

SAFEX INTERNATIONAL

(Established 1954)

INCIDENT NOTICE

(Kindly direct all correspondence to the Secretary General)

INCIDENT TITLE:

14 Jun 2014: Chile - Violent decomposition in AN distributor vessel

DATE POSTED 10 December 2014	REFERENCE IN23-14	SOURCE Member
INCIDENT OUTLINE		
When did it happen?	Thursday, 14 June 2014 at 07:15 am	
Who experienced it?	Enaex S.A.	
Where did it happen?	Prillex® America Plant, Mejillones, Chile	
What material was involved?	Approx. 40 l of ammonium nitrate (AN) solution	
What happened?	While an operator was routinely cleaning the hot concentrated AN solution spraying nozzles on the 10th floor of the AN prilling tower, a violent decomposition of the AN occurred.	
Why did it happen – theory?	It is postulated that an accumulation of organic additive inside the piping was dislodged by the flow through it and mixed with the solution. This resulted in the additive content exceeding 4000 ppm which sensitized the AN.	
What was the impact?	The pressure shock wave caused by the decomposition of AN threw the operator to the floor and caused injury to his arms and left eardrum. The AN solution distributor vessel was totally destroyed with minor damage to the roof.	

ADDITIONAL INFORMATION

Enclosure

None

Subsequent report

An Investigation Report (IR) is being prepared.

COMMENT

Value of incident

The sensitivity of AN to impurities is highlighted by this incident as is the need for effective routine cleaning procedures. The IR will elaborate on the detail thereof.

Observations**DISTRIBUTED BY:**

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