



Department of Health & Human Services

HEALTH DIVISION

[oakgov.com/health](http://oakgov.com/health)

# Why so Blue?

Michelle Mader  
Oakland County Health Division

The Oakland County Health Division will not deny participation in its programs based on race, sex, religion, national origin, age or disability. State and Federal eligibility requirements apply for certain programs.

# Why so Blue?

- I received a call on December 6<sup>th</sup> from the well operator of a school stating that the morning custodian had noticed dark blue water in the toilets at the start of his shift.
- The school provided bottled water for drinking at once and flushed the water until it ran clear. This was done prior to any students arriving for the day.

# Why so Blue?

- The operator concluded that the source of the blue color in the water was the water softener resin cleaner.
- A new chemical injection system had been installed in September at all 11 schools in the district to dispense a softener bed cleaning chemical.

# Why so Blue?

- The operator indicated that the system had been installed in an effort to remove iron from the resin bed during regeneration.
- The product is dispensed by a feeder system directly into the brine tank.

# Why so Blue?

- I contacted Mark Doyle for assistance.
- We requested a copy of the MSDS and NSF certification for the chemical. We also requested a spec sheet on the injection system.
- We required that use of the chemical be discontinued immediately and taken offline. We also required that the parents of children at the school be notified in writing of the incident.

# Why so Blue?

- Upon review, I noted that the chemical, Resup, does not meet NSF standard 60.
- I notified the operator that Resup cannot be used in this application. All schools placed the units offline.

# Why so Blue?

- The feeder system was evaluated by the installer. The installer determined that due to a control valve failure, the resin cleaner was not flushed out of the resin bed after the backwash cycle.
- When the morning custodian arrived and began using water, the resin cleaner was flushed out of the softener and into the potable water system.

# Why so Blue?

- The operator located a chemical which has the NSF 60 certification, Rescare, to use for their desired application.
- He forwarded the MSDS and NSF certification for the new product and feeder system.

# Why so Blue?

260-483-2277    samuel@nsf.com    samuel@nsf.com    01-25-2019 12:14:20 PM    2/2

**NSF/ANSI Standard 30 - Drinking Water Treatment Chemicals**  
Automated Registered Formulation

Reason for Revision: B115564 changed the Eye eye from "DANGER: IRRITANT" to "DANGER: IRRITANT/HAZARDOUS TO THE ENVIRONMENT".

Customer Name: P3 Products, LLC    Facility Location: Naumkeag, NH  
Customer Number: 01580    Facility At: Naumkeag, NH  
Facility Number: 0004599

Trade Name Level Purposes: Other

Trade Name(s)	PAULING/L
Liquid Solvent Cleaner	N/A
Liquid Solvent Treatment	N/A
Mixing/Neutralizer	N/A
Pest Control	N/A

Usage Notes

This product is designed to be used off the shelf. It is not intended for use in a laboratory or other specialized manufacturing applications.

This product is Certified for use as a **DRINKING WATER SUPPLY PRODUCT**.

Section Category: **DRINKING WATER SUPPLY PRODUCTS**

Chemical Name: **Chlorine Dioxide**    Product Name: **Chlorine Dioxide**

Sample Notes

N/A

# Why so Blue?

Water Softener Maintenance

**PRO**  
CHEMICALS

## Pro Easy Feeder™ Resin Cleaning Feeder for Water Softeners

### Restores the resin bed automatically.

The Pro Easy Feeder™ automatically dispenses the right amount of Pro Res Care® Cleaning Solution to maintain water softener efficiency. The Pro Easy Feeder™ is non-electric and easy to install and use. It restores softener resin and control valve parts to peak efficiency and helps maintain equipment life. Res Care Solution is a specially formulated liquid cleaner that cleanses the resin bed of iron, manganese, silt, metal particles and organic compounds that cause softener inefficiencies.

### Application

#### Automatic Feeder System:

(Note: Must use 64 oz. Res Care® Bottle)

Install the Pro Easy Feeder™ assembly and a bottle of 64 oz. Res Care® according to instructions on the package. Automatic feeding will begin in a few hours. The Easy Feeder will feed solution continuously.

Read relevant MSDS before handling Pro Res Care® Cleaning Solution



A. Pro Easy Feeder mounts the 64 oz. Res Care® feeder bottle on inside wall of Brine Tank  
B. Wick is suspended inside brine well to facilitate automatic dispensing



Benefits to User	Technical Information	Part#	Size	Qty.
<ul style="list-style-type: none"> <li>• Easy to use, non-electric, feeder system</li> <li>• Designed for use with 64 oz. Res Care® Cleaning Solution</li> <li>• Feeds 1 or 1/2 oz./day of solution continuously</li> </ul>	<ul style="list-style-type: none"> <li>• Prevents iron and mineral build-up on integral parts of the softener</li> <li>• Maintains maximum performance of the unit</li> <li>• Helps extend life of the unit</li> </ul>	RF05N RF10N	1/2 oz./day 1 oz./day	6/case 6/case



# Why so Blue?



# Why so Blue?

- Mark noted the following on the Rescare NSF certification sheet:

## Listing Notes

This product is designed to be used off-line and flushed out prior to using the system for drinking water following manufacturer's use instructions.

This product is Certified for use as a softener resin cleaner.

# Why so Blue?

- But the application specs for the feeder indicate a continuous feed:

## **Automatic Feeder System:**

Install the Pro Easy Feeder™ assembly and a bottle of 64 oz. Res Care® according to instructions on the package. Automatic feeding will begin in a few hours. **The Easy Feeder will feed solution continuously.**

# Why so Blue?

- Mark contacted Kevin Holdwick for his input. We wanted to verify that the feeder would not be feeding the chemical constantly and that it would only feed while the potable system is offline.
- Kevin determined that the Rescare and Pro Easy Feeder could be used together as it is designed to dispense during backwash cycles only.

# Why so Blue?

- Mark provided information from Cynthia Weaver regarding several residential complaints of a blue/green staining on fixtures and health problems associated with ResUp use. ResUp, the original product used at the school, is very similar to Rescare, and made by the same manufacturer for the same purpose.

# Why so Blue?

- The operator contacted the manufacturer, Pro Products. Pro Products believe the staining was caused by a malfunctioning unit leading to the acidic product leaching copper from the pipes over a long period of time.

# Why so Blue?

- This information reinforced our concerns about valve/equipment failure. We wanted procedures in place to verify that if a mechanical failure occurred again, the staff would be checking the units before students were impacted.
- We shared the consumer complaint information with the well operator.

# Why so Blue?

- Mark and Kevin provided suggestions of alternative softener salts which contain resin cleaners built-in.
- The school district chose to remove all dispensing equipment and switch to softener salts containing a resin cleaning agent. This eliminated our concerns.

# Why so Blue?

- Takeaway
  - Water treatment systems are becoming more and more common.
  - OCHD has 711 supplies with 458 softeners!
  - Take time to check out each device during the sanitary survey.

# Why so Blue?

- Takeaway
  - Question the owner. Be specific.
  - Emphasize that the client notifies you any time changes to the system are made.
  - When in doubt, check it out!

Find us on  
**facebook**®



**Public Health  
Oakland**

