

RSDL® has a proven heritage:

- Deployed for use by warfighters in both Gulf wars
- Currently protects military, first responders, and ministries of defense in over 30 countries worldwide.
- Has US Department of Homeland Security SAFETY Act certification¹⁷

To learn about ordering RSDL,
Call 1-888-773-3266.

Your first responders save lives.
Now you can save theirs.



Neutralize the threat.
Order RSDL today.



† Important Safety Information:

For external use only. Contact with eyes and mucous membranes should be avoided. In emergency conditions, RSDL does not require immediate removal from skin, but should be rinsed as soon as it is safe to do so. An ingredient of RSDL may be absorbed. Studies with RSDL left on the skin for 24 hours showed minimal adverse effects, however some patients have been known to experience minor skin irritation.

1. Braue E, Smith K, Doxzon B, Lumpkin H, Clarkson E. Efficacy studies of Reactive Skin Decontamination Lotion, M291 Skin Decontamination Kit, 0.5% bleach, 1% soapy water, and skin exposure reduction paste against chemical warfare agents, part 1: guinea pigs challenged with VX. *Cutan Ocul Toxicol.* 2011;30(1):15-28. 2. Braue E, Smith K, Doxzon B, Lumpkin H, Clarkson E. Efficacy studies of Reactive Skin Decontamination Lotion, M291 Skin Decontamination Kit, 0.5% bleach, 1% soapy water, and skin exposure reduction paste against chemical warfare agents, part 2: guinea pigs challenged with soman. *Cutan Ocul Toxicol.* 2011;30(1):29-37. 3. Hanssen K, Doxzon B, Lumpkin H, Clarkson E, Braue E. Evaluation of decontamination systems challenged with nerve agents. Aberdeen Proving Ground, MD: US Army Medical Research Institute of Chemical Defense; 2004. 4. Bide R, Risk D, Schofield L. Evaluation of the Canadian reactive skin decontaminant lotion and US skin decontamination kit for decontamination of T-2 toxin on guinea pig skin. Final report. Suffield, Canada: Defence Research and Development Canada; 2002. 5. Taysse L, Daulon S, Delamanche S, Bellier B, Breton P. Skin decontamination of mustards and organophosphates: comparative efficacy of RSDL and Fuller's earth in domestic swine. *Hum Exp Toxicol.* 2007;26(2):135-141. 6. Snider T, Hayes T, Jarvis R, Matthews M, Estep J. Assessment of RSDL as a decontaminant against VX and HD: efficacy, equivalence to M291 skin decontamination kit, and compatibility with fielded materials. Final report. Columbus, OH: US Army Medical Materiel Development Activity and US Marine Corps Systems Command; 2002. 7. Bjarnason S, Mikler J, Hill J, et al. Comparison of selected skin decontaminant products and regimens against VX in domestic swine. *Hum Exp Toxicol.* 2008;27(3):253-261. 8. Rolland P, Bolzinger MA, Cruz C, Josse D, Briançon S. Hair skin exposure to VX *in vitro*: effectiveness of delayed decontamination. *Toxicol In Vitro.* 2013;27(1):358-366. 9. Fentabil M, Gebremedhin M, Burczyk A, Purdon JG, Goldman V. In-Vitro Reactivity of the RSDL: LC-MS Investigation of the Effectiveness and Minimum Molar Ratio of RSDL: Test Article for Decontamination of Nine Pesticides. Data on File, Emergent BioSolutions, 2013. 10. The chemical weapons ban facts and figures. <http://www.opcw.org/news-publications/publications/facts-and-figures/#c1918>. Organisation for the Prohibition of Chemical Weapons Web site. Accessed January 24, 2014. 11. Organophosphates. <http://www.panna.org/resources/organophosphates>. Pesticide Action Network. Accessed January 24, 2014. 12. Braue E, Boardman C, Hurst C. Decontamination of chemical casualties. In: Lenhart M, ed. *Medical Aspects of Chemical Warfare*. Houston, TX: Office of the Surgeon General; 2008:527-557. 13. Clarke S, Chilcott R, Wilson J, Kamanyire R, Baker D, Hallett A. Decontamination of multiple casualties who are chemically contaminated: a challenge for acute hospitals. *Prehosp Disaster Med.* 2008;23(2):175-181. 14. Kahn C. Hospital preparation for disasters. *Prehosp Disaster Med.* 2008;23(2):182-183. 15. Tonucci D. Evaluation of phototoxicity and photoallergy for Reactive Skin Decontamination Lotion (RSDL) in humans. Columbus, OH: Battelle Memorial Institute; 2003. 16. Farrington, Lockwood Company Limited. Novel comparative research on skin decontaminants using advanced digital imagery. Poster presented at: CBRNe Convergence Conference; November, 2013; San Diego, CA. 17. US Department of Homeland Security. SAFETY Act Certification; August 2011.

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protected by **emergent**
biosolutions™

THE MOMENT YOU ARE EXPOSED IS THE MOMENT YOU NEED RSDL® NEUTRALIZATION

Within 2 minutes, RSDL **removes or neutralizes** chemical warfare agents and many pesticide-related chemicals.¹⁻⁹



Chemical warfare agent? Pesticide-related chemical? **Unexpected exposure?**



The moment your first responders are exposed,
can they effectively be decontaminated?

- "...a tiny drop of a nerve agent, no larger than the head of a pin, can kill an adult human being within minutes after exposure" (Organisation for the Prohibition of Chemical Weapons)¹⁰
- Pesticide-related chemicals may be just as toxic as chemical warfare agents¹¹
- While decontamination is crucial, soap and water do not neutralize pesticide-related chemicals or chemical warfare agents and may¹²:
 - Spread mustard agents¹³
 - Cause cross-contamination¹⁴

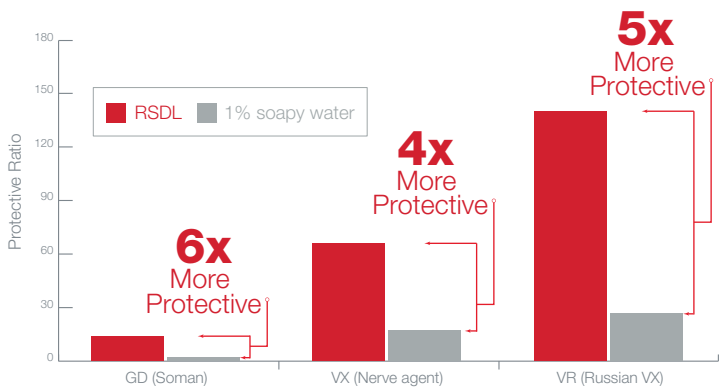
Don't let your first responder become the second victim¹⁴

Now you can protect your first responders

The same neutralizing skin decontaminant that is used by military forces worldwide is now available to you.

- **RSDL® removes or neutralizes:**
 - Chemical warfare agents within 2 minutes, including: tabun, sarin, soman, cyclohexyl sarin, vx, mustard, and T-2 Toxin¹⁻⁸
 - Many pesticide-related chemicals, including organophosphates such as parathion and malathion⁹
- **Safe:** Leaves a nontoxic residue on the skin¹⁵
- **Fast:** Just open, wipe the skin after exposure, and rinse when time permits
- RSDL has a long shelf life of five years*

Efficacy of RSDL Compared to 1% Soapy Water³



RSDL provided significantly greater protection than 1% soapy water³

Efficacy of Contaminant Removal and Neutralization
RSDL Compared to Paper Towels¹⁶

| | RSDL | Paper Towels |
|--|------|--------------|
| Neutralization of contaminants | Yes | No |
| Picks up contaminant from skin | Yes | Yes |
| Delivers decontaminant onto skin | Yes | No |
| Water washing following decontamination cleans the skin† | Yes | No |

RSDL neutralized contaminants on the skin while paper towels did not¹⁶



*Storage temperature should be between 15°C to 30°C (59°F to 86°F). Store in original container protected from direct sunlight in a dry, cool area. Keep container tightly closed until ready for use.

