

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**IEC 60079-11**  
Edition 7.0 2023-01

**EXPLOSIVE ATMOSPHERES –**

**Part 11: Equipment protection by intrinsic safety "i"**

**INTERPRETATION SHEET 1**

This interpretation sheet has been prepared by subcommittee 31G: Intrinsically-safe apparatus, of IEC technical committee 31: Equipment for explosive atmospheres.

The text of this interpretation sheet is based on the following documents:

DISH	Report on voting
31G/392/DISH	31G/397/RVDISH

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

**IEC 60079-11:2023 (Edition 7.0)**

**Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i"**

**Background**

5.4.1 of IEC 60079-11:2023 states, in part:

All surfaces of intrinsically safe apparatus that come into contact with explosive atmospheres shall be assessed to ensure that, under the conditions specified in 5.2, the apparatus complies with the maximum surface temperature requirements of IEC 60079-0.

**Question**

Is "all surfaces of intrinsically safe apparatus that come into contact with explosive atmospheres", as referenced in 5.4.1 for thermal ignition compliance, intended to mean the junction temperature of a sealed semiconductor?