

Swiss Safety Center AG Richtistrasse 15, Postfach, CH-8304 Wallisellen T +41 44 877 62 22, info@safetycenter.ch www.safetycenter.ch

Swiss Safety Center AG as a Conformity Assessment Body according to art. 15 of the Ordinance of 31 October 2012 relating to the placing on the market of dangerous goods receptacles and the market surveillance (RO 2012 6607) grants the following approval:

# Approval CH/KBS-GGU 073 4207317

of the packaging design type for the transport of dangerous goods, 1st issue, valid until 30.06.2031.

Applicant CEMO GmbH

In den Backenländern 5 D – 71384 Weinstadt

Holder of the approval

**CEMO GmbH** 

In den Backenländern 5 D – 71384 Weinstadt

Your order Your reference Our reference E-Mail dated 27.10.2020

CEMO metaBOX\_215S Li-SAFE + CEMO metaBOX\_340S Li-SAFE

SM 314474 / LIM

Object

Rigid plastic box, code 4H2, with an interior of non-combustible insulating

material, for

- lithium batteries, or

- lithium batteries in machinery and equipment, or

- Lithium batteries incl. accessories

Article: Li-SAFE\_BOX\_2-S and Li-SAFE\_BOX\_3-S

Manufacturer

Plaston CR, s.r.o. Kralovska 1972 CZ – 407 77 Šluknov

# 1. Legal base and transport regulations

ADR Agreement concerning the International Carriage of Dangerous Goods by Road

SDR Regulation on the transport of dangerous goods by road

RID Regulations concerning the international carriage of dangerous goods by rail

RSD Ordinance for the Swiss rail transport of dangerous goods

ICAO-TI International Civil Aviation Organisation: Technical Instruction for the safe transport

of dangerous goods by air

IATA-DGR International Air Transport Association: Dangerous Goods Regulations

IMDG-Code International Maritime Dangerous Goods Code.

GGUV Ordinance of 31 October 2012 relating to the placing on the market of dangerous

goods receptacles and the market surveillance (RO 2012 6607)

The publication or reproduction of this approval is only allowed in its entire form.

This approval includes 5 pages.

# 2. Performed tests

2.1	Drop test	CEMO Li-Safe Box 2-S	CEMO Li-Safe Box 3-S	
	drop height [m]	1.2	1.2	
	gross mass [kg]	10.4	12.6	

2.2	Stacking test	CEMO Li-Safe Box 2-S	CEMO Li-Safe Box 3-S	
	stacking load [kN]	1.8	1.02	
	test time [h]	24	24	

# 3. Description of the design type

# 3.1 Type

kind of packaging designation by manufacturer

4H2

CEMO Li-Safe Box 2-S CEMO Li-Safe Box 3-S

3.2	Dimensions	CEMO Li-Safe Box 2-S	CEMO Li-Safe Box 340 S
	length [mm]	396	396
	width [mm]	296	296
	height [mm]	215	340

# 3.3 Material type

Box and cover

ABS und PA

## 3.4 Closures

transport closures

Two clasps

# 3.5 Interior fittings of the transport box

Insulation insert made of glass fibre mats and special cushion with vermiculite according to drawing 138.1944.014-01 (AKKU- System fire protection box Li-Safe Box).

3.6	Tare and admissible gross mass	CEMO Li-Safe Box 2-S	CEMO Li-Safe Box 3-S
	tare mass of a box and Cover [kg]	1.82	2.40
	admissible gross mass [kg]	10	12.0

#### 3.7 Documents to consider

- Test report No 5'164'777\_metaBOX\_340, dated 01.12.2020, Swiss Safety Center AG, CH – 8304 Wallisellen
- Test report No 61560\_CEMO metaBOX\_340S Li-SAFE, dated 31.05.2021, Plaston, CZ – 40777 Šluknov
- Test report No 61437\_CEMO metaBOX\_215S Li-SAFE, dated 31.05.2021, Plaston, CZ – 40777 Šluknov
- Drawing 6854\_Rev.00 CEMO Li-Safe Box 215 S dated 07.05.2021, Plaston CH-9443 Widnau
- Drawing 6786\_Rev.00 CEMO Li-Safe Box 340 S dated 07.05.2021, Plaston CH-9443 Widnau
- Drawing 138.1944.014-01 AKKU- Systembrandschutzbox Li-Safe Box Grösse 2-S dated 17.05.2021, CEMO, D-71384 Weinstadt

These documents supplement the present approval.

# 4. Scope of application

## 4.1 Contents and packing group

The packagings may be used for liquid products of the packing group II or III in inner packagings.

## 4.2 Compatibility

The packagings may be used only for those dangerous goods, for which the compatibility with the packaging material, including closures, is guaranteed evidently.

#### 5. Further requirements / conditions

# 5.1 Conformity with the test samples

The design type of packagings produced in series shall conform completely with the approved type, tested according to the report(s) mentioned under paragraph 3.7.

## 5.2 Permissible use of packagings

Packagings produced in accordance with the approved design and marked accordingly to paragraph 6 may be used for dangerous goods, if these packagings are allowed for these goods in regulations/directives of the legal base and transport regulations as named under paragraph 1.

- The packaging may be used for several lithium batteries, as long as the total gross mass is not exceeded.
- The packaging is approved for lithium-ion batteries/rechargeable batteries as well as
  - UN 3480 Lithium-ion batteries (including lithium-ion polymer batteries).
  - UN 3481 Lithium-ion batteries packed WITH and/or IN equipment
  - UN 3090 Lithium metal batteries (including lithium alloy batteries)
  - UN 3091 Lithium metal batteries packed WITH and/or IN equipment

- The UN approval of this packaging meets the technical requirements for packing lithium batteries in accordance with the following ADR packing instructions, subject to compliance with the operating instructions and the intended use:
  - P903
  - P908
  - P909
  - P910
  - Also suitable within the scope of SP 188 RID/ADRF 3.3.1 (e.g. lithium-ion batteries < 100Wh)
- The dangerous goods pictogram 9A may be adapted to the container size, but must at least meet the dimensions 50 x 50 mm.
- This container may also be used for storage and internal use, if not opposed by other national regulations.
- The duration of use of the packaging is currently not regulated in the ADR.
- If the packaging is used in countries other than ADR contracting parties, the local legal regulations must be observed.

#### 5.3 Limitations

The following maximum values for the packaging resp. for the content shall not be exceeded:

	CEMO Li-Safe Box 2-S	CEMO Li-Safe Box 3-S
Gross mass [kg]:	10	12

# 5.4 Combination packaging / inner packagings

When the approved packaging will be used as a combination packaging with other than in this approval described inner packagings, it has to be guaranteed that the combination packaging with other inner packagings is just as efficient, as the approved packaging type.

#### 5.5 Series production of packagings

The production of serially produced packagings according to the described design must be carried out in accordance with a quality assurance program in accordance with the standard EN ISO 16106 recognized by the Federal Office for Transport (BAV) or a body approved by it.

The monitoring of the quality assurance program is carried out by Swiss Safety Center AG itself or is based on the approval of a monitoring report from a foreign inspection body, provided that this body has been recognized by an authority of a RID contracting state / ADR contracting party.

### 5.6 Conditions / Use of other packaging components

The applicant shall guarantee evidently, that all conditions concerning the use of the packagings are known to the user/packer.

In case packaging components are used other than those mentioned in the approval and amendments, the present approval may become invalid.

For design type modifications the holder of the approval is obliged to apply for acceptance by an authorised conformity assessment body.

## 6. Marking

The marking shown below must be affixed to the packaging:

Li-Safe BOX 2-S:



4H2 / Y10 / S / year of manufacturing\*) / CH / 073 4207317 - UNPS

Li-Safe BOX 3-S:



4H2 / Y12 / S / year of manufacturing\*) / CH / 073 4207317 - UNPS

\*) to be substituted by last two digits of the year of manufacturing

Requirements of the transport regulations RID, ADR and IMDG-Code, paragraph 6.1.3 and ICAO-TI, chapter 6, with reference to marking and height of the letters shall be respected.

## 7. Approval

Above described packagings are approved for the transport of dangerous goods based on the results of the additional design type tests.

The additional design type tests were carried out in accordance with the requirements given by the legal base and the transport regulations listed in paragraph 1 of this approval, valid at the time the approval was issued.

## This approval is valid until 30.06.2031.

In case of deviations of the produced packagings in series from the design type the approval may be revoked at any time.

In case of changes of the transport regulations the holder of the approval has to apply at Swiss Safety Center AG for the necessary modifications of this approval.

Wallisellen, 29.06.2021

Swiss Safety Center AG

Wolfgang Helbling

Expert

Samuel Aeppli

Expert