



CERTIFIED REFERENCE MATERIAL BCR[®] – 547

CERTIFICATE OF ANALYSIS

2,4-DINITROPHENYLHYDRAZONE DERIVATIVE OF ACETALDEHYDE		
	Mass fraction	
	Certified value ¹⁾ [%]	Uncertainty ²⁾ [%]
2,4-dinitrophenylhydrazone of acetaldehyde	98.3	0.5
<p>1) Unweighed mean of means of p accepted sets of results obtained by reversed-phase-HPLC with UV detection in the range of 340-380 nm. The value is traceable to the International System of Units (SI).</p> <p>2) Half-width of 95 % confidence interval of that mean.</p>		

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 1 mg.

NOTE

This material has been certified by BCR (Community Bureau of Reference, the former reference materials programme of the European Commission). The certificate has been revised under the responsibility of IRMM.

Geel, December 2002
Revised: December 2006

Signed: _____

Prof. Dr. Hendrik Emons
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DESCRIPTION OF THE SAMPLE

The material consists of approximately 5 mg of solid material in glass vials closed with screw caps. The vial is stored in a vacuum-sealed aluminium pouch.

ANALYTICAL METHOD USED FOR CERTIFICATION

Reversed-phase HPLC with UV detection in the range of 340-380 nm

PARTICIPANTS

- Hogeschool Enschede, Enschede (NL)
- Arbetslivsinstitutet, Umeå (SE)
- BASF AG, Labor für Umweltanalytik, Ludwigshafen (DE)
- BP Research & Engineering Centre, Sunbury-On-Thames (GB)
- ERGO Forschungsgesellschaft, GmbH, Hamburg (DE)
- Fondazione Clinica del Lavoro, Centro di Ricerche Ambientali, Padova (IT)
- Fondazione Clinica del Lavoro, Laboratorio Igiene Industriale, Pavia (IT)
- Health and Safety Laboratory, Sheffield (GB)
- Institut für Wasser-, Boden- und Lufthygiene des Bundesgesundheitsamtes, Berlin (DE)
- Institut für Arbeits- und Socialmedizin, Erlangen (DE)
- Institut National de Condiciones de Trabajo (INSHT), Barcelona (ES)
- Institut National de l'Environnement, Industriel et des Risques (INERIS), Département Mesures et Analyses, Verneuil-en-Halatte (FR)
- Institut Universitaire de Medicine et d'Hygiène du Travail, Lausanne (CH)
- Miljøkemi, Galten (DK)
- Ministère de l'Emploi et du Travail, Laboratoire de Toxicologie Industrielle, Bruxelles (BE)
- Niedersächsisches Landesamt für Ökologie, Hannover (DE)
- Tampereen Alueyöterveyslaitos, Tampere (FI)
- TNO Milieuwetenschappen, Delft (NL)

SAFETY INFORMATION

The usual laboratory safety measures apply.

INSTRUCTIONS FOR USE

The material is intended to be used for calibration of analytical methods.

Before opening, the vial containing the crystals is allowed to reach room temperature. After weighing the crystals, a stock solution is made up with acetonitrile as solvent to a concentration in the range 50 - 300 µg/ml of hydrazone. Ultrasonificate the solution for 2 min.

STORAGE

The materials should be stored at 4 °C.

However, the European Commission cannot be held responsible for changes that happen during storage of the material at the customer's premises, especially of opened samples.

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NOTE

A technical report on the production of BCR-547 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.