

This safety data sheet has been prepared in accordance with the requirements of EC Directive 88/379/EEC and 91/155/EEC (and other related directives) and provides information relating to the safe handling and use of the product.

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## 1. PRODUCT AND COMPANY INFORMATION

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**Product Code** 0178276A  
**Trade Name** 7649 (Aerosol)  
**Manufacturer/Supplier** Loctite UK  
**Address** Watchmead,  
Welwyn Garden City,  
Herts., AL71JB.  
**Phone Number** 01 707 358800  
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**Emergency Phone Number** +353-1-4599301/+353-1-87-2629625/+353-1-4046444

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

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**Nature** Solvent based activator.

**Hazardous Components in Product for EC**

<b>Component Name</b>	<b>Concentration</b>	<b>R Phrases</b>	<b>Classification</b>
Acetone	60.00 - 90.00	R11	F
2-Ethylhexanoic Acid	0.10 - 2.00	R21, R36	
Propane Propellant	5.00 - 15.00	R12	F+

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## 3. HAZARD IDENTIFICATION

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Extremely flammable. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Solvent will have a defatting action on the skin making it more susceptible to dermatitis and sensitisation. Inhalation of vapours may cause headaches or dizziness.

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## 4. FIRST AID MEASURES

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**First Aid - Inhalation**

Remove affected person to fresh air, and if still feeling unwell seek medical attention.

**First Aid - Skin**

Wash skin with plenty of soap and water and apply replenishing cream if necessary.

**First Aid - Eyes**

Flush eyes with plenty of water for at least 15 minutes. If irritation persists seek medical attention.

**First Aid - Ingestion**

Rinse mouth with water then give plenty of water to drink. Do not induce vomiting.

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## 5. FIRE FIGHTING MEASURES

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Self contained breathing apparatus should be worn when dealing with fire. Aerosol containers may explode when exposed to high temperatures. Keep unaffected containers cool with water spray. If

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**5. FIRE FIGHTING MEASURES**

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product is involved in fire extinguish with dry powder, foam or carbon dioxide.

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**6. ACCIDENTAL RELEASE MEASURES**

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Ventilate area. Eliminate sources of ignition. For small spills wipe up with paper towel and place in container for disposal.

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**7. HANDLING AND STORAGE**

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**Handling**

Use in a well ventilated area. Avoid sources of ignition - no smoking. Vapours should be extracted to avoid inhalation. Prolonged or repeated skin contact should be avoided.

**Storage**

Store away from heat in a cool, well-ventilated area. Keep away from sources of ignition.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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In circumstances where there is a potential for prolonged or repeated skin contact, the use of polyvinyl chloride, polyethylene or nitrile rubber gauntlets or equivalent solvent resistant gloves is recommended.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical State</b>	Liquid.
<b>Colour</b>	Green.
<b>Odour</b>	Pungent.
<b>pH</b>	Not determined.
<b>Boiling Range/Point (°C)</b>	56
<b>Flash Point (CC) (°C)</b>	-18 (solvent)
<b>Specific Gravity</b>	0.8 at 20 °C.
<b>Solubility in Water (kg/m<sup>3</sup>)</b>	Miscible.
<b>Solubility in Acetone</b>	Miscible
<b>Vapour Pressure (mmHg @25°C)</b>	230 mBar at 20 °C.
<b>Explosion Limits (%)</b>	Lower limit 2.5. Upper limit 13. (Solvent)

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**10. STABILITY AND REACTIVITY**

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The product is relatively stable under normal conditions of use.

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**11. TOXICOLOGICAL INFORMATION**

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**Inhalation**

Inhalation of vapours may cause headaches or dizziness.

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**11. TOXICOLOGICAL INFORMATION**

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**Skin**

Solvent may remove essential oils from the skin making it susceptible to attack from other chemicals. Acute dermal LD50 (rabbit) is estimated to be greater than 2000mg/kg.

**Eyes**

May cause mild irritation to the eyes.

**Ingestion**

This product is considered to be of low toxicity having an acute oral LD50 (rat) >2000mg/kg by analogy to other similar products. Ingestion of large quantities may cause liver or kidney damage.

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**12. ECOLOGICAL INFORMATION**

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Does not contain substances listed on the Montreal protocol.

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**13. DISPOSAL CONSIDERATIONS**

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Dispose of in accordance with local and national regulations. Incineration under controlled conditions recommended.

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**14. TRANSPORT INFORMATION**

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<b>UN Number</b>	1950
<b>Air (IATA)</b>	Aerosols, flammable, n.o.s., Class 2.1, flammable gas.
<b>Sea (IMO)</b>	Aerosol, Class 2.1 EmS 2-13 MFAG 300.
<b>Road (ADR)/Rail (RID)</b>	Aerosols, Class 2, Item No.5° F

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**15. REGULATORY INFORMATION**

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**Contains  
Labelling  
Information**

N/A  
Extremely  
flammable

**R phrases  
S phrases**

R12 Extremely flammable.  
S2 Keep out of the reach of children.  
S9 Keep container in a well ventilated place.  
S16 Keep away from sources of ignition - No Smoking.  
S23 Do not breathe vapour.  
S33 Take precautionary measures against static discharges.  
S51 Use only in well ventilated areas.

**Voluntary Labelling**

Pressurised container: protect from sunlight and do not expose to temperatures exceeding +50°C.  
Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material.

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**16. OTHER INFORMATION**

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<b>MSDS first issued</b>	8 October 1996
<b>MSDS data revised</b>	6 April 1999

Prepared by:

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Health &amp; Regulatory Affairs - Europe Further Information may be obtained from:-

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Supersedes Safety Data Sheet No: 0178276A dated 22/12/97

## PRODUCT DESCRIPTION

LOCTITE® ACTIVATOR 7649 is a single component non-CFC solvent based surface activator. The activator is designed to promote the speed of cure of Loctite anaerobic adhesives and sealants. The activator is HIGHLY FLAMMABLE.

## TYPICAL APPLICATIONS

ACTIVATOR 7649 is used where increased cure speed of Loctite anaerobic products is required. It is especially recommended for applications with passive metals or inert surfaces and with large bond gaps. ACTIVATOR 7649 can also be used when cure temperatures are below room temperature. Use of activator is particularly recommended for cure conditions below 15°C.

## LIQUID PROPERTIES

	Typical Value
Chemical type	Basic Copper Salt
Solvent	Acetone*
Appearance	Clear Green liquid
Specific Gravity @ 25°C	0.79
Viscosity, 20°C, mPa.s (cP)	2
Flash point (TCC), °C	-18 (HIGHLY FLAMMABLE)
TLV, (ACGIH), ppm	750
Drying time @ 20°C, seconds	30 to 70
On part life, days	30

- \* Acetone is an environmentally friendly solvent. Acetone has zero Ozone Depletion Potential. Conforms to German WGK, category 0.

## Caution

UNDER NO CIRCUMSTANCES SHOULD ACTIVATOR AND ADHESIVE BE MIXED DIRECTLY AS LIQUIDS.

## TYPICAL PERFORMANCE

Fixture time and cure speed achieved as a result of using ACTIVATOR 7649 depend on the adhesive used and the substrate bonded.

## GENERAL INFORMATION

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

## HANDLING INFORMATION

### Handling Precautions

Activator must be handled in a manner applicable to highly flammable materials and in compliance with relevant local regulations. For example, special care must be taken to avoid contact of the activator or its vapour with naked flame or any electrical equipment that is not flame proofed.

The carrying solvent can affect certain plastics or coatings. It is recommended to check all surfaces for compatibility before use.

Avoid prolonged or repeated skin contact.

Use only in a well ventilated area.

No smoking in presence of activator.

## Directions for use

1. Spray or brush on the activator on both mating surfaces to be bonded. For small gaps treatment of only one surface may be adequate. Contaminated surfaces may need repeated treatment or special degreasing prior to activation to remove any dissolvable contamination. Porous surfaces may need two treatments of activator.
2. Allow the solvent time to evaporate under good ventilation until the surfaces are completely dry.
3. After activation, parts should be bonded within one month. Contamination of the surface before bonding should be prevented.
4. Apply the Loctite anaerobic product to one or both surfaces and assemble parts immediately.
5. Where possible, move surfaces in relation to each other for a few seconds on assembly to properly distribute the adhesive and for maximum activation.
6. Secure the assembly and await fixturing before any further handling.

## Storage

This activator is classified as being HIGHLY FLAMMABLE and therefore must be stored in an appropriate manner and in compliance with relevant regulations. Do not store near oxidising agents or combustible materials.

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 labelled. 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 Centre.

## Note

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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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