

CERTIFIED REFERENCE MATERIAL Organic substance

Ref No: CM 30453
Barcode: 41548950

Lot No: 1054193

Certification Date: 28.10.2024
Expiry date: 28.11.2026

Description: Tribromomethane
CAS No: 75-25-2

Empirical formula: CHBr_3

MW: 252.731

Certified Purity / Uncertainty: 0.9900 +/- 0.0010 g/g (99.00 +/- 0.10 %)
Purity=100% - Assay organic impurities

Water content: 1.0

Storage Conditions: Store in a refrigerator at temperatures between 2°C to 8°C

Method of certification:	Concept of Certification and traceability statement:	Intended use:	Instructions for the correct use of this reference material:	Stability and storage:	Level of homogeneity:
CRM's calibration procedure (WQP 5.15.1/22)	The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with EA 4/02. Metrological traceability is established through in-house validated method. The measurement results are traceable to SI.	For Laboratory Use Only. This CRM is intended for: Calibration of TLC, GC/FID, GC/TCD, GC/ECD, GC/MS, GC/MS/MS, LC/UV, LC/MS and LC/MS/MS. Validation of analytical methods. Preparation of "working reference samples". Detection limit and linearity studies. This statement is not intended to restrict the use for other purposes.	This CRM can be used directly or can be diluted in an appropriate solvent. Only a clean glassware should be used. Hazardous situation: The normal laboratory safety precautions should be observed when working with this CRM. Further details for the handling of this chemical are available as safety data sheet.	This CRM is with a guaranteed purity +/- 2% deviation prior to the expiration date. Stability is guaranteed, provided that the material is kept in its original packaging, tightly closed stored, as written in the section: Storage Conditions.	The material was tested for homogeneity by analyzing randomly selected samples according to an in-house procedure. The level of homogeneity proved satisfactory for a sample volume of min. 2 mg. The uncertainty incorporates the sample standard deviation combined with the uncertainty calculated from homogeneity and stability studies.

This certificate relates solely to the lot number given above.

All processes (including generating of this certificate) are completely controlled by the specialized Computer-Aided-Manufacturing (CAM) software.

This Certified Reference Material was produced under a quality management system that is:

- Registered to ISO 9001 Quality Management System (Lloyd's Register Quality Assurance Ltd Cert No 0039638)
- Accredited according to ISO/IEC 17025
- Accredited according to ISO 17034

This document is designed and the certified value and uncertainty are determined in accordance with ISO 33401, ISO 33405, and Eurachem / CITAC Guides

Names of certifying officers:

Laboratory:  Margarita Dimitrova

Manager:  Krassimira Taralova

Analytical Data:

GC-Conditions

	He, constant flow	Oven	Temperature	Hold
Carrier gas:		Initial	70°C	0
Column:	Agilent CP9105 J&W VF-624ms 60m, 0.32mm, 1.80µm	10°C/min	120°C	0
Flow rate:	1.6 ml/min	5°C/min	160°C	0
Injection volume:	1µl split	30°C/min	220°C	3
Injector:	220 °C			

MS Conditions

Ionization mode:	EI
MS Quad:	150°C
MS Source:	230°C
Mode:	Scan
Transfer line:	230°C

Area Percent Report

Data Path : C:\DATA\2024\02.2024\
 Data File : Tribromomethane_41548950-s2.D
 Acq On : 1 Feb 2024 20:41
 Operator : MD
 Sample : Tribromomethane_41548950-s2
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: autoint1.e
 Integrator: ChemStation

Method : C:\METHODS\Quant\913084.M
 Title :

Signal : TIC: Tribromomethane_41548950-s2.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.998	616	628	635	M6	2613	58839	0.01%	0.014%
2	7.197	667	682	696	M8	6769	165940	0.04%	0.039%
3	9.229	1211	1233	1268	M2	54438	1576339	0.38%	0.375%
4	11.614	1852	1880	1911	M	10828629	416897357	100.00%	99.062%
5	11.795	1916	1929	1947	M6	4474	152727	0.04%	0.036%
6	12.102	1992	2012	2027	M6	4341	153508	0.04%	0.036%
7	12.518	2105	2125	2145	M10	6082	209341	0.05%	0.050%
8	13.152	2272	2297	2311	M3	24336	757982	0.18%	0.180%
9	14.496	2650	2661	2672	M3	5575	133249	0.03%	0.032%
10	15.436	2904	2916	2934	M9	13459	349804	0.08%	0.083%
11	15.947	3035	3055	3070	M2	15485	390675	0.09%	0.093%

Sum of corrected areas: 420845761

913084.M Fri Feb 02 09:11:19 2024

