

DUSTLAB – ANALYSIS OF EXPLOSION CHARACTERISTICS

Knowledge of materials and their proper handling in potentially explosive atmospheres is a mandatory element. DustLab provides an opportunity for a fact-based approach to highly flammable and explosive substances and their mixtures used in different technologies and for the implementation of user specification, design, and operation, as well as further analyses.

COMPETENCIES

- Determination of explosion characteristics of dusts, gases and vapours and hybrid mixtures
- Carrying out tests according to European and USA standards



SERVICES

- Go/No go test (ASTM E1226, EN ISO/IEC 80079-20-2)
- Determination of explosion characteristics (P_{max} , K_{St} , K_g) (ASTM E1226-10, EN 14034-1, EN 14034-2)
- Determination of Lower explosion limit – LEL (EN 14034-3, ASTM E1515)
- Layer Ignition Temperature – LIT (ASTM E2021, EN 50281-2-1, IEC 61241-2-1)
- Minimum Ignition Energy - MIE (ASTM E2019, EN 13821)
- Minimum Ignition Temperature – MIT (ASTM E1491, EN 50281-2-1)
- Limiting Oxygen Concentration – LOC (ASTM E2931-13, EN 14034-4)
- Launching explosion protection for professional engineers and highly specific training in relevant areas



TOOLS

- Kühner 20 litre explosion chamber determination of P_{max} , K_{St} , K_g , LEL, LOC
- Dekra LIT equipment
- Dekra MIE equipment
- Dekra MIT equipment
- Horiba LA-950 V2 laser scanner for particle distribution



REFERENCES

- Veproil Kft.
- ExNB Kft.
- Bunge Zrt.
- Duna-Dráva Cement Kft.
- Dow Agrosience Kft.
- Ongropack Kft.
- Borsodchem Zrt.
- Aromabázis Kft.
- MOL Nyrt.
- Zoltek Zrt.
- Hungrana Kft.
- AUDI Hungária Kft.
- Pannon Növényolaj Kft.
- IKEA
- General Electric
- LeBelier
- Schneider Electric
- Arconic
- Dunacell
- Kall Ingredients
- Solver Unio