



CONNECTICUT CLEAN ROOM CORPORATION

[www.ctcleanroom.com](http://www.ctcleanroom.com)



ENVIROSAFE SOLUTIONS INTERNATIONAL, INC.

"TARGETED TOWARDS A SAFER ENVIRONMENT"

# CR-2

**A USER AND ENVIRONMENTALLY SAFE, LOW  
PARTICULATE CLEANER**



CR-2 is a "State of the Art" surfactant that was specially formulated to meet the Critical cleaning needs of today's advanced technologies.

CR-2 is a replacement for some of the harmful solvents used in maintenance Cleaning as well as process cleaning.

Test results have shown CR-2 to pass all mobile ion specifications for class 100 Cleanrooms. It is customary to dilute CR-2 with de-ionized water.

# MOBILE ION SPECIFICATIONS

Below are the mobile ion specifications per the product CR-2. The quantitative results are calculated as parts per million relative to the weight of the sample used, for particles 0.3 microns and smaller. Various dilution scenarios are listed as it is customary to dilute CR-2 (with DI water). The "Class 100 Specs" are listed for comparison purposes only.

Particulate	Concentrate	1 to 20 Dilution	1 to 40 Dilution	Class 100 Specs*
Na	> 2.30 ppm	> 0.115 ppm	> 0.058 ppm	> 0.500 ppm
K	> 4.60 ppm	> 0.230 ppm	> 0.115 ppm	> 0.300 ppm
Mg	> 0.02 ppm	> 0.001 ppm	> 0.001 ppm	> 0.100 ppm
Ca	> 0.30 ppm	> 0.002 ppm	> 0.001 ppm	> 0.100 ppm
Cl <sup>-</sup>	> 0.10 ppm	> 0.005 ppm	> 0.003 ppm	> 0.200 ppm
PO <sub>4</sub> <sup>-3</sup>	> 0.50 ppm	> 0.025 ppm	> 0.012 ppm	> 0.500 ppm
SO <sub>4</sub> <sup>-2</sup>	> 0.70 ppm	> 0.035 ppm	> 0.018 ppm	> 0.000 ppm
Residue	> 1.63 ppm	> 0.082 ppm	> 0.041 ppm	> 5.000 ppm

\*From Motorola Chem Spec 11  
ATD00901W, Issue M

# PRODUCT APPLICATIONS/DILUTIONS

## CLEANROOMS

General Housekeeping  
Ceilings, Walls, Floors

Dilution ratio of 1:20 (CR-2:DI water)  
Usage is the same as IPA/DI  
cleaning procedures.

## CLEANROOMS

Pre-entry 3-phase wipe downs prior to  
entering the cleanroom (including):  
Equipment  
Tools  
Work Benches  
Gowning Rooms

Dilution ratios should increase as  
one moves along the 3-phase wipe  
down process:

Phase	Dilution Range
Gross	1:1 – 1:10
Intermediate	1:10 – 1:20
Precision	- 1:20

## CLEANROOMS

Tacky Mat Adhesive

Depending on severity, dilution ratios can range  
from: 1:1 to 1:20

## Ultrasonic Cleaning

Circuit Boards

Dilution 1:20 @ 60 degrees C.

## Ultrasonic Cleaning

Precision Valves  
Precision Components  
Metal Cleaning Tools, etc.

Dilution ratio range of 1:10 to 1:20. Based on  
application, temperatures may vary.

A de-ionized water rise is sometimes useful especially when using low dilution ratios.  
For best results, temperature should not exceed 60 degrees C.