



Safety Data Sheet according to (EC) No 1907/2006

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SDS No. : 153556
V002.6

LOCTITE 7471 ACT T 500ML

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

LOCTITE 7471 ACT T 500ML

Contains:

Acetone
Propan-2-ol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use:
Primer, containing solvents

1.3. Details of the supplier of the safety data sheet

Henkel Limited
2 Bishop Square Business Park
AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933
Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Flammable liquids	Category 2
H225 Highly flammable liquid and vapor.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Target organ: Central Nervous System	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

Classification (DPD):

F - Highly flammable
R11 Highly flammable.
Xi - Irritant
R36 Irritating to eyes.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
Dangerous for the environment
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements**Label elements (CLP):**

Hazard pictogram:		
Signal word:	Danger	
Hazard statement:	H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.	
Supplemental information	EUH066 Repeated exposure may cause skin dryness or cracking. Contains Benzothiazole-2-thiol. May produce an allergic reaction.	
Precautionary statement: Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing mist/vapours. P273 Avoid release to the environment.	
Precautionary statement: Response	P337+P313 If eye irritation persists: Get medical advice/attention.	

Label elements (DPD):

F - Highly flammable



Xi - Irritant



Risk phrases:

- R11 Highly flammable.
- R36 Irritating to eyes.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

Safety phrases:

- S16 Keep away from sources of ignition - No smoking.
- S23 Do not breathe vapour.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37 Wear suitable gloves.
- S51 Use only in well-ventilated areas.
- S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

- For consumer use only: S2 Keep out of the reach of children.
- S46 If swallowed, seek medical advice immediately and show this container or label.

Contains Benzothiazole-2-thiol. May produce an allergic reaction.

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Primer, containing solvents

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Acetone 67-64-1	200-662-2 01-2119471330-49	75- < 100 %	Flammable liquids 2 H225 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H336
Propan-2-ol 67-63-0	200-661-7 01-2119457558-25	10- < 20 %	Flammable liquids 2 H225 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H336
Diethylol-p-toluidine 3077-12-1	221-359-1	1- < 3 %	Acute toxicity 4; Oral H302 Serious eye damage 1 H318
Benzothiazole-2-thiol 149-30-4	205-736-8	0,1- < 1 %	Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 1 H410 Acute hazards to the aquatic environment 1 H400

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Acetone 67-64-1	200-662-2 01-2119471330-49	75 - < 100 %	F - Highly flammable; R11 Xi - Irritant; R36 R66 R67
Propan-2-ol 67-63-0	200-661-7 01-2119457558-25	10 - < 20 %	F - Highly flammable; R11 Xi - Irritant; R36 R67
Diethylol-p-toluidine 3077-12-1	221-359-1	1 - < 3 %	Xn - Harmful; R22 Xi - Irritant; R41
Benzothiazole-2-thiol 149-30-4	205-736-8	0,1 - < 1 %	R43 N - Dangerous for the environment; R50/53

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.
Seek medical advice.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.
Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

EYE: Irritation, conjunctivitis.

Prolonged or repeated contact may cause skin irritation.

Vapors may cause drowsiness and dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. Special hazards arising from the substance or mixture

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.
Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.
Vapours should be extracted to avoid inhalation.
Keep away from sources of ignition - no smoking.
Avoid skin and eye contact.
See advice in section 8

Hygiene measures:

Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.
Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place.

Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Primer, containing solvents

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**

Valid for

Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
ACETONE 67-64-1	500	1.210	Time Weighted Average (TWA):		EH40 WEL
ACETONE 67-64-1	1.500	3.620	Short Term Exposure Limit (STEL):		EH40 WEL
ACETONE 67-64-1	500	1.210	Time Weighted Average (TWA):	Indicative	ECTLV
PROPAN-2-OL 67-63-0	500	1.250	Short Term Exposure Limit (STEL):		EH40 WEL
PROPAN-2-OL 67-63-0	400	999	Time Weighted Average (TWA):		EH40 WEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Acetone 67-64-1	aqua (intermittent releases)					21 mg/L	
Acetone 67-64-1	STP					100 mg/L	
Acetone 67-64-1	sediment (freshwater)				30,4 mg/kg		
Acetone 67-64-1	sediment (marine water)				3,04 mg/kg		
Acetone 67-64-1	soil				29,5 mg/kg		
Acetone 67-64-1	aqua (freshwater)					10,6 mg/L	
Acetone 67-64-1	aqua (marine water)					1,06 mg/L	
Propan-2-ol 67-63-0	aqua (freshwater)					140,9 mg/L	
Propan-2-ol 67-63-0	aqua (marine water)					140,9 mg/L	
Propan-2-ol 67-63-0	sediment (freshwater)				552 mg/kg		
Propan-2-ol 67-63-0	sediment (marine water)				552 mg/kg		
Propan-2-ol 67-63-0	soil				28 mg/kg		
Propan-2-ol 67-63-0	aqua (intermittent releases)					140,9 mg/L	
Propan-2-ol 67-63-0	STP					2251 mg/L	
Propan-2-ol 67-63-0	oral					160 mg/kg food	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Acetone 67-64-1	Workers	Inhalation	Acute/short term exposure - local effects		2420 mg/m ³	
Acetone 67-64-1	Workers	Dermal	Long term exposure - systemic effects		186 mg/kg bw/day	
Acetone 67-64-1	Workers	Inhalation	Long term exposure - systemic effects		1210 mg/m ³	
Acetone 67-64-1	general population	Dermal	Long term exposure - systemic effects		62 mg/kg bw/day	
Acetone 67-64-1	general population	Inhalation	Long term exposure - systemic effects		200 mg/m ³	
Acetone 67-64-1	general population	oral	Long term exposure - systemic effects		62 mg/kg bw/day	
Propan-2-ol 67-63-0	Workers	Dermal	Long term exposure - systemic effects		888 mg/kg bw/day	
Propan-2-ol 67-63-0	Workers	Inhalation	Long term exposure - systemic effects		500 mg/m ³	
Propan-2-ol 67-63-0	general population	Dermal	Long term exposure - systemic effects		319 mg/kg bw/day	
Propan-2-ol 67-63-0	general population	Inhalation	Long term exposure - systemic effects		89 mg/m ³	
Propan-2-ol 67-63-0	general population	oral	Long term exposure - systemic effects		26 mg/kg bw/day	

Biological Exposure Indices:
None**8.2. Exposure controls:****Respiratory protection:**

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Wear protective glasses.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	Liquid
	Amber to yellowish
Odor	Acetone
Odour threshold	No data available / Not applicable
pH	not applicable
Initial boiling point	56 °C (132.8 °F)
Flash point	-8 °C (17.6 °F) Estimated
Decomposition temperature	No data available / Not applicable
Vapour pressure	172 mm hg
Density	0,795 g/cm3
0	
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Miscible
(Solvent: Water)	
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reaction with strong acids.
Reacts with strong oxidants.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

Irritating organic vapours.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****General toxicological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-single exposure:

May cause drowsiness or dizziness.

Oral toxicity:

This material is considered to have low toxicity if swallowed.

Inhalative toxicity:

May cause headache and dizziness.

Skin irritation:

Solvent may remove essential oils from the skin making it susceptible to attack from other chemicals.

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Causes serious eye irritation.

Sensitizing:

May produce an allergic reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acetone 67-64-1	LD50	5.800 mg/kg	oral		rat	
Propan-2-ol 67-63-0	LD50	5.338 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acetone 67-64-1	LC50	76 mg/l	inhalation	4 h	rat	
Propan-2-ol 67-63-0	LC50	72,6 mg/l	inhalation	4 h	rat	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acetone 67-64-1	LD50	> 15.688 mg/kg	dermal		rabbit	
Propan-2-ol 67-63-0	LD50	12.870 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Propan-2-ol 67-63-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acetone 67-64-1	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Propan-2-ol 67-63-0	moderately irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Propan-2-ol 67-63-0	not sensitising	Buehler test	guinea pig	
Benzothiazole-2-thiol 149-30-4	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Benzothiazole-2-thiol 149-30-4	sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Acetone 67-64-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propan-2-ol 67-63-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Benzothiazole-2-thiol 149-30-4	negative	intraperitoneal		mouse	Micronucleus assay

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Acetone 67-64-1	NOAEL=2500 ppm	oral: drinking water	13 weeks	rat	
Acetone 67-64-1	LOAEL=5000 ppm	oral: drinking water	13 weeks	rat	
Propan-2-ol 67-63-0	NOAEL=1500	inhalation	13 weeks 6 hours/day, 5 days/week	mouse	
Propan-2-ol 67-63-0	LOAEL=5000	inhalation	13 weeks 6 hours/day, 5 days/week	mouse	
Benzothiazole-2-thiol 149-30-4	NOAEL=375 mg/kg	oral: gavage	13 weeks 5 days/week	rat	
Benzothiazole-2-thiol 149-30-4	LOAEL=750 mg/kg	oral: gavage	13 weeks 5 days/week	rat	

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity**Ecotoxicity:**

Do not empty into drains / surface water / ground water.
Harmful to aquatic life with long lasting effects.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Acetone 67-64-1	LC50	8.120 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Acetone 67-64-1	EC50	6.098,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Propan-2-ol 67-63-0	LC50	9.640 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Propan-2-ol 67-63-0	EC50	13.299 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Propan-2-ol 67-63-0	EC50	> 1.000 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	1.000 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diethylol-p-toluidine 3077-12-1	LC50	> 100 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Benzothiazole-2-thiol 149-30-4	LC50	1,6 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Benzothiazole-2-thiol 149-30-4	EC50	4,1 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Benzothiazole-2-thiol 149-30-4	EC50	0,25 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability:

No data available.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Acetone 67-64-1	readily biodegradable	aerobic	81 - 92 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)
Propan-2-ol 67-63-0	readily biodegradable	aerobic	70 - 84 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)
Diethylol-p-toluidine 3077-12-1			> 48 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Benzothiazole-2-thiol 149-30-4		aerobic	2,5 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

The product evaporates readily.

Bioaccumulative potential:

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Acetone 67-64-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Propan-2-ol 67-63-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product disposal:

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

Disposal must be made according to official regulations.

Waste code

14 06 03 Other solvents and solvent mixtures

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information**14.1. UN number**

ADR	1993
RID	1993
ADNR	1993
IMDG	1993
IATA	1993

14.2. UN proper shipping name

ADR	FLAMMABLE LIQUID, N.O.S. (Acetone,Isopropanol)
RID	FLAMMABLE LIQUID, N.O.S. (Acetone,Isopropanol)
ADNR	FLAMMABLE LIQUID, N.O.S. (Acetone,Isopropanol)
IMDG	FLAMMABLE LIQUID, N.O.S. (Acetone,Isopropanol)
IATA	Flammable liquid, n.o.s. (Acetone,Isopropanol)

14.3. Transport hazard class(es)

ADR	3
RID	3
ADNR	3
IMDG	3
IATA	3

14.4. Packaging group

ADR	II
RID	II
ADNR	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADNR	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	Special provision 640D Tunnelcode: (D/E)
RID	Special provision 640D
ADNR	Special provision 640D
IMDG	not applicable
IATA	not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**VOC content 99 %
(1999/13/EC)**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

R11 Highly flammable.
R22 Harmful if swallowed.
R36 Irritating to eyes.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.