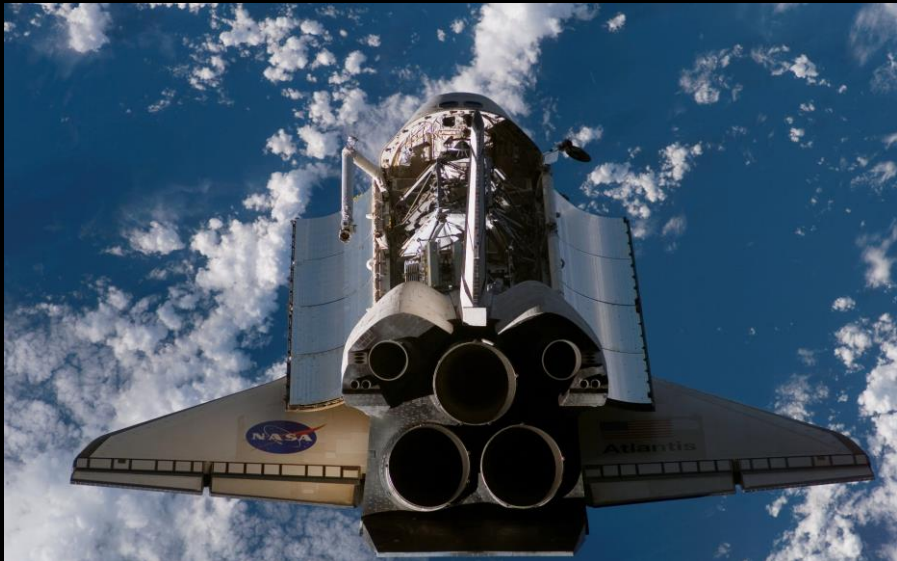


# NASA / Rocketdyne

Replaced: 1,1,1 Trichloroethane in vapor degreasing

Application: Cleaning and degreasing of orbiter parts

Results: Using **CITRA-SAFE®** as a replacement for 1,1,1 Trichloroethane vapor in surface preparation and degreasing of rocket parts.



**Precision cleanliness is essential**

because booster engines for the Space Shuttles are reused and refitted.

# Citra Safe® – now Deodorized!



## INLAND TECHNOLOGY INCORPORATED TECHNICAL DATA SHEET



### CITRA-SAFE® (DEODORIZED)

Developed for use in the aerospace industry, **CITRA-SAFE® (DEODORIZED)** is a low-volatility substitute for Methyl Ethyl Ketone (MEK), Trichloroethylene, Toluene, and blends of MEK and Toluene. **CITRA-SAFE® (DEODORIZED)** is made especially for surface preparation, general solvent cleaning, and cleaning prior to sealing. It is literally a biodegradable solvent replacement for mineral spirits, thinners, and chlorinated solvents. The use of **CITRA-SAFE® (DEODORIZED)** reduces the risk of hazardous chemical spills, eliminates most hazardous waste disposal costs, and eliminates the health hazards associated with traditional solvents.

**CITRA-SAFE® (DEODORIZED)** enjoys the following specifications:

#### BOEING AIRCRAFT COMPANY

- **BAC 5504**—Cleaning prior to sealing in fuel cells
- **BAC 5030**—Cleaning prior to smoothing and fairing
- **D6-7127**—Interior Cleaning
- **BAC 5000**—Cleaning prior to general sealing
- **BAC 5750**—General and final solvent cleaning

#### McDonnell Douglas

- **DPM 6380**

#### AIRBUS INDUSTRY

- **SIL Number 20-006**—Replace 1,1,1 Trichloroethane and Methyl Ethyl Ketone for general cleaning tasks
- **CML #11-016**—Consumable Material List

#### U.S. AIR FORCE

- **T.O.1C-135-2-5-2**—Cleaning prior to sealing in fuel cells KC135
- **T.O.1-1-8**—Application and removal of organic coatings, aerospace and non-aerospace equipment

#### U.S. DEPARTMENT OF DEFENSE

- Military Specification MIL-C-81964A—Avionic Cleaner

#### U.S. ARMY

- **TB 43-0135**—Recommended substitute for ozone depleting substances used on communications-electronics equipment

#### BOMBARDIER

- **180-9**—General Solvent Cleaning

#### ROCKETDYNE DIVISION ROCKWELL INTERNATIONAL

- **RB0210-028**—Cleaning fluid, low vapor pressure aliphatic

#### NORTH ATLANTIC TREATY ORGANIZATION

- **NATO 6850-66-137-6036**

#### WESTINGHOUSE

- **N53316LM**

#### BELL HELICOPTER

- Part Number **5130-64988**

#### Physical/Chemical Characteristics:

Initial Boiling Point:	340°F	Appearance & Odor:	Clear with mild citrus odor
Vapor Pressure (mmHg @ 25°C):	<2	Specific Gravity (H <sub>2</sub> O = 1)	.84
Vapor Density (air = 1):	>4	Volatile by Volume:	100%
Evaporation Rate (n-Butyl Acetate = 1):	<1	Flash Point:	132°F (PMCC)
Solubility:	Not water soluble	Surface Tension (dynes/cm):	29.8