



Declaration of Conformity and Approved Food Additive Status

Concept Smoke Fluid A / Concept Colt 4

This is to certify that the smoke chemical referred to as Concept Smoke Fluid A (Concept Colt 4) is made up of Pharmaceutical Grade Glycerol (Glycerine) and pure de-ionised water, with no other additives.

Glycerol is commonly used in pharmaceutical preparations and foodstuffs.

It is an approved food additive, allocated E422 by the European Food Safety Authority.

A copy of a typical certificate of analysis is attached and forms part of this declaration

Independent testing, where the smoke condensate has deliberately been collected, tested and analysed, which also forms a part of this declaration, demonstrates that the condensate has not chemically altered in its transition from Smoke Fluid to vapour to the liquid particulate or aerosol that forms the smoke.

For the tests detailed above the condensate had to be collected by producing smoke in exceptionally high concentrations, immediately in front of the smoke generator, in small collection vessels. Whilst the results confirm that, should contamination occur, the resulting condensate is glycerine, in practical applications of the smoke in dense smoke concentrations associated with security/ leak testing / training no discernible contamination occurs

Practical testing to determine possible contamination following the activation of a security smoke system, using Smoke Fluid A by the US Department of the Air Force (where a typical application would result in visibility being reduced to 100mm throughout a representative volume and the effect being left in place for up to 1 hour) found no traces contamination by glycerine in any of the samples left within the testing facility.

For Concept Smoke Screen Ltd

Director

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Concept Smoke Screen Ltd – Concept Engineering Ltd – Concept Smoke Systems Ltd]
7 Woodlands Business Park, Maidenhead, Berks SL6 3UA

15th November 2012



Appendix A
Appendix B/C
Appendix D/E/F/G/H

Certificate of Analysis Glycerol
Thin Layer Chromatography Analysis - Minipak Aerosols and SafePharm Laboratories
Infra Red Analysis – Minipak Aerosols

Appendix A

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CERTIFICATE OF ANALYSIS
GLYCERINE
BM0191A

Batch: 39915
Customer: C & P Development (04712)
Order number
Expiry date: 08.03.2013

Characteristics	Unit	Specification	Analysis Result
Glycerol Content (Ph.Eur)	%	>=99.50	99.80
Colour APHA	Apha	<=10.0	5.0
Sulphates Ash (Ph.Eur)	%	<=0.01	<0.01
Chlorides (Ph.Eur)	ppm	<=10.0	1.0
Halogenated Compounds (Ph.Eur)	ppm	<=35.0	1.0
Heavy Metal	ppm	<=5.0	<1.0
Aldehydes, reducing substances	ppm	<=10.00	<1.00
Moisture (Ph.Eur)	%	<=0.500	0.0280
Refractive Index 20	ND 20	1.4700-14750	1.4740
Acidity or Alkalinity	MI 0.1N-NaOH	<=0.20	0.04
Density 20/20 (Ph.Eur)	-	>=1.2620	1.2620
Ester (0.1 N-HCL) (Ph.Eur)	ml	>=8.00	8.84
Sugar (Ph.Eur)	-	Passes test	Negative
Appearance	-	Free from visible matter	Free from visible matter
Impurity A and related substances	-	Passes test	Passes test

Blends House • Overbrook Lane • Knowsley Business Park • Knowsley • Merseyside • L34 9FB
Tel: 0151 548 3000 • Fax: 0151 548 3111 • Email: sales@blendsltd.co.uk
Company Reg. No: 3537679 VAT Reg. No: 712 2632 72

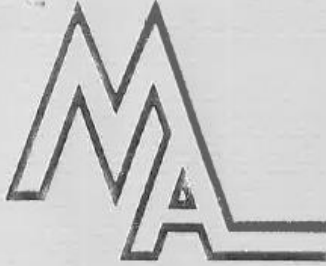


Appendix B

Declaration of Conformity and Approved Food Additive Status – Fluid A / Colt 4
Concept Smoke Screen Ltd – Concept Engineering Ltd – Concept Smoke Systems Ltd]
7 Woodlands Business Park, Maidenhead, Berks SL6 3UA

15th November 2012





RECEIVED
17 MAR 1989
RECEIVED

MINIPAK AEROSOLS LIMITED
Specialist Pharmaceutical and Cosmetic Aerosol Fillers

Registered Office
9 Arkwright Road
Astmoor Industrial Estate
Runcorn, Cheshire
England WA7 1NU
Telephone: (09285) 67676/7
Telex: 829523 MINPAK G.
Fax: (09285) 60608

Your Ref:

Our Ref:

TREVOR DUNNINGTON
CONCEPT ENGINEERING
30 WHITE WALTHAM
AIRFIELD ESTATE
MAIDENHEAD
BERKSHIRE

16th March 1989

Dear Mr Dunnington

Please find enclosed a copy of the analysis report from Safepharm Laboratories of the Concept Smoke Concentrate and the Condensate obtained from the machine.

Note: this analysis was performed using a technique known as TLC (Thin Layer Chromatography) not GLC as requested. This is because as far as I am aware and this is also confirmed by Safepharm Laboratories Glycerine is not normally analysed by this technique.

The results confirm that both condensate and concentrate contain only Glycerine with no degradation of the product occurring upon operation of the machine.

These results are also backed up by infra red data which you already have.

If you require any further assistance in this matter please do not hesitate to contact me

Kind Regards

S. Tickle

Directors: W.G. Bytheway B.Sc., H.S. Bytheway, D.G. Bytheway, A.J. Percival, J.B. Milnes. Reg. No. 1038900 England

Appendix C

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15th November 2012



SafePharm Laboratories Ltd.

Mrs P. Stringer
Minipak Aerosols Limited
7-9 Arkwright Road
Astmoor Industrial Estate
RUNCORN
Cheshire

P.O. Box No. 45
Derby DE1 2BT England
Telephone Derby (0332) 792896
Telex 377079 SAFPHM G
Fax Derby (0332) 799018

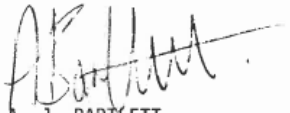
Date 13 March 1989

Your ref. 433/2228

Our ref. DJI/GCD/33

ANALYSIS OF CONCEPT SMOKE AND GLYCERIN CONDENSATE

<u>Sample</u>		<u>Glycerin Identification</u>
Concept Smoke	16/2/89	Positive
Glycerin Condensate	15/2/89	Positive


A. J. BARTLETT
SENIOR ANALYST


D. J. INSLEY
DIRECTOR CHEMICAL AND MICROBIOLOGICAL LABORATORIES

Reg. In England No. 1123855

Appendix D

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FROM D.G.BYTHEWAY
TO TREVOR DUNNINGTON

RE INFRA RED SCAN ON CONCEPT 4
PRODUCT/SMOKE
.....

PLEASE FIND ATTACHED COPIES OF THE FOLLOWING:-

- NUMBER 1 SCAN OF STANDARD GLYCERINE
- NUMBER 2 SCAN OF CONCEPT PRODUCT CONCENTRATE (WITH WATER REMOVED).
- NUMBER 3 SCAN OF CONDENSATE FROM THE SMOKE (WITH WATER REMOVED).
- NUMBER 4 SCAN SHOWING ALL THREE TRACES TOGETHER.

FINDINGS OBTAINED INDICATE THAT BOTH PRODUCT AND SMOKE ARE MADE
UP OF ONLY GLYCERINE I.E. THERE ARE NO OTHER MATERIALS PRESENT/
FORMED IN THE TRANSITION FROM PRODUCT TO SMOKE.

REGARDS

D.G.BYTHEWAY

Appendix E

15th November 2012

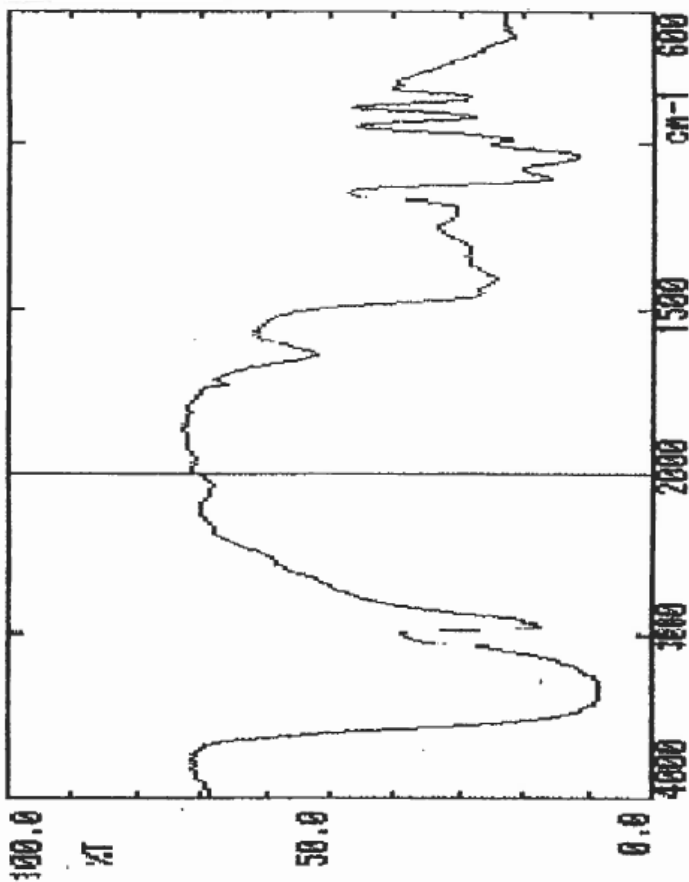
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Concept Smoke Screen Ltd – Concept Engineering Ltd – Concept Smoke Systems Ltd]
7 Woodlands Business Park, Maidenhead, Berks SL6 3UA



PHILIPS INFRARED DATA STATION

DATE 01:02:89 TIME 16:14:35

CURRENT AREA
STANDARD MATERIAL
BETWEEN KBR DISCS
GLYCEROL
PRINTER STATUS
NO DEVICE



HELP LIBRARY MANIP-ULATE SCAN MENU DISPLAY MODE BACK

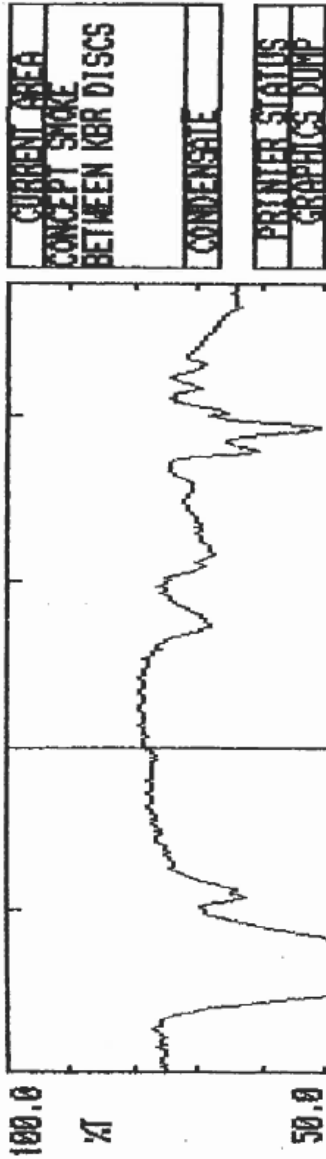
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Appendix F

15th November 2012



PHILIPS INFRARED DATA STATION DATE 01:02:89 TIME 16:48:49



- 0 HELP
- 1 LIBRARY MENU
- 2 MANIPULATE
- 3 SCAN MENU
- 4 DISPLAY MODE

Appendix G

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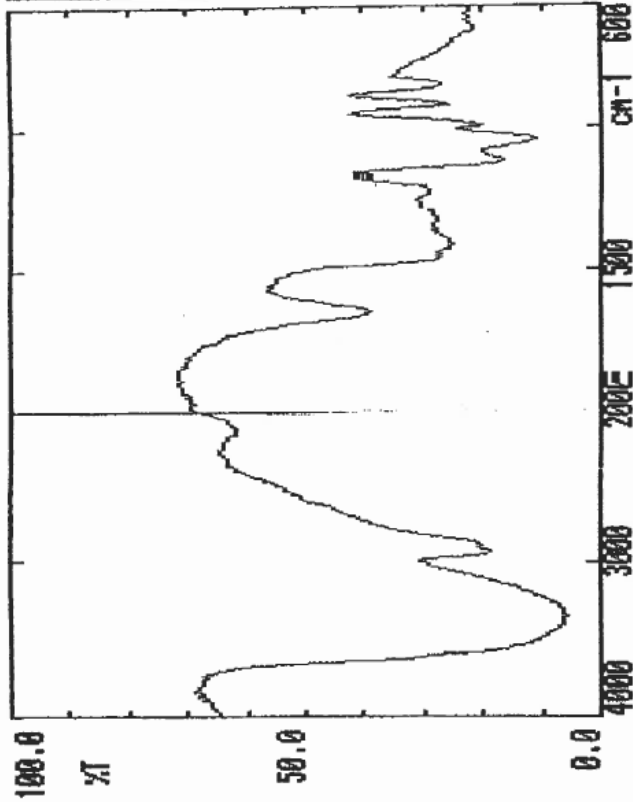
15th November 2012



PHILIPS INFRARED DATA STATION

DATE 01:02:89 TIME 16:06:15

CURRENT AREA
CONCEPT SMOKE CANA
LISTER 8K129 PRODUCC
T CONCENTRATE
CONCEPT SMOKE CA
PRINTER STATUS
NO DEVICE



0 HELP 2 LIBRARY MENU 3 BACK 5 MANIP-ULATE 6 SIGN IEND 8 DISPLAY MODE

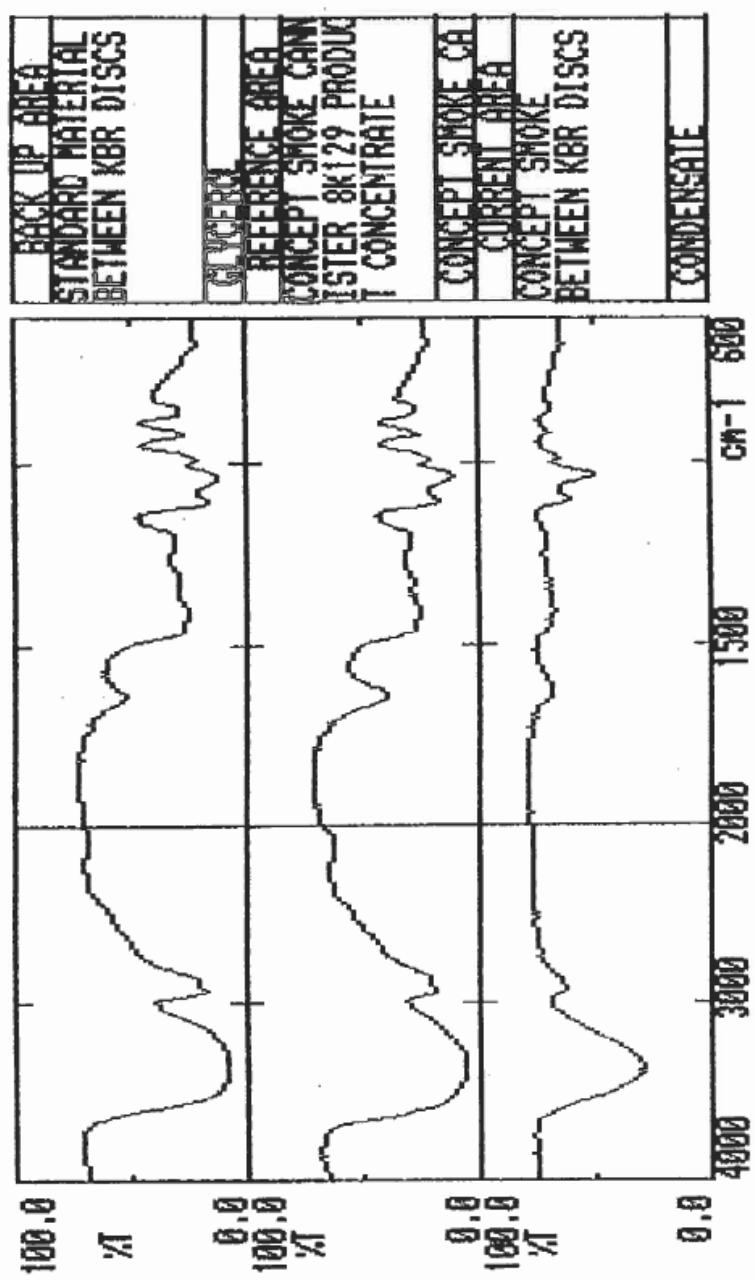
Appendix H

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15th November 2012



PHILIPS INFRARED DATA STATION DATE 01:02:89 TIME 16:53:36



- 01 HELP
- 02 LIBRARY MENU
- 03 BACK
- 04 MANIPULATE
- 05 SCAN MENU
- 06 DISPLAY MODE

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