Justification for the selection of a candidate CoRAP substance

Substance Name (Public Name):   Benzothiazole-2-thiol

Chemical Group: -

EC Number: 205-736-8

CAS Number: 149-30-4

Submitted by: Germany

Published: 20/03/2013

NOTE

This document has been prepared by the evaluating Member State given in the CoRAP update.

Contents

1 IDENTITY OF THE SUBSTANCE

1.1 Name and other identifiers of the substance

Table 1: Substance identity

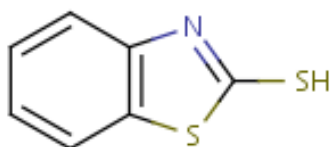|	
Public Name:	Benzothiazole-2-thiol
EC number:	205-736-8
EC name:	Benzothiazole-2-thiol
CAS number (in the EC inventory):	149-30-4
CAS number:	149-30-4
CAS name:	Benzothiazole-2-thiol
IUPAC name:	1,3-benzothiazole-2-thiol
Index number in Annex VI of the CLP Regulation	613-108-00-3
Molecular formula:	C7H5NS2
Molecular weight or molecular weight range:	167.26 g/mol
Synonyms:	1,3-benzothiazole-2-thiol 2-Mercaptobenzothiazol 2(3H)-benzothiazolethione MBT

Type of substance ☒ Mono-constituent   ☐ Multi-constituent   ☐ UVCB

Structural formula:

2 CLASSIFICATION AND LABELLING

2.1 Harmonised Classification in Annex VI of the CLP

CLP:

Skin Sens. 1   H317: May cause an allergic skin reaction.

Aquatic Acute 1   H400: Very toxic to aquatic life.

Aquatic Chronic 1   H410: Very toxic to aquatic life with long lasting effects.

DSD:

R43 May cause sensitisation by skin contact.

N; R50/53 Dangerous for the environment; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Proposal for Harmonised Classification in Annex VI of the CLP

None

2.3 Self classification

Classification by the lead registrant is consistent with the entry in Annex VI (CLP), except that H400 is not included.

Classification and labelling inventory additionally includes the following classification given by three notifiers:

Carc. 1B; H350: May cause cancer.

3 JUSTIFICATION FOR THE SELECTION OF THE CANDIDATE CoRAP SUBSTANCE

3.1 Legal basis for the proposal

☐ Article 44(1) (refined prioritisation criteria for substance evaluation)

☒ Article 45(5) (Member State priority)

3.2 Grounds for concern

☒ (Suspected) CMR	☒ Wide dispersive use	☐ Cumulative exposure
☒ (Suspected) Sensitiser	☒ Consumer use	☐ High RCR
☐ (Suspected) PBT	☒ Exposure of sensitive populations	☒ Aggregated tonnage
☐ Suspected endocrine disruptor	☐ Other (provide further details below)	

2-MBT is used as an accelerator for the vulcanisation of rubber. The substance is self-classified by some notifiers as Carc. 1B. In Germany the expert committee for occupational exposure values has identified the substances as possible carcinogen. The substance evaluation is intended to clarify whether the available data justify a harmonised classification regarding carcinogenicity and/or genotoxicity.

On the basis of test results on the release of 2-MBT from consumer products (air mattresses) and the maximum possible dermal uptake of the substance, in an evaluation by the Federal Institute for Risk Assessment (BfR) it was concluded that the emission of 2-MBT from consumer products should be minimised as far as possible. The analysis of migration rates of 2-MBT from air mattresses under realistic conditions revealed that the safety margin between the possible dermal up-take (under worst-case exposure assumptions) and the NOAEL may be below 100 so that a preventive consumer protection is considered necessary. The substance evaluation is intended to clarify whether risks from this use and possible other uses of the 2-MBT in consumer products are adequately addressed in the registration dossiers.

3.3 Information on aggregated tonnage and uses

☐ 1 – 10 tpa	☐ 10 – 100 tpa	☐ 100 – 1000 tpa
☐ 1000 – 10,000 tpa	☒ 1000 + tpa	☐ 10,000 – 100,000 tpa
☐ 100,000 – 1000,000 tpa	☐ > 1000,000 tpa	

☒ Confidential

Confidentiality claim for some tonnage.

☐ Industrial use	☐ Professional use	☒ Consumer use	☐ Closed System

The following consumer uses are mentioned in the list on ECHA's Website:
Use of tyres and general rubber goods
Environmental release category
ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release
ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)
ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release
Subsequent service life relevant for that use? yes
Article category related to subsequent service life
AC 1: Vehicles
AC 2: Machinery, mechanical appliances, electrical/electronic articles
AC 3: Electrical batteries and accumulators
AC 10: Rubber articles

Also industrial and professional uses are indicated there.

3.4 Other completed/ongoing regulatory processes that may affect suitability for substance evaluation

☐ Compliance check	☐ Dangerous substances Directive 67/548/EEC
☐ Testing proposal	☐ Existing Substances Regulation 793/93/EEC
☒ Annex VI (CLP)	☐ Plant Protection Products Regulation 91/414/EEC
☐ Annex XV (SVHC)	☒ Biocidal Products Directive 98/8/EEC
☐ Annex XIV (Authorisation)	☐ Other (provide further details below)
☐ Annex XVII (Restriction)	

2-MBT has an entry in Annex VI in the Regulation (EC) No 1272/2008 (see above).

It was recommended for non-inclusion in Annexes I, IA or IB to Directive 98/8/EC (Biocides) according to Commission Decision 2008/681/EC as stated in the ESIS entry for 2-MBT.

3.5 Information to be requested to clarify the suspected risk

☒ Information on toxicological properties	☐ Information on physico-chemical properties
☐ Information on fate and behaviour	☐ Information on exposure
☐ Information on ecotoxicological properties	☐ Information on uses
☐ Other (provide further details below)	

3.6 Potential follow-up and link to risk management

☐ Restriction	☒ Harmonised C&L	☐ Authorisation	☐ Other (provide further details)

The substance evaluation is intended to clarify whether the available data or data requested justify a harmonised classification regarding carcinogenicity and/or genotoxicity.