

QUICK GUIDE

Using DeoxIT[®] Sprays and Do's & Don'ts

(DeoxIT[®] D-Series, DeoxIT[®] Gold, DeoxIT[®] Shield and DeoxIT[®] Fader)

1. Which spray is best for my application? (Video)
2. Which spray is best for my application? (Text)
3. Selection Guide
4. Compatibility Chart
5. **Cautions, Warnings** and Best Practices

1. WHICH SPRAY IS BEST FOR MY APPLICATION? (Video)

- ✓ 1. * DeoxIT[®] D5S-6 with Perfect-Straw[™]
(with and without the Flex-Tip[™] Attachment)
- ✓ 2. * DeoxIT[®] DN5S-6N with Perfect-Straw[™]
(with and without the Flex-Tip[™] Attachment)
- ✓ 3. * DeoxIT[®] D100S-2 with Metered One-Shot Valve
- ✓ 4. * DeoxIT[®] DN5S-2N, Mini-Spray with L-M-H Valve
- ✓ 5. * DeoxIT[®] DP5S-6 with Pump Valve

* The Perfect-Straw has been discontinued.
The products now use the L-M-H valve. See 2a.



Link to Video:

<https://caig.com/deoxit-spray-selection>



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2. WHICH SPRAY IS BEST FOR MY APPLICATION? (Text)

2a. Part No. D5S-6, G5S-6, F5S-H6: Original Low-Med-High Adjustable Valve



Applicator: Spray, provides flushing action, briefly flammable (until solvent evaporates within 2-3 minutes). Refer to “Best Practices section” (Section 5-3, Page 6) for when to use the Perfect-Straw™ valve versus Low-Med-High (L-M-H) valve.

Formulation: 5% DeoxIT® (active ingredient), 75% odorless mineral spirits (carrier solvent), 20% propellant

Use: Solvent is slower to evaporate, providing flushing action to remove surfaces dirt, grease and other contaminants. Is ideal for connectors and components removed from equipment or those that are easily accessible.

Notes: *Use when over spray NOT an issue.* Formulation safe on plastics. Always recommend testing for compatibility, especially on critical/sensitive parts, and vintage equipment with aging ABS plastic(s). On rubber, may swell until solvent evaporates. For quick-dry, non-drip spray, we recommend Part Nos. DN5S-6N, DN5S-2N, GN5S-6N, GN5S-2N, GX5S-6N, FN5S-2N, SN5S-6N.

2b. Part Nos. D5S-6, G5S-6: **Perfect-Straw™ version Discontinued** Using Perfect-Straw™ with Low-Volume Valve



Applicator: Spray, provides flushing action, briefly flammable (until solvent evaporates within 2-3 minutes). Refer to “Best Practices section” (Section 5-3, Page 6) for when to use the Perfect-Straw™ valve versus Low-Med-High (L-M-H) valve.

Formulation: 5% DeoxIT® (active ingredient), 75% odorless mineral spirits (carrier solvent), 20% propellant

Use: Solvent is slower to evaporate, providing flushing action to remove surfaces dirt, grease and other contaminants. Is ideal for connectors and components removed from equipment or those that are easily accessible.

Notes: *Use when over spray NOT an issue.* Formulation safe on plastics. Always recommend testing for compatibility, especially on critical/sensitive parts, and vintage equipment with aging ABS plastic(s). On rubber, may swell until solvent evaporates. For quick-dry, non-drip spray, we recommend Part Nos. DN5S-6N, DN5S-2N, GN5S-6N, GN5S-2N, GX5S-6N, FN5S-2N, SN5S-6N.



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2c. Part No. DN5S-6N, GN5S-6N, GX5S-6N, SN5S-6N: Using Perfect-Straw™ with Low-Volume Valve



Applicator: Non-Flammable Spray, provides precise control and application of DeoxIT®. Quick-Dry, Non-Drip Solvent. Refer to “Best Practices section” (Section 5-3, Page 6) for when to use the Perfect-Straw™ valve versus Low-Med-High (L-M-H) valve.

Formulation: 5% DeoxIT® (active ingredient), 75% Solstice PF (carrier solvent), 20% propellant

Use: Solvent evaporates quickly, providing precise control, no dripping and overspray. Is ideal for applying on delicate connectors and components on and in equipment.

Notes: *Use when over spray IS an issue.* Formulation safe on plastics. Always recommend testing for compatibility, especially on critical/sensitive parts, and vintage equipment with aging ABS plastic(s). Will not swell rubber. For more flushing action and non-critical applications, we recommend Part Nos. D5S-6, D5S-6ET, D5S-6-LMH, G5S-6, F5S-H6.

2d. Part No. DN5S-2N, GN5S-2N, SN5S-2N, FN5S-2N Mini-Sprays: Using Low-Med-High Adjustable Valve



Applicator: Non-Flammable Spray, provides precise control and application of DeoxIT®. Quick-Dry, Non-Drip Solvent.

Formulation: 5% DeoxIT® (active ingredient), 75% Solstice PF (carrier solvent), 20% propellant

Use: Solvent evaporates quickly, providing precise control, no dripping and overspray. Is ideal for applying on delicate connectors and components on and in equipment.

Notes: *Use when over spray IS an issue.* Formulation safe on plastics. Always recommend testing for compatibility, especially on critical/sensitive parts, and vintage equipment with aging ABS plastic(s). Will not swell rubber. For more flushing action and non-critical applications, we recommend Part Nos. D5S-6, D5S-6ET.

2e. Part No. D100S-2, G100S-2, F100S-L2: 100% Spray, No solvents



Applicator: Spray, provides NO flushing action, applies 100% DeoxIT® using a metered one-shot valve.

Formulation: 20% DeoxIT® (active ingredient), 80% propellant

Use: When solvents are not required or materials are sensitive to any solvents. No flushing action. Spray provides application of DeoxIT® on connectors and components that are not easily accessible.

Notes: Use when over spray is an issue and on sensitive materials. Always recommend testing for compatibility, especially on critical/sensitive parts, and vintage equipment with aging ABS plastic(s). Will not swell rubber. On easily accessible surfaces, recommend wiping off excess, leaving a thin layer.



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3. DeoxIT Spray - Selection Guides

DeoxIT® - Product Selection Guide

	DeoxIT®	DeoxIT® GOLD	DeoxIT® GOLD GxL	DeoxIT® GOLD Gx2	DeoxIT® SHIELD	DeoxIT® FaderLube
New Surfaces		✓	✓	✓	✓	✓
* In Service / Used	✓					✓
Gold surfaces		✓	✓	✓		
Oxidation / corrosion visible	✓					
Conductive plastics						✓
** Outdoor / Severe environments	✓				✓	
Deoxidizing / cleaning properties	20%	0.1%	0.1%	0.0%	0.0%	0.0%
Metal / Plastic surfaces	Yes	Yes	Yes	Yes	Yes	
Plastics compatibility	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Temperature range (°C)	-34/200	-45/240	-45/310	-45/500	-34/210	-26/150
Stationary & moving surfaces	Yes	Yes	Yes	Yes	Yes	Yes
Seals & protects base metals	Good	Excellent	Excellent	Excellent	Good	No

✓ All products are Nonflammable and RoHs Compliant

* In Service: Clean with DeoxIT®. For added protection, follow with DeoxIT® GOLD (indoors), DeoxIT® SHIELD (outdoors) or DeoxIT® Grease (additional barrier).

** Severe environments: Pre-clean with DeoxIT®. Follow with DeoxIT® SHIELD or DeoxIT® Grease.

DeoxIT® - Spray Selection Guide

Product Series	FP	QD	NF	PC	VOC
Standard - 5% solution	✓			✓	75% (588g/L)
D5S-6, D5MS-15, G5S-6, G5MS-15, S5S-6, S5MS-15, F5S-6, F5MS-15					
N Series - 5% solution		✓	✓	✓	0.0%
DN5S-6N, DN5S-2N, GN5S-6N, GN5S-2N, SN5S-6N, SN5S-2N					
X Series - 5% solution		✓	✓	✓	0.0%
GX5S-6N					
100% Spray solution			✓	✓	0.0%
D100S-2, G100S-2, F100S-L2					

FP = Flushing properties QD = Quick dry / non drip

NF = Nonflammable PC = Plastics compatibility VOC = VOC (%)

4. Compatibility Chart (Plastics, Rubber, Elastomeric and Metals):

(Rating: Not compatible, Poor, Fair, Good, Excellent), (N/A = Not applicable (no solvents and propellants)

(* If the product is not 100% DeoxIT® then the package is rated before and after the solvents/propellants are applied to materials. Compatibility testing is always recommended)

Material Name	Rating (*100% DeoxIT®)	Rating (*with solvents)
ABS	Excellent	Fair-Good
Nylon	Excellent	Excellent
Lexan	Excellent	Excellent
HDPE	Good	Good
LDPE	Good	Good
C.E.Phenolic	Excellent	Good
Epoxy	Excellent	Excellent
Polycarbonate	Excellent	Fair-Good
PMMA	Fair	Fair
POM	Excellent	Excellent
PP	Excellent	Good
PS	Fair	Fair
PTFE	Excellent	Excellent
PVC	Excellent	Excellent
TPE/Varnish	Poor	Poor
Rubber ⁽¹⁾	Fair	Fair

(1) **Using on Rubber:** Rubber will absorb solvents and may swell the rubber slightly. Allow the solvent to completely evaporate before using or reinstalling. If you require a spray, the non-flammable DeoxIT® sprays (DN5, GN5, GX5, SN5) have a fast evaporating solvent, apply sparingly and test for compatibility.

Otherwise, use the DeoxIT® non spray applicators - there are plenty to choose from.



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IMPORTANT:

Rating, 100% DeoxIT®: Any of the above that fall into the “Fair” and “Poor” categories should be thoroughly tested for compatibility. They may be compatible, however, it will depend on the manufacturing process of the materials. Acrylics, ABS, and polycarbonate, if under stress, may show slight cracking or crazing damage. Test for compatibility before use. On porous materials; i.e. wood, rubber, cloth, some phenolics, semi-cured materials, no liquid or solvents should be used. Occasionally, DeoxIT® will get onto unwanted surfaces, quickly wipe off surface and usually no damage will occur.

Rating, with solvents: Similar to rating above (100% DeoxIT®). However, any rating worse than the 100% DeoxIT® may require additional care. If DeoxIT® is applied to unwanted areas or materials, wipe off surface quickly and usually no damage will occur. Alternatively, apply DeoxIT® onto a lint-free swab or cloth first and then wipe onto desired metal surface.

5. Warnings, Cautions and Best Practices

5-1. WARNINGS:

- a. **Flammable Products:** As always, Keep away from heat, sparks, open flame, hot surfaces. Do not spray on an open flame or other ignition source.
- b. **Ventilation:** Provide good ventilation in process areas and confined spaces to prevent formation of vapor.
- c. **Electrical Shock Hazard: WARNING- ELECTRICAL SHOCK HAZARD:** This can will conduct electricity - keep away from all live electrical sources including battery terminals, electrical panels, and other electrical components. Failure to observe this warning may result in serious injury.
- d. **Additional Warnings:** Wear protective gloves, eye protection and face protection. Wash hands and exposed skin areas with soap and water thoroughly after handling. In case of fire, CO2, Halon (if permitted), dry chemical, or foam for extinction. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep cool. Store locked up. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.
- e. **KEEP OUT OF REACH OF CHILDREN.**
- f. **IN CASE OF EMERGENCY: Call CHEMTREC +1 (703) 527-3887 (24 hrs).**

5-2. CAUTIONS:

- a. **Compatibility:** As the compatibility chart shows in Section 4, we recommend keeping products, especially products that contain solvents, away from TPE, Rubber and Varnish.
- b. **TPE and Rubber products** - will absorb solvents, and depending on the quality and age of the materials, the solvents may not completely evaporate from the materials.
- c. **Varnishes** - maybe softened and damaged by many solvents and materials. Please keep away from varnished surfaces.

Examples:

- Varnish on delicate surfaces; i.e. instrument surfaces (pianos, guitars, etc.). If you get on surfaces, wipe up immediately. If used in sensitive areas, use non-aerosol DeoxIT® applicators.
- Varnish on motor windings. Solvents may damage varnish; thereby exposing the windings and shorting/damaging the device.



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- d. **Porous surface/materials.** May absorb and discolor materials. If used in sensitive areas, use non-aerosol DeoxIT® applicators.
- e. **Wirewound Rheostats and Potentiometers, trim pots and other sensitive electronics:**
We recommend NOT using solvents, including any DeoxIT® sprays with solvents. We do recommend trying the non-aerosol DeoxIT® products on the contact surfaces. We recommend keeping away from sensitive areas, as a precaution, especially on old equipment.
- f. **Carbon Pots & Faders:**
Care should be taken on carbon pots and faders, especially old equipment. The carbon may flake off over time. We recommend NOT to use any product with solvents. For carbon materials, we also recommend using the DeoxIT® Fader (F100S-L2 and F100L-L25C and DeoxIT® FaderGrease DFG-213-8G
- g. **Do not use aerosols/sprays DIRECTLY on sensitive devices.** For example; cell phones, tablets, cameras, computer connectors, etc. Spray the cable ends, not the device connectors.
- **On delicate devices spray onto a swab or cloth, then wipe on metal surface/connector.**
DO NOT spray directly onto/into device.

5-3. BEST PRACTICES:

- a. **Perfect-Straw™ valve versus Low-Med-High valve:**
The D5S-6/D5S-6-LMH cans are ideal for using on a test bench, giving the tech some adjustment over the L-M-H spray pattern. However, during our survey, most placed the valve on the "L" setting and left it there.
The D5S-6 with the Perfect-Straw™ was developed especially for the tech that uses it on the bench and off bench applications. Can you imagine if you are working under a car or on top of a cell phone tower and lose the red straw?
- b. **Use Aerosols/sprays when overspray is not an issue.** For example; instead of spraying the connectors on the backside of equipment or the connector on a cell phone, instead, spray onto a lint-free swab or cloth and then wipe on cable connector. Then insert the cable connector into the device. DeoxIT® will treat the connector socket once inserted. Also, you can use a non-aerosol applicator (brush, wipes, pen, swabs, etc.) to apply DeoxIT® in sensitive areas.
- c. **ALWAYS test for compatibility if you are unsure of materials.** Example; if you have many of the same connectors/potentiometers, just apply to one, then let sit for a few days. If OK, treat the rest.
- d. **Contact the equipment manufacturer.** If you are unsure of any of the materials used on your equipment, contact the manufacturer or search for the owners manual for additional information.
- e. **OLD Equipment.** Special care should be taken when treating old equipment and should be performed by a qualified service technician or experienced tech. Challenges that could arise from deteriorated materials; structural or electrical.
Recommendations: Use only non-aerosols and products without solvents. Many solvents can make things worse on old parts and equipment. If you need to use a cleaner, use alcohol (99%) and a lint-free swab or cloth to clean parts, carefully. Then let dry thoroughly for 24 hours.
Using DeoxIT® Products: Again, we recommend not to use aerosols. Some of the best applicators for old equipment are the brush applicator (*D100L-2DB), wipes (*D50W), needle (*D100L-25C) and the pre-saturated swabs (*D100L-SWP10).



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* Also available with the DeoxIT® Gold, DeoxIT® Shield and DeoxIT® Fader Products.

If a spray is needed, we would recommend only non-flammable sprays. The solvent evaporates very quickly and should not have time to damage materials. Should be used very sparingly.

VERY IMPORTANT: Testing for compatibility is important. **Clean and treat one part**, then check a few days later for any adverse reactions before proceeding to treat the other parts.



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