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# Technical Data Sheet

## Product 7070

Worldwide Version, February 1998

### PRODUCT DESCRIPTION

LOCTITE® Product 7070 is a non-aqueous, hydrocarbon-based, non-CFC solvent designed for cleaning and degreasing of surfaces to be bonded with adhesives. It is an alternative to 1,1,1-trichloroethane (methyl chloroform) for general industrial cleaning.

### TYPICAL APPLICATIONS

Used as a final pre-assembly cleaning treatment to remove most greases, oils, lubrication fluids, metal cuttings and fines, for all surfaces to be bonded with adhesives. It is designed to be used as a spray or in immersion cleaning processes, at room temperature or heated.

NOTE: Product 7070 is not intended as a solvent for flushing Loctite products from dispensing equipment, or for cleaning printed circuit boards and printed circuit assemblies.

### LIQUID PROPERTIES

	Typical	
	Value	Range
Chemical Type	Hydrocarbon Blend	
Appearance	Colorless Liquid	
Specific Gravity @ 25°C	0.75	
Viscosity @ 25°C, mPa.s (cP)		
Canon Fenske No. 150	1.5	1 to 2
Flash Point (TCC), °C	54	
Boiling Range, °C		154 to 210
Resistivity, MΩ-cm, ASTM D4308,	1.3	
Percent Aromatics, %	<1	
Vapor Pressure, mmHg: 25 °C	<5.0	
Kauri-Butanol Value (KB):	31	
ASTM D1133-61		
Autoignition Temperature, °C	398	
ASTM E659-78		

### COMPATIBILITY

Loctite 7070 is compatible with metals, many plastics and elastomers. The following tables show the effects of Loctite 7070 and 1,1,1-trichloroethane on various plastics and elastomers. Since compatibility is affected by material variation, it is recommended to check parts and cleaning equipment gaskets, seals, and O-rings under end use conditions before adopting use of Loctite 7070.

### LOCTITE 7070 COMPATIBILITY WITH PLASTICS \*

(Tested Per ASTM D543 - 87)

\* All specimens weighed 30 minutes after removing from solvents

**Key:** NC = No change; VT = Very tacky; C = Cracking;  
 S = Swelling; SS = Slight swelling

Plastics	Loctite 7070		1,1,1- Trichloroethane	
	30 Minutes @ RT		30 Minutes @ RT	
	% Wt chg	Apper.	% Wt chg	Apper.
ABS	+0.05	NC	-2.65	VT
Acrylic	+0.11	NC	+0.19	NC
Delrin®	+0.02	NC	+0.02	NC
Epoxy G-10	+0.01	NC	+0.01	NC
Nylon 101	+0.14	NC	+0.07	NC
Nylon 66	+0.04	NC	+0.04	NC
Polycarbonate	+0.07	NC	-6.79	C
Phenolic	+0.21	NC	+0.13	NC
Polyethylene (HD)	+0.05	NC	+0.06	NC
Polyethylene (LD)	+0.11	NC	+0.27	NC
Polypropylene	+0.06	NC	+0.05	NC
Polystyrene (High Impact)	+0.13	NC	-15.9	VT
Polystyrene	+0.13	NC	-18.7	VT
Polysulfone	+0.05	NC	+0.17	NC
PVC	+0.03	NC	+0.02	NC
Teflon®	+0.02	NC	+0.01	NC
Ultem®	+0.09	NC	+0.12	NC
Valox® 420	+0.05	NC	+0.02	NC

Plastics	Loctite 7070		1,1,1- Trichloroethane	
	30 Minutes @ 38°C		30 Minutes @ 38°C	
	% Wt chg	Apper	% Wt chg	Apper
ABS	0	NC	-2.90	VT
Acrylic	+0.04	NC	-0.56	NC
Delrin®	+0.01	NC	+0.03	NC
Epoxy G-10	+0.01	NC	+0.01	NC
Nylon 101	+0.05	NC	+0.05	NC
Nylon 66	+0.02	NC	+0.01	NC
Polycarbonate	+0.03	NC	+1.20	C
Phenolic	+0.13	NC	+0.17	NC
Polyethylene (HD)	+0.10	NC	+0.25	NC
Polyethylene (LD)	+0.39	NC	+1.4	NC
Polypropylene	+0.10	NC	+0.47	NC
Polystyrene (High Impact)	+0.28	NC	-19.3	VT
Polystyrene	+0.03	NC	-22.8	VT
Polysulfone	+0.03	NC	+0.01	NC
PVC	+0.03	NC	+0.13	NC
Teflon®	+0.01	NC	+0.02	NC
Ultem®	+2.7	NC	+0.02	NC
Valox® 420	+0.04	NC	0	NC

Delrin and Teflon are registered trademarks of E.I. DuPont.  
 Valox and Ultem are registered trademarks of GE Plastics.

NOT FOR PRODUCT SPECIFICATIONS

THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.

PLEASE CONTACT LOCTITE CORPORATION QUALITY DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.  
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**LOCTITE 7070 COMPATIBILITY WITH ELASTOMERS \***  
(Tested Per ASTM D543-87)

\* All specimens weighed 30 minutes after removing from solvents

**Key:** NC = No change; VT = Very tacky; C = Crazing;  
S = Swelling; SS = Slight swelling

ELASTOMERS	Loctite 7070		1,1,1Trichloroethane	
	30 Minutes @ RT		30 Minutes @ RT	
	% Wt chg.	Apper	% Wt chg	Apper
Buna N	+0.90	SS	+12.4	S
Buna S	+0.48	SS	+7.28	S
Butyl	+5.33	S	+12.1	S
EPDM	+5.23	S	+11.1	S
Neoprene	+1.08	SS	+11.8	S
Polyurethane	+0.07	SS	+1.72	S
Silicone	+10.8	S	+11.3	S
Viton®	+1.08	SS	+1.73	S

ELASTOMERS	Loctite 7070		1,1,1Trichloroethane	
	30 Minutes @ 38°C		30 Minutes @ 38°C	
	% Wt chg	Apper	% Wt chg	Apper.
Buna N	+2.5	S	+23.8	S
Buna S	+1.1	SS	+11.9	S
Butyl	+8.2	S	+19.9	S
EPDM	+12.0	S	+23.2	S
Neoprene	+2.3	S	+14.7	S
Polyurethane	+0.07	SS	+3.30	S
Silicone	+13.8	S	+17.7	S
Viton®	0	SS	+3.10	S

**EVAPORATION RATE****Drying Times at 25°C**

<u>Material</u>	<u>Minutes</u>
No Wipe	5 to 20
Post Wipe (Dry Cloth)	1 to 2

**ENVIRONMENTAL INFORMATION**

Product 7070 has no ozone depletion potential. Unlike 1,1,1-trichloroethane, it is not subject to regulation or phase-out under the 1990 Clean Air Act Amendments or the Montreal Protocol.

This product contains no components reportable under SARA Title III, Section 313. It is TSCA listed for the United States, and is DSL listed for Canada.

**GENERAL INFORMATION**

**For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).**

THIS PRODUCT SHOULD NEVER BE USED IN VAPOR PHASE DEGREASERS OR SYSTEMS THAT USE A BOILING VAPOR PROCESS.

AIR TEMPERATURE SHOULD BE KEPT BELOW THE SOLVENT'S FLASH POINT.

TO AVOID SOLVENT ENTRAPMENT WITHIN THE BOND JOINT, ALWAYS ALLOW PRODUCT 7070 TO FULLY EVAPORATE FROM PARTS PRIOR TO BONDING.

**Directions for use**

1. Spray area generously with product.
2. Wipe surfaces when still wet with a clean cloth to remove all heavy contamination. If necessary, spray surfaces again to allow run-off of product.
3. Allow Product 7070 to fully evaporate from parts prior to bonding to avoid solvent entrapment within the bond joint.
4. Apply Loctite adhesive immediately after drying and assemble bond.

**Storage**

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact your local Technical Service Center.

This cleaning solvent is classified as **COMBUSTIBLE** (as determined by OSHA) and must be stored in an appropriate manner in compliance with relevant regulations. Do not store near oxidizing agents or sources of ignition. Spray containers are non-aerosol and do not have to be stored as pressurized materials.

**Note**

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loctite Corporation's products. Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

**Caution**