

Loctite 7400 Varnistop

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

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sds no.: 290260

V005.0 Revision: 12.02.2013

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

1.1. Product identifier

Loctite 7400 Varnistop

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

Intended use: Coating

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 (DPD):

F - Highly flammable

R11 Highly flammable.

Xn - Harmful

R20 Harmful by inhalation.

Xi - Irritant

R36/37 Irritating to eyes and respiratory system.

R66 Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

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Label elements (DPD):

F - Highly flammable







Risk phrases:

R11 Highly flammable.

R20 Harmful by inhalation.

R36/37 Irritating to eyes and respiratory system.

R66 Repeated exposure may cause skin dryness or cracking.

Safety phrases:

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.

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:

4-Methylpentan-2-one

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:

Solvent based coating

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
4-Methylpentan-2-one	203-550-1	> 25-< 50 %	Acute toxicity 4; Inhalation
108-10-1	01-2119473980-30		H332
			Flammable liquids 2
			H225
			Serious eye irritation 2
			H319
			Specific target organ toxicity - single
			exposure 3
			H335
n-Butyl acetate	204-658-1	> 25-< 50 %	Flammable liquids 3
123-86-4	01-2119485493-29		H226
			Specific target organ toxicity - single
			exposure 3
			H336
Cellulose nitrate		> 10-< 25 %	Explosives 1.1
9004-70-0			H201

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.

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
n-Butyl acetate	204-658-1	> 25 - < 50 %	R10
123-86-4	01-2119485493-29		R66
			R67
4-Methylpentan-2-one	203-550-1	> 25 - < 50 %	F - Highly flammable; R11
108-10-1	01-2119473980-30		Xi - Irritant; R36/37
			Xn - Harmful; R20
			R66
Cellulose nitrate		> 10 - < 25 %	E - Explosive; R3
9004-70-0			-

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

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

EYE: Irritation, conjunctivitis.

Repeated exposure may cause skin dryness or cracking.

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.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.

Ensure adequate ventilation.

See advice in chapter 8

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.

Dispose of contaminated material as waste according to Chapter 13.

6.4. Reference to other sections

See advice in chapter 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.

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)

Coating

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
BUTYL ACETATE	150	724	Time Weighted Average		EH40 WEL
123-86-4			(TWA):		
BUTYL ACETATE	200	966	Short Term Exposure		EH40 WEL
123-86-4			Limit (STEL):		
4-METHYLPENTAN-2-ONE			Skin designation:	Can be absorbed through the	EH40 WEL
108-10-1				skin.	
4-METHYLPENTAN-2-ONE	50	208	Time Weighted Average		EH40 WEL
108-10-1			(TWA):		
4-METHYLPENTAN-2-ONE	100	416	Short Term Exposure		EH40 WEL
108-10-1			Limit (STEL):		
4-METHYLPENTAN-2-ONE	20	83	Time Weighted Average	Indicative	ECTLV
108-10-1			(TWA):		
4-METHYLPENTAN-2-ONE	50	208	Short Term Exposure	Indicative	ECTLV
108-10-1			Limit (STEL):		

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$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Exposure Value Compartment period						Remarks
			mg/l	ppm	mg/kg	others	
n-Butyl acetate	aqua					0,18 mg/L	
123-86-4	(freshwater)						
n-Butyl acetate	aqua (marine					0,018 mg/L	
123-86-4	water)						
n-Butyl acetate	aqua					0,36 mg/L	
123-86-4	(intermittent						
	releases)						
n-Butyl acetate	STP					35,6 mg/L	
123-86-4							
n-Butyl acetate	sediment				0,981		
123-86-4	(freshwater)				mg/kg		
n-Butyl acetate	sediment				0,0981		
123-86-4	(marine water)				mg/kg		
n-Butyl acetate	soil				0,0903		
123-86-4					mg/kg		
4-Methylpentan-2-one	aqua					0,6 mg/L	
108-10-1	(freshwater)						
4-Methylpentan-2-one	aqua (marine					0,06 mg/L	
108-10-1	water)						
4-Methylpentan-2-one	sediment				8,27 mg/kg		
108-10-1	(freshwater)						
4-Methylpentan-2-one	sediment				0,83 mg/kg		
108-10-1	(marine water)						
4-Methylpentan-2-one	soil				1,3 mg/kg		
108-10-1							
4-Methylpentan-2-one	STP					27,5 mg/L	
108-10-1							

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Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
n-Butyl acetate 123-86-4	worker	inhalation	Acute/short term exposure - systemic effects		960 mg/m3	
n-Butyl acetate 123-86-4	worker	inhalation	Acute/short term exposure - local effects		960 mg/m3	
n-Butyl acetate 123-86-4	worker	inhalation	Long term exposure - systemic effects		480 mg/m3	
n-Butyl acetate 123-86-4	worker	inhalation	Long term exposure - local effects		480 mg/m3	
n-Butyl acetate 123-86-4	general population	inhalation	Acute/short term exposure - systemic effects		859,7 mg/m3	
n-Butyl acetate 123-86-4	general population	inhalation	Acute/short term exposure - local effects		859,7 mg/m3	
n-Butyl acetate 123-86-4	general population	inhalation	Long term exposure - systemic effects		102,34 mg/m3	
4-Methylpentan-2-one 108-10-1	worker	inhalation	Acute/short term exposure - systemic effects		208 mg/m3	
4-Methylpentan-2-one 108-10-1	worker	inhalation	Acute/short term exposure - local effects		208 mg/m3	
4-Methylpentan-2-one 108-10-1	worker	inhalation	Long term exposure - systemic effects		83 mg/m3	
4-Methylpentan-2-one 108-10-1	worker	inhalation	Long term exposure - local effects		83 mg/m3	
4-Methylpentan-2-one 108-10-1	worker	dermal	Long term exposure - systemic effects		11,8 mg/kg bw/day	
4-Methylpentan-2-one 108-10-1	general population	inhalation	Acute/short term exposure - systemic effects		155,2 mg/m3	
4-Methylpentan-2-one 108-10-1	general population	inhalation	Acute/short term exposure - local effects		155,2 mg/m3	
4-Methylpentan-2-one 108-10-1	general population	inhalation	Long term exposure - systemic effects		14,7 mg/m3	
4-Methylpentan-2-one 108-10-1	general population	inhalation	Long term exposure - local effects		14,7 mg/m3	
4-Methylpentan-2-one 108-10-1	general population	dermal	Long term exposure - systemic effects		4,2 mg/kg bw/day	
4-Methylpentan-2-one 108-10-1	general population	oral	Long term exposure - systemic effects		4,2 mg/kg bw/day	

Biological Exposure Indices:

Ingredient	Parameters	Biological specimen	Sampling time	 Basis of biol. exposure index	 Additional Information
4-METHYLPENTAN-2-ONE	4-	Urine	Sampling time: End of	UKEH40BMG	
108-10-1	methylpentan -2-one		shift.	V	

8.2. Exposure controls:

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Respiratory protection:

Use only in well-ventilated areas.

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; \geq 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

red

Odor characteristic

Odour threshold No data available / Not applicable

pH No data available / Not applicable

Initial boiling point $114 \,^{\circ}\text{C} (237.2 \,^{\circ}\text{F})$ Flash point $12 \,^{\circ}\text{C} (53.6 \,^{\circ}\text{F})$

Decomposition temperature No data available / Not applicable

Vapour pressure 58,7 mbar

(20 °C (68 °F))

Density 0,97 g/cm3

(20 °C (68 °F))

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) Not miscible

(Solvent: Water)

Solidification temperature

Melting point

Mo data available / Not applicable
No data available / Not applicable
Flammability

No data available / Not applicable
Auto-ignition temperature

No data available / Not applicable

Explosive limits

 $\begin{array}{c} \text{lower} & 1,7 \ \%(\text{V}) \\ \text{upper} & 10,4 \ \%(\text{V}) \end{array}$

Partition coefficient: n-octanol/water

Evaporation rate

Vapor density

Oxidising properties

No data available / Not applicable

9.2. Other information

No data available / Not applicable

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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

No data available.

10.6. Hazardous decomposition products

Irritating organic vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:

May cause irritation to the digestive tract.

Inhalative toxicity:

Harmful by inhalation.

Irritating to respiratory system

Vapors may cause drowsiness 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:

Irritating to eyes.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
n-Butyl acetate 123-86-4	LD50	> 8.800 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
n-Butyl acetate 123-86-4	LC50	> 23,4 mg/l	inhalation	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
4-Methylpentan-2-one 108-10-1	LC50	8,2 - 16,4 mg/l	inhalation	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)

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Skin corrosion/irritation:

Hazardous components	Result	Exposure	Species	Method
CAS-No.		time		
n-Butyl acetate	not irritating		rabbit	
123-86-4				
4-Methylpentan-2-one	not irritating	4 h	rabbit	OECD Guideline 404 (Acute
108-10-1	_			Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
n-Butyl acetate 123-86-4	not irritating		rabbit	
4-Methylpentan-2-one 108-10-1	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
n-Butyl acetate 123-86-4	not sensitising	Guinea pig maximisat ion test	guinea pig	
4-Methylpentan-2-one 108-10-1	not sensitising	Guinea pig maximisat ion 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
n-Butyl acetate 123-86-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
4-Methylpentan-2-one 108-10-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

SECTION 12: Ecological information

General ecological information:

Do not empty into drains / surface water / ground water.

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

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12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
n-Butyl acetate 123-86-4	LC50	62 mg/l	Fish	96 h	Leuciscus idus	
n-Butyl acetate 123-86-4	EC50	72,8 mg/l	Daphnia	24 h	Daphnia magna	
n-Butyl acetate 123-86-4	EC50	674,7 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
4-Methylpentan-2-one 108-10-1	LC50	600 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	OECD Guideline 203 (Fish, Acute Toxicity Test)
4-Methylpentan-2-one 108-10-1	EC50	170 mg/1	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4-Methylpentan-2-one 108-10-1	EC50	400 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline
Cellulose nitrate 9004-70-0	LC50	> 1.000 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cellulose nitrate 9004-70-0	EC50	> 1.000 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cellulose nitrate 9004-70-0	ErC50	> 90.000 mg/l	Algae	72 h	Scenedesmus sp.	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
n-Butyl acetate	readily biodegradable	aerobic	98 %	OECD Guideline 301 D (Ready
123-86-4				Biodegradability: Closed Bottle Test)
4-Methylpentan-2-one 108-10-1	readily biodegradable	aerobic	99 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Cellulose nitrate 9004-70-0	readily biodegradable	no data	> 60 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

The product is insoluble and floats on water.

The product evaporates readily.

Bioaccumulative potential:

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
n-Butyl acetate 123-86-4	1,81				23 °C	OECD Guideline 107 (Partition Coefficient (noctanol / water), Shake Flask Method)
4-Methylpentan-2-one 108-10-1	1,31				20 °C	

12.5. Results of PBT and vPvB assessment

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Hazardous components	PBT/vPvB
CAS-No.	
n-Butyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
123-86-4	Bioaccumulative (vPvB) criteria.
4-Methylpentan-2-one	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
108-10-1	Bioaccumulative (vPvB) criteria.
Cellulose nitrate	Not fulfilling PBT (persistent/bioaccummulative/toxic) criteria
9004-70-0	

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

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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. (Methyl isobutyl ketone, Butylacetate)
RID	FLAMMABLE LIQUID, N.O.S. (Methyl isobutyl ketone, Butylacetate)
ADNR	FLAMMABLE LIQUID, N.O.S. (Methyl isobutyl ketone, Butylacetate)
IMDG	FLAMMABLE LIQUID, N.O.S. (Methyl isobutyl ketone, Butylacetate)
IATA	Flammable liquid, n.o.s. (Methyl isobutyl ketone, Butylacetate)

14.3. Transport hazard class(es)

ADR	3
	3
RID	3
	3
ADNR	3
	3
IMDG	3
	3
IATA	3
	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

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(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:

R10 Flammable.

R11 Highly flammable.

R20 Harmful by inhalation.

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.

R36/37 Irritating to eyes and respiratory system.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

H201 Explosive; mass explosion hazard.

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and it's subsequent amendments, and Commission Directive 1999/45/EC.