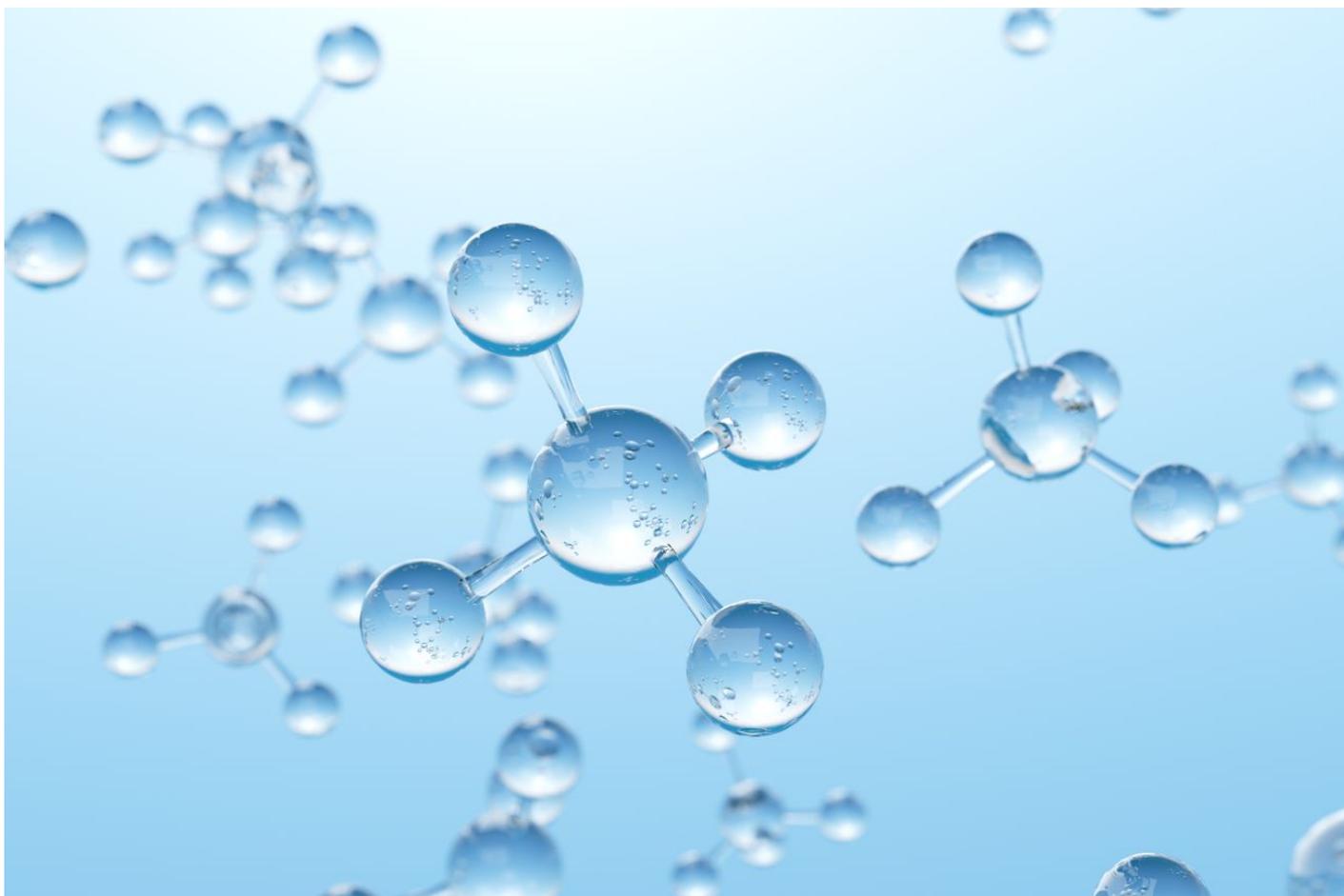


METHANE FROM FLARING TOOLKIT



Composition: Utilising Export Gas Composition

Do I know the gas composition? > Composition: Utilising Export Gas Composition

Summary

Export gas from a facility usually has a gas custody transfer system installed along with an analytical system, within this analytical system there will be a gas chromatograph.

If a sample system or on-line analysis system cannot be installed on the flare system, then this export gas composition can be referenced as a pseudo flare gas composition.

How it Works

If analytical systems for taking compositional samples or conducting on-line compositional analysis on the flare systems cannot be installed for technical or operational reasons, then as the gas is analysed as it is exported from the facility, this composition could be utilised as a pseudo composition for the flare gas.

This pseudo composition could be entered into the flow computing function of the flare metering system as a keypad value, thereby, allowing the density and mass flow rate of the flare gas to be calculated. This pseudo composition can also allow the weight fraction of methane in the flare gas to be derived.

This pseudo composition needs to be reviewed and updated periodically.

Utilisation of export gas composition as a pseudo flare gas composition is used within the oil and gas industry in certain areas of the world.

Advantages

- ✓ No Equipment costs
- ✓ Minimal Maintenance costs

Limitations

- ✗ High Uncertainty
- ✗ Low Accuracy
- ✗ Pseudo composition required to be updated periodically
- ✗ A single gas composition may not be representative of all flaring events

Go Deeper

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Case study

No case study available at this time.

Do I know the gas composition?



Composition: Spectrometry (GC – MS)



Composition: On-Line



Composition: Laboratory Analysis



Composition: Specific Gravity Analyser (Relative Density)



Composition: Wobbe Index Analyser (Calorimeter)