

622.235

. . . , . . . , . . . , . . . ( „ ” )  
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 : , , , .

*Dangerous factors at the handling ammonium nitrate explosives are covered. Dependence of influence of critical diameter for detonation on degree of compaction of the explosives is specified, causes of self-ignition of liquid explosive mixes are determined and measures according to their elimination are recommended.*

*Key words: ammonium nitrate, explosion, dangerous factors, fire.*

,  
 100 150 . 2004 . 45059 ,  
 3454 [1].  
 2007 . 26 . ,  
 2240 [2]. 2004 .  
 11 % , – 13 % .  
 ,  
 ( ) . ,  
 ,  
 ( 94 % ) ( ) .  
 ,  
 ;  
 , 1947 .  
 ( ) . 2000 ,

600 . 1957 .

, , ;  
, ; ;  
[3].

[4-7].

; , ; ,

340 / , 980 / .

( ).

79/21.

AN-FO

[4].

: , ( ), ;  
, ( ), ;  
, , ;

1) „ ”

, , D. , , . ,

2) [5];

»: , « ,

( . 7.10.4.7).

, ( . 7.10.4.3).

. 7.10.4.25:

3) 2 ;

, , 1

4) 6 ;

0,8 / <sup>3</sup> . ~100 .

*d* *D*  
[6]:

|              |     |     |     |     |      |      |
|--------------|-----|-----|-----|-----|------|------|
| <i>d</i> ,   | 100 | 150 | 200 | 250 | 300  | 460  |
| <i>D</i> , / |     | 1,4 | 1,6 | 1,8 | 1,15 | 2,75 |

40 1,95 / , - 3,4 / .

6...9 %.

- 15...18 %,

) ( ),

) ” 6

1,5...2,0

15

( ).

(NO CO),

( ),

(64 %), (16 %) 1 (20 %), -20, 2, 9 %

21,2

21,1

[7].

0,17  
2 - 0,73...0,84 / <sup>3</sup>,

2 - 1,48...1,54 / <sup>3</sup>.  
-8

1 5,8...5,9

2

2).

1

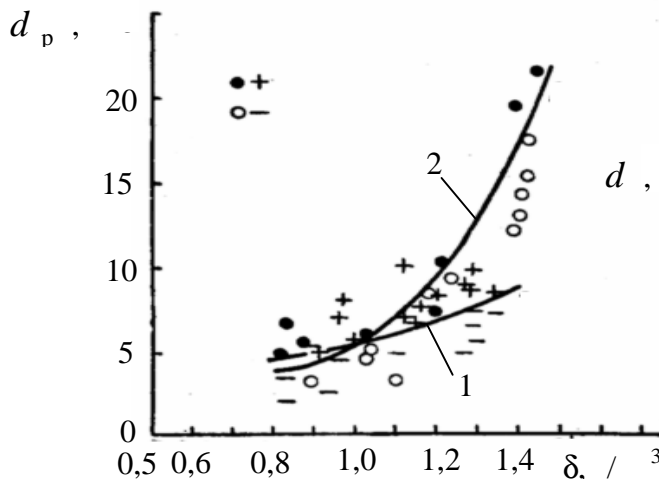
8,3...8,5 ,  
-20...26 .  
 $d_p$

. 2  
 $d$

. 1, 2

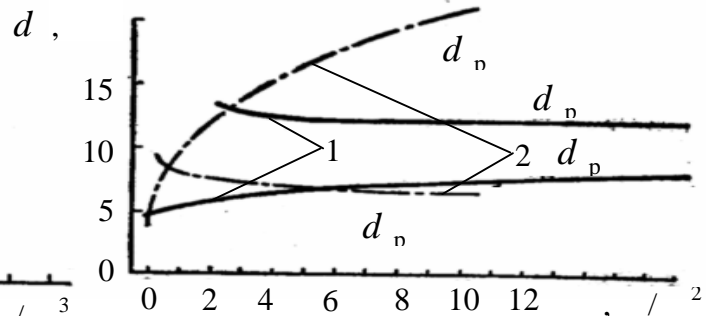
2

2



. 1.

2 - : 1 - 1 ( -20), 2 - : 1 - 2 ( 9 % )



. 2.

1 ( -20), 2 - : 1 - 2 ( 9 % )

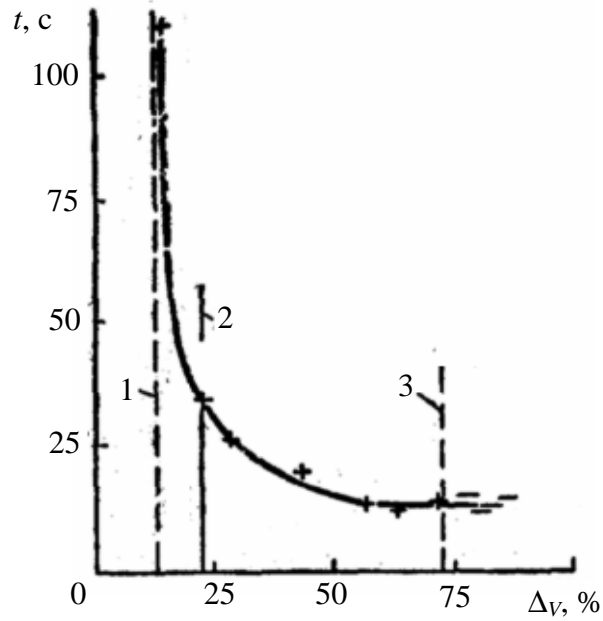
: ( )

[7],

. 3,

$$t = 15...17^\circ$$

3,5 . 3, ( )



. 3. , %: 1 3 - ; + ; - ; 2 -

1,2 .

(1:2,5).



[8],  
 ,  
 1...2 , -  
 ( ) .

1) , :  
 ) , -  
 ) , ;  
 NO<sub>2</sub>, CO), (NO,  
 2) , ;

3) , ;  
 , ,  
 4) ;

5) , ;  
 „ ” 6 ,  
 .

1. : . / . . ,
2. , . . . - : , 2007. - 384 .
- // . . . - 10(124). - 2007. - . 77-99.
3. - / . . . , . . . //



4. . „ . . . . . // . . . . .  
 . - „, 2003. - 1. - . 33-35.
5. . „ . „ . . . . . -  
 . - „: . - 2007. - 13. - . 119-127. //
6. . „ . „ . . . . .  
 . - „: , 1988. - 358 .
7. . . . . .  
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8. / . // . . . . . -  
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