

Subpart Ja Compliance

Monitoring sulfur emissions in flares



- Blend accuracy is assured for dual-certified standards featuring interlocked concentration values between $\pm 1\%$ and $\pm 2\%$
- H₂S and SO₂ EPA protocols are NIST-traceable
- Customized and off-the-shelf BTU standards are available
- The industry's longest guaranteed shelf life for sulfur standards—36 or 96 months, product dependent

Safeguarding the environment

Airgas, an Air Liquide company, is working with existing customers, analyzer manufacturers and the US EPA to help the refinery industry address needs for compliance with Subpart Ja regulations governing flare emissions monitoring and analyzer calibration, effective November 2015. Standard and custom calibration gases are both offered to meet individual refinery requirements. Manifold systems and safety accessories are engineered to facilitate safe and efficient compliance.

Moreover, calibration of flare analyzers using these products can significantly reduce calibration time while enhancing overall repeatability and system performance. Especially when distributed using our equipment, on-the-job safety is also significantly improved.

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• Subpart Ja Primary Standard Grade

Provide the highest level of accuracy and quality assurance for calibration standards at ppm and percent level concentrations which are higher than existing NIST SRM or NTRM levels. Interlocked concentration values (within $\pm 1\%$) provide accuracy assurance for error-free monitoring and reporting.

• Subpart Ja Certified Standard Grade

Meet or exceed minimum requirements for Subpart Ja compliance produced using our proprietary cylinder inerting processes designed to enhance and ensure product shelf life.

• EPA Protocols

A recognized standard for excellence. These protocols are dual-certified and NIST-traceable, with maximum-allowable shelf lives.

• BTU Calibration Standards

Customized and off-the-shelf standards are engineered/manufactured for maximum reliability and accuracy to meet your needs for calorimetric and analyzed BTU values.

• Equipment and Safety Products

Recommended for all refining applications. High quality and performance combine to safely and efficiently deliver corrosive and noncorrosive gases to the point of use without degrading gas purity and mixture integrity that can result in calibration error or regulation noncompliance. Safety accessories and enclosures are also available.

Subpart Ja Compliant Calibration Standards

Additional components and concentrations are available to meet Subpart Ja demands. Contact your account manager for more information.

| Component* | Subpart Ja Primary Standard Grade** | Subpart Ja Certified Standard Grade | EPA Protocol |
|---------------------|-------------------------------------|-------------------------------------|--------------|
| Sulfur Hexafluoride | 5 ppm–30% | 1 ppm–50% | |
| Sulfur Dioxide | 2 ppm–4.5% | 2 ppm–10% | 2 ppm–4.5%† |
| Hydrogen Sulfide | 20 ppm–20% | 250 ppb–50% | 2–3000ppm†† |
| Carbonyl Sulfide | 5 ppm–2% | 250 ppb–50% | |
| Methyl Mercaptan | 20–1000 ppm | 5–1000 ppm | |
| Dimethyl Sulfide | 5–8000 ppm | 1 ppm–50% | |
| Dimethyl Disulfide | 5–200 ppm | 1 ppm–50% | |

* All mixtures are prepared in nitrogen balance

** Dual-certified and interlocked at $\pm 1\%$ (where possible) or $\pm 2\%$

† Shelf life: ≤ 50 ppm = 4 years; > 50 ppm = 8 years

†† Shelf life: 36 months



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