

gas or 8.7 to 9.3 percent methane. The air temperature is between 41 and 86 °F.

(f) *Detonation test.* Each of ten sheathed explosive units shall propagate completely when fired at the minimum product firing temperature for the explosive used in the unit or 41 °F for units with explosives approved under regulations in effect prior to January 17, 1989. The units are initiated with test detonators.

(g) *New technology.* MSHA may approve an explosive unit designed to be fired outside the confines of a borehole that incorporates technology for which the requirements of this subpart are not applicable if MSHA determines that such explosive unit is as safe as those which meet the requirements of this subpart.

[FR 46761, Nov. 18, 1988; 54 FR 351, Jan. 5, 1989]

**§ 15.31 Tolerances for ingredients.**

Tolerances established by the applicant for each ingredient in the sheath shall not exceed the tolerances specified in Table II §15.21 of this part.

**§ 15.32 Tolerances for weight of explosive, sheath, wrapper, and specific gravity.**

(a) The weight of the explosive, the sheath, and the outer covering shall each be within ±7.5 percent of that specified in the approval.

(b) The ratio of the weight of the sheath to that of the explosive shall be within ±7.5 percent of that specified in the approval.

(c) The specific gravity of the explosive and sheath shall be within ±7.5 percent of that specified in the approval.

**PART 18—ELECTRIC MOTOR-DRIVEN MINE EQUIPMENT AND ACCESSORIES**

**Subpart A—General Provisions**

- Sec.
- 18.1 Purpose.
- 18.2 Definitions.
- 18.3 Consultation.
- 18.4 Electrical equipment for which approval is issued.
- 18.5 Equipment for which certification will be issued.
- 18.6 Applications.

- 18.7 [Reserved]
- 18.8 Date for conducting investigation and tests.
- 18.9 Conduct of investigations and tests.
- 18.10 Notice of approval or disapproval.
- 18.11 Approval plate.
- 18.12 Letter of certification.
- 18.13 Certification plate.
- 18.14 Identification of tested noncertified explosion-proof enclosures.
- 18.15 Changes after approval or certification.
- 18.16 Withdrawal of approval, certification, or acceptance.

**Subpart B—Construction and Design Requirements**

- 18.20 Quality of material, workmanship, and design.
- 18.21 Machines equipped with powered dust collectors.
- 18.22 Boring-type machines equipped for auxiliary face ventilation.
- 18.23 Limitation of external surface temperatures.
- 18.24 Electrical clearances.
- 18.25 Combustible gases from insulating material.
- 18.26 Static electricity.
- 18.27 Gaskets.
- 18.28 Devices for pressure relief, ventilation, or drainage.
- 18.29 Access openings and covers, including unused lead-entrance holes.
- 18.30 Windows and lenses.
- 18.31 Enclosures—joints and fastenings.
- 18.32 Fastenings—additional requirements.
- 18.33 Finish of surface joints.
- 18.34 Motors.
- 18.35 Portable (trailing) cables and cords.
- 18.36 Cables between machine components.
- 18.37 Lead entrances.
- 18.38 Leads through common walls.
- 18.39 Hose conduit.
- 18.40 Cable clamps and grips.
- 18.41 Plug and receptacle-type connectors.
- 18.42 Explosion-proof distribution boxes.
- 18.43 Explosion-proof splice boxes.
- 18.44 Non-intrinsically safe battery-powered equipment.
- 18.45 Cable reels.
- 18.46 Headlights.
- 18.47 Voltage limitation.
- 18.48 Circuit-interrupting devices.
- 18.49 Connection boxes on machines.
- 18.50 Protection against external arcs and sparks.
- 18.51 Electrical protection of circuits and equipment.
- 18.52 Renewal of fuses.
- 18.53 High-voltage longwall mining systems.

**Subpart C—Inspections and Tests**

- 18.60 Detailed inspection of components.
- 18.61 Final inspection of complete machine.