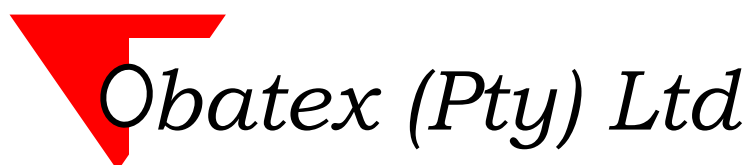
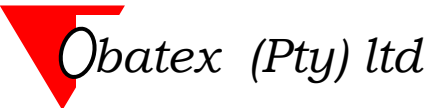


# **SAFETY DATA SHEET**



***BLACK POWDER***

Company/Factory: <b>OBATEX (PTY) LTD</b>	Document Reference: OBATEX - SDS 0	 <p><i>Obatex (Pty) Ltd</i></p> <p><b>Registration number 2012/116101/07</b></p> <p><b>Blasting &amp; Gun Powder</b></p> <p><b>Manufacturer</b></p>
Document Type: <b>SAFETY DATA SHEET</b>	Revision number: <b>01</b>	
Description: <b>BLACK POWDER</b>	Issue Date: <b>28 September 2015</b>	
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## 1. IDENTIFICATION

### 1.1 MANUFACTURER

- 1.1.1 COMPANY: OBATEX (PTY) LTD
- 1.1.2 NAME OF RESPONSIBLE PERSON: HANS VAN WYK (ID 540516 5085 081).
- 1.1.3 POSTAL ADDRESS: P.O. BOX 586 KROONDAL 03650, NORTH-WEST PROVINCE, SOUTH AFRICA.
- 1.1.4 PHYSICAL ADDRESS: PLOT 80, KROONDAL 0350, NORTH-WEST PROVINCE, SOUTH AFRICA.
- 1.1.5 TELEPHONE: +27(0)71 690 1408.
- 1.1.6 FACSIMILE: NONE.
- 1.1.7 CELLULAR: +27(0)82 498 9512.
- 1.1.8 E-MAIL: [OBATEXPTYLTD@GMAIL.COM](mailto:OBATEXPTYLTD@GMAIL.COM)

### 1.2 TRADE NAME

- 1.2.1 OBATEX BLACK POWDER.

### 1.3 PROPER SHIPPING NAME/ DESCRIPTION

- 1.3.1 BLACK POWDER

### 1.4 UN CLASSIFICATION CODE

- 1.4.1 CLASS 1 EXPLOSIVE – HAZARD DIVISION 1.1D: SUBSTANCES AND ARTICLES WHICH HAVE A FIRE HAZARD AND EITHER A MINOR BLAST HAZARD OR A MINOR PROJECTION HAZARD OR BOTH, BUT NOT A MASS EXPLOSIVE HAZARD.

### 1.5 UN No.: 0027.

### 1.6 COMPATIBILITY GROUP: D – PYROTECHNIC SUBSTANCE.

### 1.7 APPEARANCE: DARK GREY / BLACK GRANULAR POWDER

### 1.8 PRIMARY USE

- SUBSTANCE FOR ROCK BLASTING PURPOSES.
- MUZZLE LOADER PROPELLANT.
- IT IS BASED ON THE "FLASH FIRE" CONCEPT THAT FORMS THE BASIS OF THE DEFLAGRATION PROCESS.

*THE MANUFACTURER'S AIM WITH THIS PRODUCT IS THAT IT SHOULD PRODUCE GAS AND HEAT, ACKNOWLEDGING THE HAZARD THAT FIRE/HEAT CREATES. IT IS A GAS GENERATOR AND DEFLAGRATES, TURNING INTO COMBUSTION.*

## 2. HAZARDS IDENTIFICATION

### AN EXPLOSIVE SUBSTANCE

- IMPACT, FRICTION, SPARK OR FLAME MAY INITIATE A DEFLAGRATION
- CONTAMINATION WITH GRID INCREASE SENSITIVITY TO IMPACT OR FRICTION

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL ENTITY	PROPORTION
• POTASSIUM NITRATE (KNO <sub>3</sub> )	VERY HIGH
• CHARCOAL	MED
• SULPHUR	MED
• DEXTRIN	LOW
• GRAPHITE	LOW
• LAST COMPONENT (OBATEX TRADE SECRET)	LOW

(PROPORTION (% WEIGHT PER WEIGHT))

VERY HIGH >60; HIGH 30–60; MED 10–29; LOW 1–9; VLOW < 1)

### 4. FIRST AID MEASURES

SPECIFIC IMMEDIATE TREATMENT:

- **INHALING:** KEEP WARM AND REST THEN OBTAIN MEDICAL ATTENTION
- **SKIN CONTACT:** WASH IMMEDIATELY WITH WATER THEN OBTAIN MEDICAL ATTENTION
- **EYE CONTACT:** IRRIGATE WITH CLEAN WATER HOLDING THE EYELIDS APART FOR AT LEAST 20 MINUTES THEN OBTAIN MEDICAL ATTENTION
- **INGESTION:** WASH MOUTH OUT WITH WATER, DO NOT INDUCE VOMITING, AND THEN OBTAIN MEDICAL ATTENTION
- **INJURY FROM DETONATION:** SEEK IMMEDIATE MEDICAL ATTENTION

### 5. FIRE FIGHTING MEASURES

- **DO NOT FIGHT BLACK POWDER - EVACUATE THE AREA**
- AUTO IGNITION TEMPERATURE: 230°C – 460 °C.
- EXPLOSIVE TEMPERATURE (5 SEC): 427 °C.
- EXTINGUISHING MEDIA: WATER AND DRY CHEMICAL POWDER.
- FLOOD AREA FROM A SAFE DISTANCE IF POSSIBLE.

### 6. ACCIDENTAL RELEASE MEASURES

- EVACUATE THE AREA THEN INFORM THE EXPLOSIVE MANAGER IMMEDIATELY.
- SPILLAGES MUST BE THOROUGHLY WETTED WITH WATER BEFORE HANDLING.

### 7. HANDLING & STORAGE

#### 7.1 OUTER PACKAGING DESCRIPTION

- STYLE: CORRUGATED FIBREBOARD BOX - FEFCO 0201.
- MATERIAL BASIS COMBINED GRAMMAGE: 971G/ M<sup>2</sup>.
- TARE MASS: 0.307KG.
- DIMENSIONS: (OD) 480MM X 200MM X200MM.
- MANUFACTURER'S JOINT: 4 X 25MM X STAPLES.
- SEALING MECHANISM: 48MM SELF-ADHESIVE CLEAR TAPE AND STRAPPED WITH 2 X 10MM PVA STRAPPING (TOP & BOTTOM).

#### 7.2 INNER PACKAGE DESCRIPTION

- GALVENISED TINS:
  - QUANTITY: 10 PER BOX
  - TARE MASS: 131 G.
  - OVERALL DIMENSIONS: 180MM X 90MM Ø.
  - CONTENTS: 0.5 KG BLACK POWDER.
- CORRUGATED FIBREBOARD DIVIDER:
  - QUANTITY 1 X 10 DEVIDERS.
  - TARE MASS: 131 G.
  - OVERALL DIMENSIONS: 10 OF 90MM X 80MM X 175MM HIGH.

### 7.3 HANDLING BLACK POWDER WITH EXTREME CAUTION AT ALL TIMES

- IMPACT, FRICTION, SPARK OR FLAME CAN CAUSE DEFLAGRATION.
- CARE MUST BE TAKEN NOT TO GENERATE ELECTROSTATIC CHARGES; AN EXPLOSION OF DUST MAY BE INITIATED WITH AS LITTLE AS 20MJ.
- STORAGE: THE MATERIAL MUST BE STORED IN APPROVED LICENCED, COOL AND DRY MAGAZINE.
- BLACK POWDER IS STORED IN 10 TINS OF 500G IN A 5KG UN 4G APPROVED CARDBOARD BOXES.

### 8. EXPOSURE CONTROL / PERSONNEL CONTROL AND PROTECTION

- AS A MINIMUM, WEAR 100% COTTON OVERHAULS, SOCKS AND UNDERCLOTHES AND CONDUCTIVE SHOES.
- IN AREAS WHERE DUST AND NOISE OCCUR WHERE DUST MASKS, EAR PROTECTION AND SAFETY GLASSES OR AS PRESCRIBED BY THE LOCAL AUTHORITY.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE: DARK GREY / BLACK GRANULAR GRANULE POWDER
- ODOUR: SULPHUROUS
- SOLUBILITY: POTASSIUM NITRATE (KNO<sub>3</sub>) IS VERY SOLUBLE IN WATER  
CHARCOAL IS INSOLUBLE IN WATER  
SULPHUR IS INSOLUBLE IN WATER  
DEXTRIN IS SOLUBLE IN WATER  
GRAPHITE IS INSOLUBLE IN WATER
- IMPACT VALUES: BLACK POWDER CAN BE INITIATED BY IMPACT OF 5KG DROPPED FROM GREATER THAN 4 M
- BOILING POINT: N/A
- DENSITY: N/A
- pH: N/A

### 10. STABILITY AND REACTIVITY

- STABILITY: AN EXPLOSIVE MATERIAL
- HAZARDOUS REACTION: TEMPERATURE HIGHER THAN 230 °C, SPARKS AND SOURCES OF IGNITION
- DECOMPOSITION PRODUCTS: CO, CO<sub>2</sub>, H<sub>2</sub>S

### 11. TOXICOLOGY INFORMATION

- INHALING: HIGH CONCENTRATIONS OF DUST MAY CAUSE BREATHING TO BE LABOURED AND IRRITATION TO RESPIRATORY TRACT.
- SKIN CONTACT: REPEATED AND/OR PROLONGED CONTACT MAY CAUSE IRRITATION.
- EYE CONTACT: DUST MAY CAUSE SEVERE IRRITATION.
- INGESTION: SWALLOWING MAY CAUSE ABDOMINAL SPASMS AND DIZZINESS.
- LONG TERM EXPOSURE: SERIOUS CASES OF INGESTION MAY RESULT IN BLOOD DISORDERS

### 12. ECOLOGICAL INFORMATION

- MOBILITY, PERSISTENCE/DEGRADABILITY, BIOACCUMULATION AND ECO TOXICITY:
- TOXIC TO AQUATIC LIFE. KNO<sub>3</sub> AND DEXTRIN ARE VERY SOLUBLE IN WATER.  
SULPHUR AND GRAPHITE ARE VIRTUALLY INSOLUBLE IN WATER.  
CHARCOAL AND GRAPHITE IS NINSOLUBLE IN WATER

### 13. DISPOSAL CONSIDERATIONS

DISPOSAL SHOULD BE IN ACCORDANCE WITH THE EXPLOSIVE ACT, ACT No. 26 OF 1956 CHAPTER 15, S15.2  
"EXPLOSIVES SHALL BE DESTROYED ONLY IN A MANNER PREVIOUSLY APPROVED, IN WRITING, BY AN INSPECTOR AND THE PERSON CARRYING OUT THE DESTRUCTION SHALL ADHERE IN EVERY DETAIL TO THE METHOD APPROVED".

### 14. REGULATORY INFORMATION

- USERS SHALL ENSURE THAT THEY COMPLY WITH THE EXPLOSIVE ACT, ACT 26 OF 1956, AS AMENDED.
- THE MATERIAL IS CLASSIFIED AS A CLASS 1.1D CATEGORY ZZ EXPLOSIVE

**15. OTHER INFORMATION**

ALL INFORMATION IS GIVEN IN GOOD FAITH, BUT WITHOUT GUARANTEE IN RESPECT OF ACCURACY AND NO RESPONSIBILITY IS ACCEPTED FOR ERRORS OR OMISSIONS OR THE CONSEQUENCES THEREOF. IT IS THE USERS OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE MATERIAL.

**COMPILED BY:**     **OBATEX (PTY) LTD, KROONDAL, PO Box 586 KROONDAL 0350 REPUBLIC OF SOUTH AFRICA.**  
                          **TELEPHONE 082 498 5912**  
                          **E-MAIL OBATEXPTYLTD@GMAIL.COM**