

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

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sds no.: 175159

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Category 2

LOCTITE MCF 800 known as MCF800 MINICLEANER PEN

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

1.1. Product identifier

LOCTITE MCF 800 known as MCF800 MINICLEANER PEN

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

Intended use: Cleaner

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):

Serious eye irritation

H319 Causes serious eye irritation.

Classification (DPD):

Xi - Irritant

R36 Irritating to eyes.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word: Warning

Hazard statement: H319 Causes serious eye irritation.

Precautionary statement:

Prevention

P261 Avoid breathing vapors.

Precautionary statement:

Response

P337+P313 If eye irritation persists: Get medical advice/attention.

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Label elements (DPD):

Xi - Irritant



Risk phrases:

R36 Irritating to eyes.

Safety phrases:

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
2-(2-Butoxyethoxy)ethanol	203-961-6	80- 100 %	Serious eye irritation 2
112-34-5	01-2119475104-44		H319
1-(1-Methyl-2-propoxyethoxy)propan-2-ol 29911-27-1	249-949-4	5- 10 %	Serious eye irritation 2 H319
25511 27 1			11317
(2-Methoxymethylethoxy)propanol	252-104-2	1- 10 %	
34590-94-8	01-2119450011-60		

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
2-(2-Butoxyethoxy)ethanol 112-34-5	203-961-6 01-2119475104-44	80 - 100 %	Xi - Irritant; R36
1-(1-Methyl-2-propoxyethoxy)propan- 2-ol 29911-27-1	249-949-4	5 - 10 %	Xi - Irritant; R36
(2-Methoxymethylethoxy)propanol 34590-94-8	252-104-2 01-2119450011-60	1 - 10 %	

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. Declaration of ingredients according to Detergent Regulation 648/2004/EC

> 30 %

aliphatic hydrocarbons

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:

Immediately wash skin thoroughly with soap and water.

Obtain medical attention if irritation persists.

Eye contact:

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

Ingestion:

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.

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

Water

5.2. Special hazards arising from the substance or mixture

Danger of decomposition if exposed to heat.

May produce fumes when heated to decomposition. Fumes may contain carbon monoxide and other toxic fumes. See section 10.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Wipe up using absorbent material.

Keep in suitable and closed containers for disposal.

6.4. Reference to other sections

See advice in chapter 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See advice in chapter 8

Do not spray onto flame or red-hot objects.

Hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container.

Keep away from heat and direct sunlight.

7.3. Specific end use(s)

Cleaner

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
2-(2-BUTOXYETHOXY)ETHANOL	15	101,2	Short Term Exposure		EH40 WEL
112-34-5			Limit (STEL):		
2-(2-BUTOXYETHOXY)ETHANOL	10	67,5	Time Weighted Average		EH40 WEL
112-34-5			(TWA):		
2-(2-BUTOXYETHOXY)ETHANOL	10	67,5	Time Weighted Average	Indicative	ECTLV
112-34-5			(TWA):		
2-(2-BUTOXYETHOXY)ETHANOL	15	101,2	Short Term Exposure	Indicative	ECTLV
112-34-5			Limit (STEL):		
(2-METHOXYMETHYLETHOXY)	50	308	Time Weighted Average		EH40 WEL
PROPANOL			(TWA):		
34590-94-8					
(2-METHOXYMETHYLETHOXY)			Skin designation:	Can be absorbed through the	EH40 WEL
PROPANOL				skin.	
34590-94-8					
(2-METHOXYMETHYLETHOXY)-	50	308	Time Weighted Average	Indicative	ECTLV
PROPANOL			(TWA):		
34590-94-8					

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

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
	•		mg/l	ppm	mg/kg	others	
2-(2-Butoxyethoxy)ethanol 112-34-5	aqua (freshwater)					1 mg/L	
2-(2-Butoxyethoxy)ethanol 112-34-5	aqua (marine water)					0,1 mg/L	
2-(2-Butoxyethoxy)ethanol 112-34-5	aqua (intermittent releases)					3,9 mg/L	
2-(2-Butoxyethoxy)ethanol 112-34-5	sediment (freshwater)				4 mg/kg		
2-(2-Butoxyethoxy)ethanol 112-34-5	sediment (marine water)				0,4 mg/kg		
2-(2-Butoxyethoxy)ethanol 112-34-5	STP					200 mg/L	
2-(2-Butoxyethoxy)ethanol 112-34-5	oral				56 mg/kg		
2-(2-Butoxyethoxy)ethanol 112-34-5	soil				0,4 mg/kg		
(2-Methoxymethylethoxy)propanol 34590-94-8	aqua (freshwater)					19 mg/L	
(2-Methoxymethylethoxy)propanol 34590-94-8	aqua (marine water)					1,9 mg/L	
(2-Methoxymethylethoxy)propanol 34590-94-8	STP					4168 mg/L	
(2-Methoxymethylethoxy)propanol 34590-94-8	sediment (freshwater)				70,2 mg/kg		
(2-Methoxymethylethoxy)propanol 34590-94-8	sediment (marine water)				7,02 mg/kg		
(2-Methoxymethylethoxy)propanol 34590-94-8	soil				2,74 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2-(2-Butoxyethoxy)ethanol 112-34-5	worker	inhalation	Long term exposure - systemic effects		67,5 mg/m3	
2-(2-Butoxyethoxy)ethanol 112-34-5	worker	Dermal	Long term exposure - systemic effects		20 mg/kg bw/day	
2-(2-Butoxyethoxy)ethanol 112-34-5	general population	inhalation	Acute/short term exposure - local effects		50,6 mg/m3	
2-(2-Butoxyethoxy)ethanol 112-34-5	general population	inhalation	Long term exposure - systemic effects		34 mg/m3	
2-(2-Butoxyethoxy)ethanol 112-34-5	general population	Dermal	Long term exposure - systemic effects		10 mg/kg bw/day	
2-(2-Butoxyethoxy)ethanol 112-34-5	worker	inhalation	Acute/short term exposure - local effects		101,2 mg/m3	
2-(2-Butoxyethoxy)ethanol 112-34-5	worker	inhalation	Long term exposure - local effects		67,5 mg/m3	
2-(2-Butoxyethoxy)ethanol 112-34-5	general population	oral	Long term exposure - systemic effects		1,25 mg/kg bw/day	
2-(2-Butoxyethoxy)ethanol 112-34-5	general population	inhalation	Long term exposure - local effects		34 mg/m3	
(2-Methoxymethylethoxy)propanol 34590-94-8	worker	inhalation	Long term exposure - systemic effects		310 mg/m3	
(2-Methoxymethylethoxy)propanol 34590-94-8	worker	Dermal	Long term exposure - systemic effects		65 mg/kg	
(2-Methoxymethylethoxy)propanol 34590-94-8	general population	oral	Long term exposure - systemic effects		1,67 mg/kg	
(2-Methoxymethylethoxy)propanol 34590-94-8	general population	inhalation	Long term exposure - systemic effects		37,2 mg/m3	
(2-Methoxymethylethoxy)propanol 34590-94-8	general population	Dermal	Long term exposure - systemic effects		15 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure adequate ventilation, especially in confined areas.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Suitable respiratory protection: Filter type: A

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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:

Goggles which can be tightly sealed.

and/or

facial protection

Skin protection:

Protective clothing that covers arms and legs.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

colourless

0,94 - 0,96 g/cm3

characteristic Odor

Odour threshold No data available / Not applicable

4 - 6

(20 °C (68 °F); Solvent: Water)

Initial boiling point 184.0 °C (363.2 °F)

103 - 110 °C (217.4 - 230 °F) Flash point Decomposition temperature No data available / Not applicable

Vapour pressure < 0.1 mbar

(20 °C (68 °F))

Density

(20 °C (68 °F)) Bulk density No data available / Not applicable Viscosity No data available / Not applicable

No data available / Not applicable Viscosity (kinematic) Explosive properties No data available / Not applicable Solubility (qualitative) Soluble

(20 °C (68 °F); 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 225,0 °C (437 °F)

Explosive limits

0,85 %(V) lower 24,6 %(V) upper

Partition coefficient: n-octanol/water No data available / Not applicable Evaporation rate No data available / Not applicable

Vapor density Heavier than air

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 oxidants. Reaction with strong bases

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Danger of decomposition if exposed to heat.

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors.

May produce fumes when heated to decomposition. Fumes may contain carbon monoxide and other toxic fumes.

See section 5.

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.

Inhalative toxicity:

Inhalation of vapors in high concentration may cause irritation of respiratory system

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Due to the low volatility of the product there are no hazards associated with inhalation under normal conditions of use

Skin irritation:

slightly irritating, does not require labeling.

Eye irritation:

Irritating to eyes.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
2-(2- Butoxyethoxy)ethanol 112-34-5	LD50	> 2.000 mg/kg	oral		rat	EU Method B.1 (Acute Toxicity (Oral))
(2- Methoxymethylethoxy)pr opanol 34590-94-8	LD50	8.740 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
2-(2-	LD50	2.800 mg/kg	dermal		rabbit	
Butoxyethoxy)ethanol						
112-34-5						

Skin corrosion/irritation:

Hazardous components	Result	Exposure	Species	Method
CAS-No.		time		
2-(2-	not irritating		rabbit	
Butoxyethoxy)ethanol				
112-34-5				

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2-(2-	moderately irritating		rabbit	
Butoxyethoxy)ethanol				
112-34-5				

Respiratory or skin sensitization:

Hazardous components	Result	Test type	Species	Method
CAS-No.				
2-(2-	not sensitising	Guinea pig	guinea pig	
Butoxyethoxy)ethanol		maximisat		
112-34-5		ion test		
1-(1-Methyl-2-	not sensitising	Buehler	guinea pig	OECD Guideline 406 (Skin
propoxyethoxy)propan-2-	-	test		Sensitisation)
ol				
29911-27-1				

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
2-(2- Butoxyethoxy)ethanol 112-34-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
(2- Methoxymethylethoxy)pr opanol 34590-94-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
2-(2- Butoxyethoxy)ethanol 112-34-5	NOAEL=> 2000 mg/kg		13 weeks 6 hours/day, 5 days/week	rat	
2-(2- Butoxyethoxy)ethanol 112-34-5	NOAEL=2 - 6 ppm	inhalation	90 days	rat	
2-(2- Butoxyethoxy)ethanol 112-34-5	NOAEL=< 50 mg/kg	oral: gavage	90 days 5 days/week	rat	
(2- Methoxymethylethoxy)pr opanol 34590-94-8	NOAEL=> 50 mg/l	inhalation	2 weeks (9 exposures) 6 hours/day; 5 days/week	rabbit	

SECTION 12: Ecological information

General ecological information:

If used properly the product does not enter the drains.

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.

No data available for the product.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
2-(2-Butoxyethoxy)ethanol 112-34-5	LC50	1.300 mg/l	Fish	96 h	Lepomis macrochirus	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-(2-Butoxyethoxy)ethanol 112-34-5	EC50	3.300 mg/l	Daphnia	24 h	Daphnia magna	
2-(2-Butoxyethoxy)ethanol 112-34-5	EC50	> 100 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	>= 100 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
1-(1-Methyl-2- propoxyethoxy)propan-2-ol 29911-27-1	LC50	> 100 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
1-(1-Methyl-2- propoxyethoxy)propan-2-ol 29911-27-1	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1-(1-Methyl-2- propoxyethoxy)propan-2-ol 29911-27-1	EC50	> 1.000 mg/l	Algae	96 h	Pseudokirchnerella subcapitata (reported as Selenastrum capricornutum)	OECD Guideline 201 (Alga, Growth Inhibition Test)
(2- Methoxymethylethoxy)propan ol 34590-94-8	LC50	> 1.000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	
(2- Methoxymethylethoxy)propan ol 34590-94-8	EC50	> 1.000 mg/l	Daphnia	24 h	Daphnia magna	
Methoxymethylethoxy)propan ol 34590-94-8	NOEC	> 0,5 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

12.2. Persistence and degradability

Persistence and Biodegradability:

Readily degradable.

Persistence and degradability:

Degradation of surfactants

The product does not contain surface-active substances as defined in the EU Detergent Regulation (EC/648/2004).

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
2-(2-Butoxyethoxy)ethanol 112-34-5	readily biodegradable	aerobic	> 60 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
1-(1-Methyl-2- propoxyethoxy)propan-2-ol 29911-27-1	readily biodegradable	no data	92 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
(2- Methoxymethylethoxy)propan ol 34590-94-8	readily biodegradable	aerobic	75 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil $\,$

Mobility:

No data available.

Bioaccumulative potential:

Does not bioaccumulate.

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Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
2-(2-Butoxyethoxy)ethanol 112-34-5	0,56	, ,				
1-(1-Methyl-2- propoxyethoxy)propan-2-ol 29911-27-1	0,87					OECD Guideline 107 (Partition Coefficient (noctanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
2-(2-Butoxyethoxy)ethanol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
112-34-5	Bioaccumulative (vPvB) criteria.
(2-Methoxymethylethoxy)propanol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
34590-94-8	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:

Collection and delivery to recycling enterprise or other registered elimination institution.

Use packages for recycling only when totally empty.

Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Recommended cleaning agents

Water, if necessary with added cleaning agent.

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.

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SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.4. Packaging group

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

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 (1999/13/EC) 5 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Great Britain):

Remarks The Health & Safety at Work Act 1974.

The Control of Substances Hazardous to Health Regulations. L5:General Approved Code of Practice to the COSHH Regulations. HS(G)97:A Step by Step Guide to the COSHH Regulations. HS(G)193:COSHH essentials: Easy steps to control chemicals.

Chemicals (Hazard Information & Packaging for Supply) Regulations.

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: R36 Irritating to eyes.

H319 Causes serious eye irritation.

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.