

e2v

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

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SDS No.: 255523

V002.0

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Replaces version from: 26.01.2017

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

1.1. Product identifier

LOCTITE ABLESTIK QMI2569 known as Hysol QMI2569 (155g) e2v

LOCTITE ABLESTIK QMI2569 known as Hysol QMI2569 (155g)

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

Intended use:

Die attach adhesive

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0 +49 211 798 2009 Fax-no.:

ua-productsafety.de@henkel.com

1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Toxic to reproduction Category 1A

H360Df May damage the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - repeated exposure Category 2

H373 May cause damage to organs through prolonged or repeated exposure.

Acute hazards to the aquatic environment Category 1

H400 Very toxic to aquatic life.

Category 1 Chronic hazards to the aquatic environment

H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains

Signal word: Danger

Hazard statement: H360Df May damage the unborn child. Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Supplemental information Restricted to professional users.

Precautionary statement: P201 Obtain special instructions before use. **Prevention** P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing.

Precautionary statement:

Response

P308+P313 IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

Contains lead which may harm your health. Lead can cause birth defects and other reproductive harm. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Conductive adhesive

Base substances of preparation:

Methacrylates Filler organic solvent

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Silver >= 99,9 % Ag in powder	231-131-3	50- 100 %	Aquatic Acute 1
(>100nm<1mm)	01-2119555669-21		H400
7440-22-4			Aquatic Chronic 1
			H410
			M factor (Acute Aquat Tox): 10 M factor
			(Chron Aquat Tox): 10
Chemical frits (containing lead)	266-047-6	10- 20 %	Acute Tox. 4; Oral
65997-18-4			H302
			Acute Tox. 4; Inhalation
			H332
			Repr. 1A
			H360Df
			STOT RE 2
			H373
1-isopropyl-2,2-dimethyltrimethylene	229-934-9	2,5-< 25 %	Aquatic Chronic 2
diisobutyrate	01-2119451093-47		H411
6846-50-0			
p-Menth-1-en-8-ol	202-680-6	1- < 5 %	Eye Irrit. 2
98-55-5			H319
			Skin Irrit. 2
			H315

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:

Delayed effects possible after inhalation.

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

Eve contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

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

Chronic overexposure to lead may result in damage to the blood forming, nervous, urinary and reproductive systems. Severe lead toxicity will cause sterility, abortion and neonatal mortality and morbidity.

Prolonged or repeated skin contact with silver and its salts may cause a blue-gray discoloration of the skin and mucous membranes that is irreversible (Argyria).

Prolonged or repeated contact may cause eye irritation.

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:

Foam, extinguishing powder, carbon dioxide.

Water spray jet

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

Danger of decomposition if exposed to heat.

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

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

Keep unprotected persons away.

Avoid contact with skin and eyes.

Ensure adequate ventilation.

Wear protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Remove mechanically.

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

For small spills wipe up with paper towel and place in container for disposal.

Dispose of contaminated material as waste according to Section 13.

Ensure adequate ventilation.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Extract when the product is heated.

Avoid naked flames, sparking and sources of ignition.

See advice in section 8

Avoid skin and eye contact.

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Keep away from food, beverages and animal feed.

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container.

Protect against contamination.

Store in a cool, dry place.

Must be stored in a room with spill collection facilities.

Keep away from heat and direct sunlight.

Refer to Technical Data Sheet

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

Do not store with strongly acidic or strongly alkaline products.

7.3. Specific end use(s)

Die attach adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Germany

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silver 7440-22-4 [SILVER, METALLIC]		0,1	Time Weighted Average (TWA):	Indicative	ECTLV
Silver 7440-22-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
Silver 7440-22-4		0,1	Exposure limit(s):	8	TRGS 900

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

Name on list	Environmental Compartment	Exposure period	Value			Remarks	
	•	Î	mg/l	ppm	mg/kg	others	
Silver >= 99,9 % Ag as powder	aqua		0,00004	1			
(>100nm<1mm) classified for environment 7440-22-4	(freshwater)		mg/l				
Silver >= 99,9 % Ag as powder	aqua (marine		0,00086				
(>100nm<1mm) classified for environment 7440-22-4	water)		mg/l				
Silver >= 99,9 % Ag as powder	sewage		0,025 mg/l				
(>100nm<1mm) classified for environment 7440-22-4	treatment plant (STP)						
Silver >= 99,9 % Ag as powder	sediment				438,13		
(>100nm<1mm) classified for environment 7440-22-4	(freshwater)				mg/kg		
Silver >= 99,9 % Ag as powder	sediment				438,13		
(>100nm<1mm) classified for environment 7440-22-4	(marine water)				mg/kg		
Silver >= 99,9 % Ag as powder	Air						
(>100nm<1mm) classified for environment 7440-22-4							
Silver >= 99,9 % Ag as powder	Soil				1,41 mg/kg		
(>100nm<1mm) classified for environment 7440-22-4							
1-Isopropyl-2,2-dimethyltrimethylene	aqua		0,014 mg/l				
diisobutyrate 6846-50-0	(freshwater)						
1-Isopropyl-2,2-dimethyltrimethylene	aqua (marine		0,0014				
diisobutyrate 6846-50-0	water)		mg/l				
1-Isopropyl-2,2-dimethyltrimethylene	aqua		0,14 mg/l				
diisobutyrate 6846-50-0	(intermittent releases)						
1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate	sediment (freshwater)				5,29 mg/kg		
6846-50-0							
1-Isopropyl-2,2-dimethyltrimethylene	sediment				0,529		
diisobutyrate 6846-50-0	(marine water)				mg/kg		
1-Isopropyl-2,2-dimethyltrimethylene	Soil				1,05 mg/kg		+
diisobutyrate	5011				1,05 mg/kg		
6846-50-0							
1-Isopropyl-2,2-dimethyltrimethylene	sewage		3 mg/l				
diisobutyrate	treatment plant						
6846-50-0	(STP)						
1-Isopropyl-2,2-dimethyltrimethylene	oral				83,3 mg/kg		
diisobutyrate							
6846-50-0	I	I .					

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Silver >= 99,9 % Ag as powder (>100nm<1mm) classified for environment 7440-22-4	Workers	inhalation	Long term exposure - systemic effects		0,1 mg/m3	
Silver >= 99,9 % Ag as powder (>100nm<1mm) classified for environment 7440-22-4	General population	inhalation	Long term exposure - systemic effects		0,04 mg/m3	
Silver >= 99,9 % Ag as powder (>100nm<1mm) classified for environment 7440-22-4	General population	oral	Long term exposure - systemic effects		1,2 mg/kg	
1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate 6846-50-0	Workers	dermal	Long term exposure - systemic effects		5 mg/kg	
1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate 6846-50-0	Workers	inhalation	Long term exposure - systemic effects		17,62 mg/m3	
1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate 6846-50-0	General population	dermal	Long term exposure - systemic effects		5 mg/kg	
1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate 6846-50-0	General population	inhalation	Long term exposure - systemic effects		4,35 mg/m3	
1-Isopropyl-2,2-dimethyltrimethylene diisobutyrate 6846-50-0	General population	oral	Long term exposure - systemic effects		5 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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

Do not inhale vapors and fumes.

Filter type: A (EN 14387)

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.

or

protective shield

Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment. Suitable protective clothing

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance pasty

silver

Odor mild

Odour threshold No data available / Not applicable

pН Not applicable

Melting point No data available / Not applicable No data available / Not applicable Solidification temperature

Polymerization may occur at elevated temperature. Initial boiling point

Flash point 81,11 °C (178 °F); Closed cup Evaporation rate No data available / Not applicable No data available / Not applicable Flammability Explosive limits No data available / Not applicable No data available / Not applicable Vapour pressure Relative vapour density: No data available / Not applicable

Density 3,8 g/cm3

(20 °C (68 °F))

Bulk density No data available / Not applicable Solubility No data available / Not applicable Solubility (qualitative) Not miscible or difficult to mix (20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water No data available / Not applicable Auto-ignition temperature No data available / Not applicable Decomposition temperature No data available / Not applicable Viscosity No data available / Not applicable Viscosity (kinematic) No data available / Not applicable No data available / Not applicable Explosive properties No data available / Not applicable Oxidising properties

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidizing agents, acids, halogens and halogenated compounds.

Peroxides.

Water, Amines, Alkalis, Alcohols.

Forms an explosive mixture with nitric acid

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 stored and applied as directed.

Danger of decomposition if exposed to heat.

Heat, flames, sparks and other sources of ignition.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

Hydrocarbons

Metallic oxides

At higher temperature carbon oxides and nitrogen oxides may be generated.

Polymerization may occur at elevated temperature or in the presence of incompatible materials.

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

See section 5.

SECTION 11: Toxicological information

General toxicological information:

Prolonged or repeated contact may cause skin irritation.

Prolonged or repeated contact may cause eye irritation.

Chronic overexposure to lead may result in damage to the blood forming, nervous, urinary and reproductive systems. Severe lead toxicity will cause sterility, abortion and neonatal mortality and morbidity.

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
p-Menth-1-en-8-ol 98-55-5	LD50	2.830 mg/kg	mouse	not specified

Acute dermal toxicity:

Prolonged or repeated skin contact with silver and its salts may cause a blue-gray discoloration of the skin and mucous membranes that is irreversible (Argyria).

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
p-Menth-1-en-8-ol 98-55-5	LD50	> 3.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

No substance data available. No data available.

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure	Species	Method
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	not irritating	time 4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
p-Menth-1-en-8-ol 98-55-5	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Expected to cause eye irritation by abrasive action of tiny metal particles

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
1-isopropyl-2,2-	not sensitising	Patch-Test	human	Patch Test
dimethyltrimethylene				
diisobutyrate				
6846-50-0				

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	negative	in vitro mammalian cell micronucleus test	with and without		OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Carcinogenicity

No data available.

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
1-isopropyl-2,2-	NOAEL P 276 mg/kg	screening	oral: feed	rat	OECD Guideline 421
dimethyltrimethylene					(Reproduction /
diisobutyrate					Developmental Toxicity
6846-50-0					Screening Test)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
1-isopropyl-2,2- dimethyltrimethylene	NOAEL 150 mg/kg	oral: feed	13 w daily	rat	FDA Guideline
diisobutyrate 6846-50-0					

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:

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

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	LC50	0,0012 mg/l	96 h	Pimephales promelas	other guideline:
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	EC10	0,00019 mg/l	217 d	Salmo trutta	OECD Guideline 210 (fish early lite stage toxicity test)
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	LC50	>= 6 mg/l	96 h	Lepomis macrochirus	OECD Guideline 203 (Fish, Acute Toxicity Test)
p-Menth-1-en-8-ol 98-55-5	LC50	> 10 - 100 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Silver >= 99,9 % Ag in	EC50	0,00022 mg/l	48 h	Daphnia magna	other guideline:
powder (>100nm<1mm)					
7440-22-4					
1-isopropyl-2,2-	EC50			Daphnia magna	OECD Guideline 202
dimethyltrimethylene					(Daphnia sp. Acute
diisobutyrate	1				Immobilisation Test)
6846-50-0	1				

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Silver >= 99,9 % Ag in	NOEC	0,00032 mg/l	21 d	Daphnia magna	EPA OPPTS 850.1300
powder (>100nm<1mm)					(Daphnid Chronic Toxicity
7440-22-4					Test)
1-isopropyl-2,2-	NOEC	0,7 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
dimethyltrimethylene					magna, Reproduction Test)
diisobutyrate					
6846-50-0					

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	EC10	0,00016 mg/l	15 d	other:	other guideline:
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	NOEC	3,56 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	EC50	> 7,49 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

No data available.

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0		aerobic	70,73 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
p-Menth-1-en-8-ol 98-55-5	readily biodegradable	aerobic	100 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential

No data available.

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	70	42 d	20 °C	Cyprinus carpio	other guideline:
1-isopropyl-2,2- dimethyltrimethylene diisobutyrate 6846-50-0	183 - 194			fish	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
1-isopropyl-2,2-	4,04 - 4,91		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
dimethyltrimethylene			Flask Method)
diisobutyrate			
6846-50-0			
p-Menth-1-en-8-ol	2,98		not specified
98-55-5			

12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Silver >= 99,9 % Ag in powder (>100nm<1mm) 7440-22-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate 6846-50-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. 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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

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

Disposal of uncleaned packages:

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.

Disposal must be made according to official regulations.

Waste code

06 04 05 - wastes containing other heavy metals

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	3082
RID	3082
ADN	3082
IMDG	3082
IATA	3082

14.2. UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)
IATA	Environmentally hazardous substance, liquid, n.o.s. (Silver)

14.3. Transport hazard class(es)

ADR	9
RID	9
ADN	9
IMDG	9
IATA	9

14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	III

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
	Tunnelcode:
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

VOC content (2010/75/EC)

< 3 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Germany):

WGK: WGK = 3, highly water endangering mixture. Classification according to the

mixture rules in German AwSV regulation annex 1, number 5.2 from 18. April

2017.

Storage class according to TRGS 510: 6.1B

General remarks (DE): This product is in scope of the German regulation

"ChemikalienVerbotsVerordnung"

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:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H360Df May damage the unborn child. Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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.