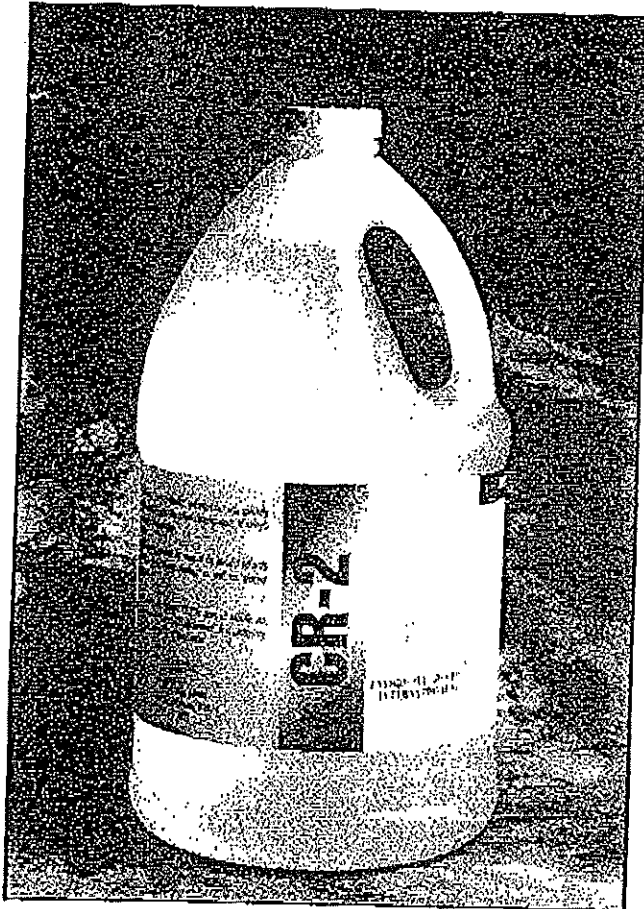


Envirosafe Solutions International, Inc.

"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.

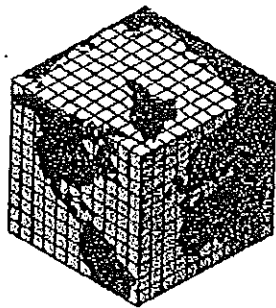
- Non-Toxic
- Non-Explosive
- Non-Hazardous
- Non-Caustic
- Non-Flammable
- Biodegradable

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 ⁻	>0.10 ppm	>0.005 ppm	>0.003 ppm	≥0.200 ppm
PO ₄ ⁻³	>0.50 ppm	>0.025 ppm	>0.012 ppm	≥0.500 ppm
SO ₄ ⁻²	>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
A1000901W, Issue 1A



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CR-2

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 ratio 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 rinse is sometimes useful especially when using low dilution ratios.
- For best results temperature should not exceed 60 degree C.

For current price information, technical assistance and/or ordering assistance, call (602) 962-5201. We maintain a large network of distributors throughout the world.

P.O. BOX 40381, MESA, ARIZONA 85274-0381, U.S.A.

Envirosafe Solutions International Inc.

Material Safety Data Sheet

Product Name: CR - 2

Section I

Manufacturer's Name: Envirosafe Solutions International Inc.

Address: Post Office Box 43615

Phoenix, Arizona 85080

Telephone Number: (623) 580-4939

Date Prepared: 6-2-00

Section II: Hazardous Ingredients / Identity Information

Hazardous Components	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS	*(OPTIONAL)
None					
				- Formula complies with 29 CFR 1910-1200(I) "TRADE SECRETS"	
				- Formula contains no components on NTP list nor IARC list for carcinogens	
				- Formula found to be: 1) Not Toxic 2) Not Corrosive 3) Not an Irritant	

Section III: Physical / Chemical Characteristics

Boiling Point	Approximately 220 F.	Specific Gravity (H ₂ O = 1)	1.070
Vapor Pressure (mm HG)	N/A	Melting Point	N/A
Vapor Density (Air = 1)	Heavier than Air	Evap. Rate (Butyl Acetate = 1)	Slower than Ether
Solubility in Water	Complete	pH Range = 9 - 10 (conc. Form)	
Appearance and odor	Light Amber - Pleasant Odor		

Section IV: Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A - Liquid Not Flammable	Flammable Limits	LEL	UEL
Extinguishing Media	None Required	Non - Flammable	N/A	N/A
Special Fire Fighting Procedures	None Required (Water can be used to cool containers adjacent to fire)			
Unusual Fire and Explosion Hazards	None			

Section V: Reactivity Data

Stability	Unstable?	Stable? XX	Conditions to Avoid	None
Incompatibility (Materials to Avoid)	Strong Acids, Strong Oxidizing Agents			
Hazardous Decomposition or Byproducts	Very Small (Trace) Amounts of Nitrogen Oxides, Carbon Dioxide, Carbon Monoxide - due to biodegradation			
Hazardous Polymerization	May Occur?	Will Not Occur? XX	Conditions to Avoid	None

Section VI: Health Hazard Data

Route(s) of Entry	N/A	Inhalation?	N/A	Skin?	N/A	Ingestion?	N/A
Health Hazards (Acute and Chronic)			None				
Carcinogenicity?	None	NTP?	None	IARC Monographs?	None	OSHA Regulation?	None

Signs and Symptoms of Exposure

When products is exposed to sensitive skin for a prolonged period of time a drying sensation may occur, rinse with water; apply hand lotion.

Medical Conditions Generally Aggravated by Exposure

None Known

Emergency and First Aid procedures

In Conc. Form, Irritation May Occur In Some Humans If Splashed Directly In Eyes. Flush With Cold Water For 15 Minutes.

Section VII: Precautions For Safe Handling And Use

Steps To Be Taken In Case Material Is Released or Spilled

Area Will Be Extremely Slippery. Evacuate Area And Flush With Water.

Waste Disposal Method

Dispose Of In Accordance To Federal And Local Waste Requirements

Precautions To Be Taken In Handling And Storing

Protect From Freezing - Storage Between 40 And 100 F Is Recommended

Other Precautions

If Exposed To Low Temperatures, product May Stratify.

If So, Mix before Using, Avoid Eye Contact

Section VIII: Control Measures

Respiratory Protection (specify type)

None Necessary

Ventilation?

Local Exhaust?

Special?

Normal

No Special Requirements

None

Mechanical (general)

None

Other?

None

Protective Gloves

Eye Protection

None Necessary

Recommended But Not Necessary

Other Protective Clothing or Equipment

Apron or Boots Suggested For Excessive Splashing

Work / Hygienic Practices

Normal Procedures