/store only in original container. Store in a place accessible by authorized persons only.
- 7.2.3 Hints on joint storage: Do not store together with inflammable or other substances that mean an increase of risk. Observe in addition any national regulations.
- 7.2.4 Storage class: Explosive substances Storage class: 1.4 Compatibility group: S

# 8. Exposure controls / Personal protection

### 8.1 Exposure limit values:

8.1.1 Occupational exposure limits (OEL):

CAS-No. EC-No.	Limit value type (country of origin)	Substance name	OE ml/m <sup>3</sup>	L mg/m <sup>3</sup>	Peak limita- tion	Remarks / Source
630-08-0 211-128-3	AGW (DE)	Carbon monoxide	30	35	1(II)	TRGS 900
124-38-9 204-696-9	AGW (DE)	Carbon dioxide	5000	9100	2(II)	TRGS 900
	AGW (DE)	A: Alveolar fraction E: Respirable fraction		1,25 10	2(II)	TRGS 900

#### 8.1.2 Biological occupational exposure limit values:

CAS-No. EC-No.	Limit value type (country of origin)	Substance name	Parameter	Limit value	Test material	Remarks / Source
630-08-0 211-128-3	BGW (DE)	Carbon monoxide	CO-Hb	5 %	Whole blood (B)	TRGS 903

#### 8.1.3 Additional information:

Preventive industrial medical examinations are to be offered.

#### 8.2 Exposure controls:

8.2.1 Appropriate engineering controls: See section 7. Any further measures are not necessary.

#### 8.2.2 Personal protection equipment:

Respiratory protection:No personal respiratory protective equipment normally required.<br/>Dust formation: Filtering Half-face mask (DIN EN 149) FFP2<br/>Hand protection is not required<br/>Eye protection:Hand protection:Hand protection is not required<br/>Eye glasses with side protection or visor made of safety glass.<br/>Wear anti-static footwear and clothing.<br/>Necessary.

## 9. <u>Physical and chemical Properties</u>

No data available, article.

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# 10. Stability and Reactivity

10.1 Conditions to avoid: In case of warming: In case of impact or pressure influence: Reaction takes place at temperatures above:

Danger of explosion Danger of explosion ca. 150 °C (302 °F)

- 10.2 Materials to avoid: Reaction: Acid, Alkali (Lye)
  10.3 Hazardous decomposition products:
- Thermal decomposition can lead to the escape of irritating gases and vapours. Exothermal decomposition with formation of: carbon monoxide, carbon dioxide, nitrous gases (NOx), metal oxides

# 11. <u>Toxicological information</u>

 11.1 General remarks: No harmful effects are to be expected if used properly. The contained ingredients can be harmful for humans, but they are hermetically enclosed in the article and cannot be released. The dismantling of the article is prohibited.

# 12. Ecological information

12.1 General remarks:

No harmful effects are to be expected if used properly. The contained ingredients can be harmful for the environment, but they are hermetically enclosed in the article and cannot be released. The dismantling of the article is prohibited.

## 13. Disposal considerations

13.1 Product/Packaging disposal: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled.

List of proposed waste cod	les/waste designations in accordance with AVV:
Waste codes product:	16 04 03*
Waste name:	Other waste explosive
Remark:	Hazardous waste
	Waste codes product: Waste name:

13.3 Additional information: Completely ignited articles may be recycled.

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#### 14. **Transport information**

14.1 Land / sea / air transport:

		Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)					
			Anzündhütchen						
	Official transport designation		Primers, cap type						
			Amorces à percussion						
	Class		1.4S						
	UN-No.		0044						
	Packing group		II	4803					
	Special provisions Limited quantity		)	A802 forbidden					
	Tunnel restriction code	E	not applicable	not applicable					
	EmS-No.	not applicable	F-B, S-X	not applicable					
	Intermediate: only required Outer: type approve	R: 133 cles of plastic, fibreboard c d, when the inner packagir ed and authorized box of p oard (4G) or of natural wo	igs are trays, e.g. recepta acking group II:						
14.3	Information of mass: Net explosive quantity (NEQ) pe	Anvil primer Anvil primer	caps 5,33 mm: max. caps 8,02 mm: max.	25 mg 44 mg 115 mg 130 mg					
	Total mass per article:	Anvil primer Anvil primer							
14.4	Additional information: Exemptions (1.1.3.6 ADR): Approvals US Department of Tra Apvil primer caps 4 45 mm	,	EX2003070048						

Approvais US Department of	Transportation (DOT).	
Anvil primer caps 4,45 mm:	4031, 4033, 4047	EX2003070048
	4023, 4039, 4064	EX2005070698
	ZE 1.1-410	EX2013070186
Anvil primer caps 5,33 mm:	5333, 5337, 5341	EX2003070055
Anvil primer caps 8,02 mm:	8212	EX2003070056
Anvil primer caps 8,43 mm:	8235	EX-9703126

#### 15. **Regulatory information**

Safety, health and environmental regulations/specific legislation:

15.1 Safety, health a 15.1.1 EU-Legislation:

Directive 93/15/EEC on the placing on the market and supervision of explosives for civil uses. Directive 91/477/EEC on control of the acquisition and possession of weapons. Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures

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## 15.1.2 Authorisations:

The following EC-Type Examination Certificates of the Federal Institute for Materials Research and Testing (BAM) are available: Anvil primer caps 4,45 mm SINOXID: 0589.EXP.0678/06

Anvil primer caps 5,33 mm SINOXID: 0589.EXP.0679/06 Anvil primer caps 8,02 mm SINOXID: 0589.EXP.0680/06

## 15.1.3 National regulations:

Observe in addition any national regulations!

Water hazard class (WGK): Article, not applicable

Soils have to conform to the "Guidelines for avoidance of ignition hazards due to To observe: electrostatic charges (TRBS 2153)".

Chemikaliengesetz (ChemG) Sprengstoffgesetz (SprengG) Waffengesetz (WaffG) Beschussgesetz (BeschussG) Kriegswaffenkontrollgesetz (KWKG) Gefahrstoffverordnung (GefStoffV) Technische Regeln für Gefahrstoffe: Berufsgenossenschaftliche Vorschriften:

TRGS 510, 900, 903, 905 DGUV Regel 113-017

#### 16. **Other information**

- Editorial revision. 16.1 Indication of changes:
- 16.2 Relevant H- and EUH-phrases (Number and full text): H-phrases:
  - 200
  - Unstable explosives. 272 May intensify fire; oxidiser.
  - 302+332 Harmful if swallowed or if inhaled.
  - Suspected of causing cancer. 351
  - May damage the unborn child. Suspected of damaging fertility. 360Df
  - 373 May cause damage to organs through prolonged or repeated exposure.
  - 400 Very toxic to aquatic life.
  - 410 Very toxic to aquatic life with long lasting effects.
- 16.3 Additional information:

The above information describes exclusively the safety requirements of the article and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the article for storage, processing, transport and disposal. The information cannot be transferred to other articles.

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