



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

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TECHNOMELT KS 224/2

SDS No. : 100520
V003.1

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

1.1. Product identifier

TECHNOMELT KS 224/2

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

Intended use:

hotmelt, based on EVA

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or www.henkel-adhesives.com.

SDSinfo.Adhesive@henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: technical.services@henkel.co.uk

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2. Label elements

Label elements (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

Supplemental information

Safety data sheet available on request.

2.3. Other hazards

None if used properly.

Following substances are present in a concentration \geq the concentration limit for depiction in Section 3 and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in a concentration \geq the concentration limit for depiction in Section 3 that are assessed to be a PBT, vPvB or ED.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M-factors and ATEs	Add. Information
vinyl acetate 108-05-4 203-545-4 01-2119471301-50	0,1- < 1 %	Flam. Liq. 2, H225 Acute Tox. 4, Inhalation, H332 Carc. 2, H351 STOT SE 3, H335	inhalation:ATE = 11,27 mg/l;vapour	EU OEL

If no ATE values are displayed, please refer to LD/LC50 values in Section 11.

For full text of the H - statements and other abbreviations see section 16 "Other information".

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Molten product. After skin contact cool down immediately with cold water. Do not remove adherent product. Seek medical advice.

Eye contact:

After contact with the hot melt: cool with water, seek medical attention.

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

No data available.

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:

All common extinguishing agents are suitable.

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In case of fire toxic gases can be released.

Toxic and irritating vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

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

Allow to solidify.

Remove mechanically.

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**

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container protected against moisture and light.

Ensure good ventilation/extraction.

Store in a cool, dry place.

7.3. Specific end use(s)

hotmelt, based on EVA

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
Vinyl acetate 108-05-4 [VINYL ACETATE]	5	17,6	Time Weighted Average (TWA):		EH40 WEL
Vinyl acetate 108-05-4 [VINYL ACETATE]	5	17,6	Time Weighted Average (TWA):	Indicative	ECLTV
Vinyl acetate 108-05-4 [VINYL ACETATE]	10	35,2	Short Term Exposure Limit (STEL):	Indicative	ECLTV
Vinyl acetate 108-05-4 [VINYL ACETATE]	10	35,2	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		10	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [DUSTS NON-SPECIFIC]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [DUSTS NON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
Vinyl acetate 108-05-4 [VINYL ACETATE]	5	17,6	Time Weighted Average (TWA):	Indicative	ECLTV
Vinyl acetate 108-05-4 [VINYL ACETATE]	10	35,2	Short Term Exposure Limit (STEL):	Indicative	ECLTV
Vinyl acetate 108-05-4	5	17,6	Time Weighted Average (TWA):	Indicative OELV	IR_OEL

[VINYL ACETATE]					
Vinyl acetate 108-05-4	10	35,2	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
[VINYL ACETATE]					

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
vinyl acetate 108-05-4	aqua (freshwater)		0,016 mg/l				
vinyl acetate 108-05-4	aqua (marine water)		0,002 mg/l				
vinyl acetate 108-05-4	aqua (intermittent releases)		0,126 mg/l				
vinyl acetate 108-05-4	sediment (freshwater)				0,067 mg/kg		
vinyl acetate 108-05-4	sediment (marine water)				0,007 mg/kg		
vinyl acetate 108-05-4	Soil				0,004 mg/kg		
vinyl acetate 108-05-4	sewage treatment plant (STP)		6 mg/l				
vinyl acetate 108-05-4	Air						no hazard identified
vinyl acetate 108-05-4	Predator						no potential for bioaccumulation

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
vinyl acetate 108-05-4	Workers	inhalation	Acute/short term exposure - systemic effects		35,2 mg/m3	no hazard identified
vinyl acetate 108-05-4	Workers	inhalation	Acute/short term exposure - local effects		35,2 mg/m3	no hazard identified
vinyl acetate 108-05-4	Workers	dermal	Long term exposure - systemic effects		0,42 mg/kg	no hazard identified
vinyl acetate 108-05-4	Workers	inhalation	Long term exposure - systemic effects		17,6 mg/m3	no hazard identified
vinyl acetate 108-05-4	Workers	inhalation	Long term exposure - local effects		17,6 mg/m3	no hazard identified

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

In case of dust formation, we recommend wearing of appropriate respiratory protection equipment with particle filter P (EN 14387).

This recommendation should be matched to local conditions.

Hand protection:

Wear heat resistance gloves while working with the hot melt (EN 407).

Eye protection:
Protective goggles
Protective eye equipment should conform to EN166.

Skin protection:
Wear protective equipment.
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:
Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway), or equivalent.
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

Delivery form	Granulate
Colour	light beige
Odor	Acetic acid medium
Physical state	solid
Melting point	80 - 90 °C (176 - 194 °F) (Softening Point)
Solidification temperature	Not applicable, Product is a solid.
Initial boiling point	Not applicable, Decomposes before boiling point is reached
Flammability	Not applicable
Explosive limits	Non flammable product (flash point is greater than 93°C)
Flash point	Not applicable, Product is a solid. The product is not explosive.
Auto-ignition temperature	> 200 °C (> 392 °F)
Decomposition temperature	Not applicable, Product is a solid.
pH	Not applicable, Substance/mixture is not self-reactive, no organic peroxide and does not decompose under foreseen conditions of use
Viscosity (kinematic)	Not applicable, Product is non-soluble (in water).
Viscosity, dynamic	Not applicable, Product is a solid.
(Brookfield; 180 °C (356 °F); speed of rotation: 30 min-1; Spindle No: 29)	14.500 - 21.000 mPa.s Dorus-method 501; viscosity Brookfield
Solubility (qualitative)	Insoluble
(20 °C (68 °F); Solvent: Water)	
Partition coefficient: n-octanol/water	Not applicable
Vapour pressure	Mixture
(20 °C (68 °F))	< 0,1 hPa
Density	
(20 °C (68 °F))	1,2 g/cm3 no method / method unknown
Relative vapour density:	Not applicable, Product is a solid.
Particle characteristics	Not applicable
	Product is not powder.

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

None if used for intended purpose.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

None if used for intended purpose.

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

No decomposition if used according to specifications.

SECTION 11: Toxicological information**General toxicological information:**

An allergic reaction cannot be excluded after repeated skin contact.

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**Acute oral toxicity:**

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

Hazardous substances CAS-No.	Value type	Value	Species	Method
vinyl acetate 108-05-4	LD50	3.500 mg/kg	rat	not specified

Acute dermal toxicity:

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

Hazardous substances CAS-No.	Value type	Value	Species	Method
vinyl acetate 108-05-4	LD50	7.440 mg/kg	rabbit	not specified

Acute inhalative toxicity:

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

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
vinyl acetate 108-05-4	Acute toxicity estimate (ATE)	11,27 mg/l	vapour			Expert judgement
vinyl acetate 108-05-4	LC50	4490 ppm	vapour	4 h	rat	not specified

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 time	Species	Method
vinyl acetate 108-05-4	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
vinyl acetate 108-05-4	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
vinyl acetate 108-05-4	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

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
vinyl acetate 108-05-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
vinyl acetate 108-05-4	ambiguous	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

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

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
vinyl acetate 108-05-4	carcinogenic	inhalation: vapour	104 w 6 h/d, 5 d/w	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity:

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

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
vinyl acetate 108-05-4	NOAEL P 1000 ppm		oral: drinking water	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

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
vinyl acetate 108-05-4	NOAEL 5000 ppm	oral: drinking water	3 m daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

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

Do not empty into drains, soil or bodies of water.

12.1. Toxicity**Toxicity (Fish):**

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
vinyl acetate 108-05-4	LC50	26 mg/l	48 h	Leuciscus idus melanotus	OECD Guideline 203 (Fish, Acute Toxicity Test)
vinyl acetate 108-05-4	NOEC	0,551 mg/l	34 d	Pimephales promelas	OECD Guideline 210 (fish early lite stage toxicity test)

Toxicity (aquatic invertebrates):

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
vinyl acetate 108-05-4	EC50	12,6 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity (aquatic invertebrates):

No data available.

Toxicity (Algae):

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

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
vinyl acetate 108-05-4	NOEC	5,96 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
vinyl acetate 108-05-4	EC50	12,7 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity (microorganisms):

No data available.

12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
vinyl acetate 108-05-4	readily biodegradable	aerobic	82 - 98 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	LogPow	Temperature	Method
vinyl acetate 108-05-4	0,73	25 °C	other guideline:

12.5. Results of PBT and vPvB assessment

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	PBT / vPvB
vinyl acetate 108-05-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. 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

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.

08 04 10 Waste adhesives and sealants other than those mentioned in 08 04 09.

SECTION 14: Transport information

- 14.1. UN number or ID number**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.2. UN proper shipping name**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.3. Transport hazard class(es)**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.4. Packing group**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.5. Environmental hazards**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.6. Special precautions for user**
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
- 14.7. Maritime transport in bulk according to IMO instruments**
not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	Not applicable
VOC content (2010/75/EU)	0,3 %

15.2. Chemical safety assessment

A chemical safety assessment has 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:

H225 Highly flammable liquid and vapour.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

ED:	Substance identified as having endocrine disrupting properties
EU OEL:	Substance with a Union workplace exposure limit
EU EXPLD 1:	Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2	Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC:	Substance of very high concern (REACH Candidate List)
PBT:	Substance fulfilling persistent, bioaccumulative and toxic criteria
PBT/vPvB:	Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very bioaccumulative criteria
vPvB:	Substance fulfilling very persistent and very bioaccumulative criteria

Further information:

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