

BNQ 2410-300/2025

Products Used as Dust Control Agents and Stabilizers for Non Asphalted Roads and Other Similar Surfaces

BNQ 2410-300/2025

Products Used as Dust Control Agents and Stabilizers for Non-Asphalted Roads and Other Similar Surfaces

Produits utilisés comme abat-poussières et agents stabilisants pour routes non asphaltées et autres surfaces similaires



Bureau de normalisation du Québec

The Bureau de normalisation du Québec (BNQ) is a standardization organization based in Quebec and created in 1961. It is one of the standards development organizations accredited by the Standards Council of Canada (SCC) and as such, is part of the National Standards System.

As an administrative unit of Investissement Québec (IQ), the BNQ produces standards that meet the needs of the industry, of public and para-public organizations, and of concerned groups.

THIRD EDITION — 2025-11-05

This new edition supersedes the edition dated October 1, 2009.

This document is published in both French and English. In case of incompatibility, the French version prevails.

The decision resulting from the systematic review that will enable to determine whether the current document shall be modified, revised, reaffirmed or withdrawn will be implemented no later than at the end of November 2035.

ICS: 71.100.99; 93.080.99.

REQUEST FOR INFORMATION AND PURCHASE

Any request for information or purchase of this document may be sent to the Bureau de normalisation du Québec (BNQ) by email at: bnqinfo@bnq.qc.ca or on the BNQ's website [https://www.bnq.qc.ca].

REVISION OF BNQ DOCUMENTS

Collaboration from BNQ document users is essential in keeping our documents up to date. Therefore, any suggestion aimed at improving their contents will be appreciated. We ask you to send us your suggestions or comments on the form at the end of this document.

The electronic or printed version of this document is for personal use only. Distribution to third parties, partners or clients, as well as saving, distribution or use on a computer network is forbidden without written agreement from the BNQ.

A notification by email mentioning the publication of a new edition of a revised document, amendments or errata will be sent to the email address used for the online purchase.

Notifications and the catalogue may be consulted at all times on the BNQ's website [https://www.bnq.qc.ca] to verify if a more recent version of a document exists or if amendments or errata have been published.

This document is the result of thousands of hours of work provided on a voluntary basis by many community experts. We thank you for taking this into account, and for your contribution through your purchase of this document for its evolution in the years to come.

© BNQ, 2025

All rights reserved. Unless otherwise specified, no part of this document may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilming, without written permission from the BNQ.

NOTICE

UNDERSTANDING OF THE NOTION OF EDITION

It is important to note that this edition implicitly includes all amendments and errata that might be published separately at a later date. It is the responsibility of the users of this document to verify whether any amendments or errata exist.

INTERPRETATION

The verb shall is used to express a requirement (mandatory) in order to conform to this document.

The verb **should**, or the equivalent expressions **is recommended that** and **ought to**, is used to express a recommendation or that which is advised, but not required. The verb **may** is used to express an option or that which is permissible within the limits of the standard.

Except for notes presented as **normative notes**, which set out mandatory requirements and which appear in the lower portion of figures and tables only, all other **notes** are **informative** (non-mandatory) and provide useful information intended to facilitate understanding or clarify the intent of a requirement or to add clarification or further details.

Normative annexes provide additional requirements (mandatory) in order to conform to this document. **Informative annexes** provide additional (non-mandatory) information intended to assist in the understanding or use of elements of this document or to clarify its implementation. They contain no mandatory requirements for the purpose of compliance with this document.

DISCLAIMER OF RESPONSIBILITY

This document was developed as a reference document for voluntary use. The BNQ assumes no responsibility or liability for any damages arising from the use of this document, its interpretation, or the implementation of its requirements. It is the user's responsibility to ensure and verify whether legislation or regulations make compulsory the use of this document or whether its use is required by trade regulations or market conditions, including, but not limited to, technical regulations, inspection plans originating from regulatory authorities, certification programs. It is also the responsibility of the user to consider limitations and restrictions specified in this document and to judge the suitability of this document for the user's purposes.

MARKING AND LABELLING REQUIREMENTS

This document may contain requirements for marking and/or labelling. In this event, in addition to meeting such requirements, it is also the responsibility of the suppliers of products to comply with the applicable national, provincial or territorial laws and regulations of the jurisdictions in which the products are distributed.



FOREWORD

This standard was developed in compliance with the Standards Council of Canada (SCC)'s Requirements and Guidance for standards development organizations. Its publication was approved by a Standards Development Committee, whose members were:

Suppliers

ARMSTRONG, Jimmy Les Entreprises Bourget

ARSENAULT, Éric Somavrac C. C.

HENRI, Michel Sel Warwick

Users

BUSCH, Christian Air Inuit

ROBITAILLE, Jean-Philippe Ministère des Transports et de la Mobilité

durable (MTMD)

SÉNÉCHAL, Édith Kativik Regional Government

General Interest

BÉRUBÉ, Virginie AGAT Laboratories

LANGLOIS, Hugo Ministère de l'Environnement, de la Lutte contre

les changements climatiques, de la Faune et des

Parcs (MELCCFP)

TRIFFAULT-BOUCHET, Gaëlle Centre d'expertise en analyse environnementale

du Québec (CEAEQ)

Bureau de normalisation du Québec (BNQ) Coordination Team

HACHID, Mourad

TREMBLAY, Carole

The development of this standard was made possible thanks to the financial support of the Ministère des Transports et de la Mobilité durable (MTMD) and the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP).



TABLE OF CONTENTS

				Page			
1	PURPC	PURPOSE AND SCOPE					
2	NORM	NORMATIVE REFERENCES					
	2.1 2.2 2.3 2.4	GOVERN	L ENT FROM A STANDARDS BODY IMENT DOCUMENTS DOCUMENTS	1 1 2 3			
3	DEFINI	DEFINITIONS					
4	TESTIN	TESTING AND SAMPLING					
	4.1 LABORATORIES AND TEST METHODS4.2 PREPARATION OF SAMPLES						
		4.2.1 4.2.2 4.2.3 4.2.4	General Water-soluble products Fat-soluble products Producing water accommodated fraction (WAF) samples	5 6 6			
5	GENER	ENERAL REQUIREMENTS					
6	SPECIFIC REQUIREMENTS						
	6.1 TOTAL WEIGHTED SCORE6.2 ECOTOXICOLOGICAL RISK LEVEL ASSESSMENT						
		6.2.1 6.2.2 6.2.3 6.2.4 6.2.5 6.2.6 6.2.7 6.2.8 6.2.9	General Complexity index level (source) Number of critical contaminants (source) Level of acceptable degradation achieved (fate) Mobility index (fate) Bioconcentration potential of detected critical contaminants (fate) Aquatic toxicity level (effects) Soil toxicity level (effects) Genotoxicity level (effects)	9 10 11 11 14 14 15 16			
7	SPREADING INSTRUCTIONS						



8	MARKING AND LABELLING					19			
Annex A	4 —	Chemical factors	substances,	critical	contaminan	ts and	bioconce	ntration	21
	Table A.1 —	-	Inorganic con	npounds	5				22
	Table A.2 — Table A.3 —		Dioxins and furans				23		
			Phenol compounds			24			
	Table A.4 —	-	Volatile organ	nic conta	aminants (VO	OCs)			26
	Table A.5 —	-	Polycyclic aro	matic h	ydrocarbons	(PAHs)			28
Annex E	3 —	Decision-r	making diagra	m					29
Annex (C —	Biodegrac procedure	lation, photoes	degrada	tion and in	herent	degradat	ion test	32
	Table C.1 —	-	Stock solution	ns					33
	Table C.2 —	-	Biodegradatio	on test t	reatments				35
	Table C.3 —	-	Photodegrada	ation tes	st treatment	:S			38
Annex [) —	Informativ	ve references						43



1 PURPOSE AND SCOPE

The purpose of this standard is to establish the ecotoxicological requirements for products used as dust control agents and stabilizers, in order to determine the total weighted score for each ecotoxicological risk level.

This standard also specifies marking and packaging requirements and spreading instructions for these products.

This standard does not aim to evaluate the efficiency, nor the concentrations of products used as dust control agents or stabilizers during their utilization.

This standard applies to products used as dust control agents and stabilizers on surface courses such as non-asphalted roads and aerodrome runways or on surfaces located near industrial activities that produce dust with a risk of environmental impact.

This standard was developed to serve as a reference document for conformity evaluation activities of specific products.

NOTE — Conformity evaluation is defined as the systematic examination of the extent to which a product fulfils specified requirements.

2 NORMATIVE REFERENCES

2.1 GENERAL

The references below (including any amendment or errata) are normative references, and are therefore considered mandatory. They are essential to the understanding and use of this standard, and are cited in appropriate places in the text.

It should be noted that a dated (normative and informative) reference refers to that specific edition of the reference, while a non-dated reference refers to the latest edition of the reference in question.

NOTE — This standard also cites informative references, which are listed in an annex.

2.2 DOCUMENT FROM A STANDARDS BODY

ISO (International Organization for Standardization) [https://www.iso.org]

ISO/IEC 17025

General Requirements for the Competence of Testing and Calibration Laboratories.

(Exigences générales concernant la compétence des laboratoires d'étalonnage et d'essais.)