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MTEx
Ontploffing Beskermingsdienste
Explosion Prevention Services

ACCREDITED TEST LABORATORY
IN TERMS OF THE ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

INSPECTION AUTHORITY CERTIFICATE

i.safe MOBILE GmbH.   **Issued: 2020/01/30**
i_Park Tauberfranken 10   **Expire: 2023/01/30**
97922 Lauda-Koenigshofen   **Revision: 0**
Germany

Equipment: Intrinsically safe and multifunctional industrial smartphone
Manufacturer: i.safe MOBILE GmbH
Address: i_Park Tauberfranken 10, 97922 Lauda-Koenigshofen
Model/Type: IS530.1
Serial No.:   All units imported between Issued and Expiry dates.

Applicant:
i.safe MOBILE GmbH

Inspection Authority Number: **MTEx-S/20.0011 X**

MTEx Record Number: **MTEx 0901/20.0011**

Ex Rating: **Ex ib IIC T4 Gb**
               Ex ib IIIC T135°C Db IP6X

Standards used:

SANS 60079-0: 2019 Ed.6 IEC 60079-0: 2017 Ed.7	**Explosive atmospheres – Part 0: General requirements.**
SANS 60079-11: 2012 Ed.4 IEC 60079-11: 2011 Ed.6	**Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i".**

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

Hazardous Area: Zone 1, 2, 21 and 22
Occurrence: Intermittent and abnormal conditions
Hazardous Group: IIC/IIIC
Permitted Temperature: T4 (135°C) and 135°C for dust applications

Equipment Protection level (EPL):

EPL		Definition
Gas	Dust	
Gb	Db	Equipment for explosive gas and dust atmospheres, having a "high" level of protection, which is not a source of ignition in normal operation or during expected malfunctions.
Gc	Dc	Equipment for explosive gas and dust atmospheres, having an "enhanced" level of protection, which is not a source of ignition in normal operation and which may have some additional protection to ensure that it remains inactive as an ignition source in the case of regular expected occurrences (for example failure of a lamp).

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Page 1 of 3

Template: MTExDOC101 Rev 5
Approve date :(2019/06/11)

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 8(1) of the Occupational Health and Safety Act, provided that the apparatus is used as prescribed in accordance with:

1) Any conditions set out in this Certificate;

2) This certificate only covers equipment imported between the "Issued" and "Expiry" dates;

3) When the supporting Q.A.N. (Quality Assurance Notification) of the equipment manufacturer expires, it is the responsibility of the applicant (as mentioned above) to submit a valid Q.A.N to MTEx Laboratories.

4) The test results presented in this Ex Test Report relate only to the item or product tested.

1. OVERVIEW

The intrinsically safe, multifunctional and rugged industrial smartphone IS530.1 has been designed for use in explosion hazardous areas of zone 1 and 21. It provides numerous technologies like 4G (LTE), NFC, GPS, Wi-Fi and Bluetooth LE. The IS530.1 with an Android operating system, large internal memory, amplified loudspeaker, replaceable battery pack and functional 13-pin ISM interface.

2. ELECTRICAL/ AND SAFETY PARAMETERS

Power Supply:
The smartphone may only be used with the approved, intrinsically safe battery pack BPIS530.1 made by i.safe MOBILE GmbH.
LiPo battery U_o = 3.8 V (U_{o_max} = 4.35V) / 3.6 Ah / 13.68 Wh

It is permissible to charge the battery pack alone outside the device via an approved charging adapter.

Interfaces:
The device has a lateral magnetic charging port with which it can be charged outside hazardous areas via an approved charging adapter.

The contacts are intrinsically safe for gas and dust.

Furthermore, the device has an USB interface (type C) for charging and data transmissions outside hazardous areas. It is not permitted to pen the USB interface cover in hazardous areas.

The ISM interface of the IS530.1 can be used within hazardous areas with approved headsets, Remote Speaker Microphones (RSM) and add-ons, marking the smartphone multifunctional equipment for industrial applications. For ISM interface use, the i.safe MOBILE headset IS-HS1.1 or approved, intrinsically safe accessories may be used, it must be securely closed by the cover provided for this purpose.

3. REASON FOR REVIEW

- ARP 0108: 2014 Requirement.

4. DOCUMENTATION PROVIDED

- IECEx Quality Assessment Report (DE/EPS/QAR12.0003/05)
- IECEx Certificate of Conformity (IECEx EPS 19.0014 X)

5. SPECIAL CONDITIONS OF USE (X)

The battery may be charged outside explosion hazardous areas only.

The device must be protected against excessive UV light emission and high electrostatic charge processes.

The permitted ambient temperature range is -20°C to +60°

6. MARKING

For validity purposes, the following marking must be added to all equipment covered by this certificate:

Manufacturer:	i.safe MOBILE GmbH
Supplier:	i.safe MOBILE GmbH
Equipment:	Intrinsically safe and multifunctional industrial smartphone.
Model/Type:	IS530.1
IA Number:	MTEx-S/20.0011 X
Ex Rating:	Ex ib IIC T4 Gb
	Ex ib IIIC T135°C Db IP6X
Serial No.:	All units imported between Issued and Expiry dates.

Note 1: It is the responsibility of the supplier to ensure that the marking label complies with the ARP 0108: 2014.

Certificate Issued by: **Authorized by:**

D. Young, Testing Officer.   **H. De Wet, Editor.**

MTEx Laboratories

End of Certificate