## SPECIAL APPLICATION

## **GAS PRODUCTS FOR SPECIAL APPLICATIONS**

## **SUPERCRITICAL FLUIDS FOR SFC AND SFE**

Hong Kong Specialty Gases supplies a range of liquefied gases specifically purified and packed for supercritical fluid applications. The extreme demands on gas purity of techniques such as Supercritical Fluid Chromatography (SFC) and Supercritical Fluid Extraction (SEF) require special purification of the bulk material followed by sub-micron filtration to remove entrained particulates. The purified gas is filled into cleaned aluminium cylinders equipped with dip tubes. The gases can be supplied either under their own vapour pressure or pressurized with helium.

GAS / SPECIFICATIONS	CYLINDER SIZE	CONTENT	PRESSURE PSIG	CGA CONN.
AMMONIA (NH $_3$ ), SFC Grade, Purity: 99.9995% min. $0_2 < 0.5 \text{ ppm} \qquad \qquad N_2 < 1 \text{ ppm} \\ H_2 0 < 1 \text{ ppm} \qquad \qquad ^1 \text{Organics} < 0.1 \text{ ppm} \\ \text{CH}_4 < 1 \text{ ppm} \qquad \qquad $	A030 A007	13.6 kg 2.3 kg	114	660
Carbon Dioxide (CO $_2$ ), SFC Grade, Purity: 99.9995% min. $0_2 < 0.5 \text{ ppm} \qquad \qquad N_2 < 2 \text{ ppm} \\ H_2O < 2 \text{ ppm} \qquad \qquad ^1 \text{Organics} < 0.1 \text{ ppm} \\ \text{CH}_4 < 0.5 \text{ ppm} \qquad \qquad $	A030 A007	18.1 kg 3.6 kg	830*	320
Nitrous Oxide ( $N_2O$ ), SFC Grade, Purity: 99.999% min. $ 0_2 < 1 \text{ ppm}                                  $	A030 A007	15.9 kg 2.3 kg	745*	326
Sulfur Hexafluoride (SF $_6$ ), SFC Grade, Purity: 99.99% min. $\begin{array}{cccc} \text{O}_2 < \text{10 ppm} & \text{N}_2 < \text{40 ppm} \\ \text{H}_2\text{O} < 8 \text{ppm} & \text{CF}_4 < 25 \text{ppm} \\ \text{CH}_4 < 1 \text{ppm} & \text{¹Organics} < \text{0.1 ppm} \\ \text{¹Organics} < \text{C}_6 & \end{array}$	A030 A007	34 kg 6.8 kg	320*	590

Supercritical fluids are extremely pure, but can be easily contaminated during use. SFC/SFE care package kit contains all the components needed to deliver supercritical fluids to your application. The kit components are cleaned by special process to avoid inadvertent contamination and are designed to interface to your specific analytical equipment.

