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TECHNICAL BULLETIN No. 2/2006

Issued: April 2006

SUBJECT

Update on ARRO Technical Bulletin No 3/99, VITON 'O' Rings.

INTRODUCTION

The 3/99 Bulletin highlighted the potential decomposition of VITON products in vehicle construction into hydrofluoric acid, see below.

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TECHNICAL BULLETIN No. 3/99
Issued: 16 April 1999

SUBJECT MORE ON VITON "O" RINGS

The May 1998 issue of the Victorian RAR Newsletter (circulated to ANRARA members in last year) included a warning about the potential decomposition of Viton (a synthetic rubber used in vehicles) into hydrofluoric acid in fire situations.

ANRARA member Darryl Camp has reported that the Queensland Emergency Services 'Chem Unit" doesn't believe it is likely to cause rescuers or fire service personnel "any major worries".

For more information, email the Queensland Emergency Services Chem Unit at: chem@thehub.com.au

SOURCE CONTACT Darryl Camp dcamp@tpgi.com.au

UPDATE

Further information has been provided by the NSWFB HazMat Response Unit, Scientific Advisor to seek further advice on this subject, see on following page.

NEW SOUTH WALES FIRE BRIGADES

Specialised State Operations
Hazardous Materials Response Unit
Scientific Advisor

Subject: VITON® O-Rings involved in motor vehicle fires
Date: Thursday, 23 June 2005

It has been determined that VITON® O-Rings are composed of fluoridated polymer that contains a significant percentage of fluorine by weight (approx 65%[1]). This fluorine will be liberated as a fluorocarbon or possibly hydrogen fluoride (HF) in the event of a fire or temperature in excess of 200°C.[2]

However, the relatively insignificant quantity of VITON® O-Ring products found in a motor vehicle as compared with other synthetic products that will also produce noxious gases and vapours under similar circumstances. Thus, I concur with the opinion of the Queensland Department of Emergency Services Chem Unit, in that VITON® O-Rings would not pose a significant threat above those already encountered during any incident regarding a motor vehicle involved in a fire.

References:
1 – Technical Info bulletin from the VITON® products website
2 – Dolphin MSDS 1997-2005 VITON®, Sur-Seal Gasket & Packing

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