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

SDS No. : 325988
V003.7

LOCTITE EDAG 550 E&C known as ELECTRODAG 550

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

1.1. Product identifier
LOCTITE EDAG 550 E&C known as ELECTRODAG 550

Contains:
Nickel powder [particle diameter < 1 mm]
Propyl acetate
Methyl methacrylate

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
EMC product

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.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Carcinogenicity	Category 2
H351 Suspected of causing cancer.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness. Target organ: Central Nervous System	
Specific target organ toxicity - repeated exposure	Category 1
H372 Causes damage to organs through prolonged or repeated exposure.	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	H225 Highly flammable liquid and vapor. H372 Causes damage to organs through prolonged or repeated exposure. H336 May cause drowsiness or dizziness. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H351 Suspected of causing cancer. H412 Harmful to aquatic life with long lasting effects.
Supplemental information	EUH066 Repeated exposure may cause skin dryness or cracking.
Precautionary statement: Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe mist/vapours. P280 Wear protective gloves/eye protection.
Precautionary statement: Response	P370+P378 In case of fire: Use CO2, dry chemical, or foam for extinction.

2.3. Other hazards
None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Base substances of preparation:
solvent
Pigment

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Nickel powder [particle diameter < 1 mm] 7440-02-0	231-111-4 01-2119438727-29	25- 50 %	STOT RE 1 H372 Skin Sens. 1 H317 Aquatic Chronic 3 H412 Carc. 2 H351
Propyl acetate 109-60-4	203-686-1	25- 50 %	Eye Irrit. 2 H319 STOT SE 3 H336 Flam. Liq. 2 H225
n-Butyl acetate 123-86-4	204-658-1 01-2119485493-29	5- 10 %	Flam. Liq. 3 H226 STOT SE 3 H336
Ethanol 64-17-5	200-578-6 01-2119457610-43	1- 5 %	Eye Irrit. 2 H319 Flam. Liq. 2 H225
Pentylacetat 628-63-7	211-047-3	1- 5 %	Flam. Liq. 3 H226
Methyl methacrylate 80-62-6	201-297-1 01-2119452498-28	0,1- 1 %	Flam. Liq. 2 H225 STOT SE 3 H335 Skin Irrit. 2 H315 Skin Sens. 1 H317
Toluene 108-88-3	203-625-9 01-2119471310-51	< 1 %	Flam. Liq. 2 H225 Repr. 2 H361d Asp. Tox. 1 H304 STOT RE 2 H373 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 3 H412

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.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Fresh air, oxygen supply, warmth; seek specialist medical attention.

Skin contact:
IF ON SKIN: Wash with plenty of soap and water.

Eye contact:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

Vapors may cause drowsiness and dizziness.

Repeated exposure may cause skin dryness or cracking.

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

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
Fine water spray

Extinguishing media which must not be used for safety reasons:
Water jet (solvent-containing product).

5.2. Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in fires.

5.3. Advice for firefighters
Wear protective equipment.
Wear self-contained breathing apparatus.

Additional information:
Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

General information:
Danger of slipping on spilled product.

6.1. Personal precautions, protective equipment and emergency procedures
Avoid skin and eye contact.
Keep away from sources of ignition.

6.2. Environmental precautions
Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections
See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ventilate working rooms throughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld.
Avoid skin and eye contact.
See advice in section 8
Avoid open flames and sources of ignition.
Ground/bond container and receiving equipment.
Use explosion proof electric equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.

Hygiene measures:

Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container.
Store in a cool, well-ventilated place.

7.3. Specific end use(s)

EMC product

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Nickel 7440-02-0 [NICKEL AND ITS INORGANIC COMPOUNDS (EXCEPT NICKEL TETRACARBONYL): NICKEL AND WATER-INSOLUBLE NICKEL COMPOUNDS (AS NI)]		0,5	Time Weighted Average (TWA):		EH40 WEL
Nickel 7440-02-0 [NICKEL AND ITS INORGANIC COMPOUNDS (EXCEPT NICKEL TETRACARBONYL): NICKEL AND WATER-INSOLUBLE NICKEL COMPOUNDS (AS NI)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Propyl acetate 109-60-4 [N-PROPYL ACETATE]	250	1.060	Short Term Exposure Limit (STEL):		EH40 WEL
Propyl acetate 109-60-4 [N-PROPYL ACETATE]	200	849	Time Weighted Average (TWA):		EH40 WEL
n-Butyl acetate 123-86-4 [BUTYL ACETATE]	200	966	Short Term Exposure Limit (STEL):		EH40 WEL
n-Butyl acetate 123-86-4 [BUTYL ACETATE]	150	724	Time Weighted Average (TWA):		EH40 WEL
Pentyl acetate 628-63-7 [PENTYL ACETATE (ALL ISOMERS)]	50	270	Time Weighted Average (TWA):		EH40 WEL
Pentyl acetate 628-63-7 [PENTYL ACETATE (ALL ISOMERS)]	100	541	Short Term Exposure Limit (STEL):		EH40 WEL
Pentyl acetate 628-63-7 [PENTYLACETATE]	50	270	Time Weighted Average (TWA):	Indicative	ECTLV
Pentyl acetate 628-63-7 [PENTYLACETATE]	100	540	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Ethanol 64-17-5 [ETHANOL]	1.000	1.920	Time Weighted Average (TWA):		EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100	416	Short Term Exposure Limit (STEL):		EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50	208	Time Weighted Average (TWA):		EH40 WEL
Toluene 108-88-3 [TOLUENE]	50	191	Time Weighted Average (TWA):		EH40 WEL
Toluene 108-88-3 [TOLUENE]	100	384	Short Term Exposure Limit (STEL):		EH40 WEL
Toluene			Skin designation:	Can be absorbed through the	EH40 WEL

108-88-3 [TOLUENE]				skin.	
Toluene 108-88-3 [TOLUENE]	50	192	Time Weighted Average (TWA):	Indicative	ECTLV
Toluene 108-88-3 [TOLUENE]	100	384	Short Term Exposure Limit (STEL):	Indicative	ECTLV

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Nickel 7440-02-0	soil				29,9 mg/kg		
Nickel 7440-02-0	aqua (freshwater)					3,55 µg/L	
n-Butyl acetate 123-86-4	aqua (freshwater)					0,18 mg/L	
n-Butyl acetate 123-86-4	aqua (marine water)					0,018 mg/L	
n-Butyl acetate 123-86-4	aqua (intermittent releases)					0,36 mg/L	
n-Butyl acetate 123-86-4	STP					35,6 mg/L	
n-Butyl acetate 123-86-4	sediment (freshwater)				0,981 mg/kg		
n-Butyl acetate 123-86-4	sediment (marine water)				0,0981 mg/kg		
n-Butyl acetate 123-86-4	soil				0,0903 mg/kg		
Ethanol 64-17-5	aqua (freshwater)					0,96 mg/L	
Ethanol 64-17-5	aqua (marine water)					0,79 mg/L	
Ethanol 64-17-5	aqua (intermittent releases)					2,75 mg/L	
Ethanol 64-17-5	sediment (freshwater)				3,6 mg/kg		
Ethanol 64-17-5	soil				0,63 mg/kg		
Ethanol 64-17-5	STP					580 mg/L	
Ethanol 64-17-5	oral				720 mg/kg		
Ethanol 64-17-5	sediment (marine water)				2,9 mg/kg		
Methyl methacrylate 80-62-6	aqua (freshwater)					0,94 mg/L	
Methyl methacrylate 80-62-6	aqua (marine water)					0,94 mg/L	
Methyl methacrylate 80-62-6	aqua (intermittent releases)					0,94 mg/L	
Methyl methacrylate 80-62-6	STP					10 mg/L	
Methyl methacrylate 80-62-6	sediment (freshwater)				5,74 mg/kg		
Methyl methacrylate 80-62-6	soil				1,47 mg/kg		

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	Workers	Inhalation	Acute/short term exposure - systemic effects		960 mg/m3	
n-Butyl acetate 123-86-4	Workers	Inhalation	Acute/short term exposure - local effects		960 mg/m3	
n-Butyl acetate 123-86-4	Workers	Inhalation	Long term exposure - systemic effects		480 mg/m3	
n-Butyl acetate 123-86-4	Workers	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	
n-Butyl acetate 123-86-4	general population	Inhalation	Long term exposure - local effects		102,34 mg/m3	
Ethanol 64-17-5	Workers	Inhalation	Acute/short term exposure - local effects		1900 mg/m3	
Ethanol 64-17-5	Workers	Dermal	Long term exposure - systemic effects		343 mg/kg bw/day	
Ethanol 64-17-5	Workers	Inhalation	Long term exposure - systemic effects		950 mg/m3	
Ethanol 64-17-5	general population	Inhalation	Acute/short term exposure - local effects		950 mg/m3	
Ethanol 64-17-5	general population	Dermal	Long term exposure - systemic effects		206 mg/kg bw/day	
Ethanol 64-17-5	general population	Inhalation	Long term exposure - systemic effects		114 mg/m3	
Ethanol 64-17-5	general population	oral	Long term exposure - systemic effects		87 mg/kg bw/day	
Methyl methacrylate 80-62-6	Workers	Dermal	Acute/short term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	Workers	Dermal	Long term exposure - systemic effects		13,67 mg/kg bw/day	
Methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - systemic effects		208 mg/m3	
Methyl methacrylate 80-62-6	Workers	Dermal	Long term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - local effects		208 mg/m3	
Methyl methacrylate 80-62-6	general population	Dermal	Acute/short term exposure - local effects		1,5 mg/cm2	
Methyl methacrylate 80-62-6	general population	Dermal	Long term exposure - systemic effects		8,2 mg/kg bw/day	
Methyl methacrylate 80-62-6	general population	Inhalation	Long term exposure - systemic effects		74,3 mg/m3	
Methyl methacrylate 80-62-6	general population	Dermal	Long term exposure - local		1,5 mg/cm2	

			effects			
Methyl methacrylate 80-62-6	general population	Inhalation	Long term exposure - local effects		105 mg/m3	

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls:
Ensure good ventilation/extraction.

Respiratory protection:
In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter. This recommendation should be matched to local conditions.

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): Isobutylene-isoprene rubber (IIR; >= 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; >= 0.7 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:
Protective goggles

Skin protection:
Suitable protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid liquid grey
Odor	sweet
Odour threshold	No data available / Not applicable
pH	Not applicable
Initial boiling point	> 100 °C (> 212 °F)
Flash point	7,2 °C (44.96 °F); Closed cup
Decomposition temperature	No data available / Not applicable
Vapour pressure	> 1 mm hg
Density (20 °C (68 °F))	1,62 g/cm3
Bulk density	No data available / Not applicable
Viscosity (Brookfield; Instrument: RVT; speed of rotation: 20 min-1)	<= 20.000 cp
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Insoluble
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 oxidants.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
See section reactivity

10.4. Conditions to avoid
No decomposition if used according to specifications.

10.5. Incompatible materials
See section reactivity

10.6. Hazardous decomposition products
None if used for intended purpose.
In case of fire toxic gases can be released.

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.

STOT-repeated exposure:
Causes damage to organs through prolonged or repeated exposure.

Skin irritation:
Repeated exposure may cause skin dryness or cracking.

Eye irritation:
Causes serious eye irritation.

Sensitizing:
May cause an allergic skin reaction.

Carcinogenicity:
Suspected of causing cancer

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	BASF Test
Ethanol 64-17-5	LD50	13.700 mg/kg	oral		rat	
Toluene 108-88-3	LD50	5.580 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		4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Ethanol 64-17-5	LC50	124,7 mg/l		4 h	rat	
Toluene 108-88-3	LC50	28,1 mg/l	Vapor.	4 h	rat	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Ethanol 64-17-5	LDLo	20.000 mg/kg	dermal		rabbit	
Ethanol 64-17-5	LD50	15.800 mg/kg				
Toluene 108-88-3	LD50	> 5.000 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
n-Butyl acetate 123-86-4	not irritating		rabbit	BASF Test
Ethanol 64-17-5	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Toluene 108-88-3	irritating		rabbit	OECD Guideline 404 (Acute 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	BASF Test
Ethanol 64-17-5	Category II		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 maximisation test	guinea pig	
Ethanol 64-17-5	not sensitising	Guinea pig maximisation test	guinea pig	Magnusson and Kligman Method
Methyl methacrylate 80-62-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

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		Ames Test
Ethanol 64-17-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	in vitro mammalian chromosome aberration test	without		
Methyl methacrylate 80-62-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Toluene 108-88-3	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
Methyl methacrylate 80-62-6	LOAEL=2000 ppm	inhalation	14 weeks6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
Methyl methacrylate 80-62-6	NOAEL=1000 ppm	inhalation	14 weeks6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study

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

Other adverse effects:
The product contains wastewater-relevant heavy metals. Officially determined threshold values for wastewater (also for partial flows, if applicable) and local discharge guidelines must be observed.

12.1. Toxicity

Ecotoxicity:
Harmful to aquatic life with long lasting effects.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Nickel powder [particle diameter < 1 mm] 7440-02-0	LC50	> 100 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Nickel powder [particle diameter < 1 mm] 7440-02-0	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Propyl acetate 109-60-4	LC50	56 - 64 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Propyl acetate 109-60-4	EC50	318 mg/l	Daphnia	24 h	Daphnia magna	
n-Butyl acetate 123-86-4	LC50	62 mg/l	Fish	96 h	Leuciscus idus	DIN 38412-15
n-Butyl acetate 123-86-4	EC50	72,8 mg/l	Daphnia	24 h	Daphnia magna	
n-Butyl acetate 123-86-4	EC10	295,5 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	674,7 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethanol 64-17-5	LC50	14.200 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethanol 64-17-5	EC50	9.268 - 14.221 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Ethanol 64-17-5	EC50	> 5.000 mg/l	Algae	7 d	Scenedesmus quadricauda	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethanol 64-17-5	NOEC	2 mg/l	chronic Daphnia	10 d		
Pentylacetat 628-63-7	LC50	131 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
Pentylacetat 628-63-7	EC50	> 180 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Pentylacetat 628-63-7	EC50	> 120 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC0	120 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
Methyl methacrylate 80-62-6	LC50	350 mg/l	Fish		Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Methyl methacrylate 80-62-6	EC50	69 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Methyl methacrylate 80-62-6	NOEC	100 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	170 mg/l	Algae	4 d	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Toluene 108-88-3	NOEC	3,2 mg/l	Fish	28 d	Cyprinodon variegatus	OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
Toluene 108-88-3	EC50	11,5 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Toluene 108-88-3	IC50	12 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella	OECD Guideline 201 (Alga, Growth

						subcapitata)	Inhibition Test)

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Propyl acetate 109-60-4	readily biodegradable	aerobic	72 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
n-Butyl acetate 123-86-4	readily biodegradable	aerobic	98 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Ethanol 64-17-5	readily biodegradable	aerobic	80 - 85 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Methyl methacrylate 80-62-6	readily biodegradable	aerobic	95 %	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test)
Toluene 108-88-3	readily biodegradable	aerobic	80 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Propyl acetate 109-60-4	1,24					
n-Butyl acetate 123-86-4	1,81				23 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Ethanol 64-17-5	-0,31					
Pentylacetat 628-63-7	2,3					
Methyl methacrylate 80-62-6	1,38					

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Nickel powder [particle diameter < 1 mm] 7440-02-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
n-Butyl acetate 123-86-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Ethanol 64-17-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Methyl methacrylate 80-62-6	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:
In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

080111

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	1263
RID	1263
ADN	1263
IMDG	1263
IATA	1263

14.2. UN proper shipping name

ADR	PAINT
RID	PAINT
ADN	PAINT
IMDG	PAINT
IATA	Paint

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packaging group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	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
ADN	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 40,9 %
(1999/13/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Great Britain):

Remarks	Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, e.g COSHH Essentials. EH40 Occupational Exposure Limits Chemicals (Hazard Information & Packaging for Supply) Regulations. The Personnel Protective Equipment at Work Regulations. The Carriage of Dangerous Goods by Road Regulations. The Health & Safety at Work Act 1974. (Note: Use latest editions/amendments of above referenced documents.)

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:

H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful 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.

Label elements (DPD):

F - Highly flammable T - Toxic

Risk phrases:

R11 Highly flammable.
R36 Irritating to eyes.
R40 Limited evidence of a carcinogenic effect.
R43 May cause sensitisation by skin contact.
R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
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:

S9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.
S35 This material and its container must be disposed of in a safe way.
S36/37 Wear suitable protective clothing and gloves.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains:

Nickel powder [particle diameter < 1 mm]

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.