



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

Page 1 of 13

Pattex Special Plastic

SDS No. : 409477  
V001.5

Revision: 28.05.2015

printing date: 03.11.2015

Replaces version from: 27.03.2014

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

#### 1.1. Product identifier

Pattex Special Plastic

#### Contains:

Acetone  
n-Butyl acetate

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

Intended use:  
Contact 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  
Fax-no.: +49 (211) 798 4008

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.

Further information is available at Poison Control Centers.

### 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.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Target organ: Central Nervous System	

#### 2.2. Label elements

##### Label elements (CLP):

**Hazard pictogram:****Signal word:**

Danger

**Hazard statement:**H225 Highly flammable liquid and vapor.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.**Supplemental information**

EUH066 Repeated exposure may cause skin dryness or cracking.

**Precautionary statement:**P102 Keep out of reach of children.  
P101 If medical advice is needed, have product container or label at hand.**Precautionary statement:  
Prevention**P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.  
P233 Keep container tightly closed.  
P261 Avoid breathing vapours.  
P271 Use only outdoors or in a well-ventilated area.**2.3. Other hazards**

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.

Pregnant women should absolutely avoid inhalation and skin contact.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****General chemical description:**

Adhesive solution

**Base substances of preparation:**Polyurethane  
in a mixture of organic solvents**Declaration of the ingredients according to CLP (EC) No 1272/2008:**

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Acetone 67-64-1	200-662-2 01-2119471330-49	< 75 %	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336
n-Butyl acetate 123-86-4	204-658-1 01-2119485493-29	< 15 %	Flam. Liq. 3 H226 STOT SE 3 H336

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

**General information:**

In case of adverse health effects seek medical advice.

**Inhalation:**

Move to fresh air, consult doctor if complaint persists.

**Skin contact:**

Rinse with running water and soap. Skin care. Remove contaminated clothes immediately.

**Eye contact:**

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remains (intensive smarting, sensivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

**Ingestion:**

Rinse mouth and throat. Drink 1-2 glasses of water. Seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

Repeated exposure may cause skin dryness or cracking.

Vapors may cause drowsiness and dizziness.

### 4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media:**

carbon dioxide, foam, powder, water spray jet, fine water spray

**Extinguishing media which must not be used for safety reasons:**

High pressure waterjet

### 5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) can be released.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

**Additional information:**

Cool endangered containers with water spray jet.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment.

Danger of slipping on spilled product.

Avoid contact with skin and eyes.

### 6.2. Environmental precautions

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

### 6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, 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 thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

Also to be noted when processing larger amounts (> 1 kg): during processing and drying after adhesion, ventilate well. Avoid all sources of fire such as stoves and ovens. Switch off all electrical devices such as parabolic heaters, hot plates, storage heaters etc. in good time for them to have cooled down before commencing work. Avoid all sparks, including those occurring at electrical switches and devices.

Hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep only in original container.

Close the container carefully after use and store it at a good ventilated place.

Store protected from heat influence.

Store frost-free.

Temperatures between + 5 °C and + 40 °C

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

**7.3. Specific end use(s)**

Contact adhesive

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational Exposure Limits**

Valid for

Germany

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Acetone 67-64-1 [ACETONE]	500	1.210	Time Weighted Average (TWA):	Indicative	ECLTV
Acetone 67-64-1	500	1.200	Exposure limit(s):	2	TRGS 900
Acetone 67-64-1			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
n-Butyl acetate 123-86-4	62	300	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
n-Butyl acetate 123-86-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900

**Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Acetone 67-64-1	aqua (intermittent releases)					21 mg/L	
Acetone 67-64-1	STP					100 mg/L	
Acetone 67-64-1	sediment (freshwater)				30,4 mg/kg		
Acetone 67-64-1	sediment (marine water)				3,04 mg/kg		
Acetone 67-64-1	soil				29,5 mg/kg		
Acetone 67-64-1	aqua (freshwater)					10,6 mg/L	
Acetone 67-64-1	aqua (marine water)					1,06 mg/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		

**Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Acetone 67-64-1	Workers	Inhalation	Acute/short term exposure - local effects		2420 mg/m <sup>3</sup>	
Acetone 67-64-1	Workers	Dermal	Long term exposure - systemic effects		186 mg/kg bw/day	
Acetone 67-64-1	Workers	Inhalation	Long term exposure - systemic effects		1210 mg/m <sup>3</sup>	
Acetone 67-64-1	general population	Dermal	Long term exposure - systemic effects		62 mg/kg bw/day	
Acetone 67-64-1	general population	Inhalation	Long term exposure - systemic effects		200 mg/m <sup>3</sup>	
Acetone 67-64-1	general population	oral	Long term exposure - systemic effects		62 mg/kg bw/day	
n-Butyl acetate 123-86-4	Workers	Inhalation	Acute/short term exposure - systemic effects		960 mg/m <sup>3</sup>	
n-Butyl acetate 123-86-4	Workers	Inhalation	Acute/short term exposure - local effects		960 mg/m <sup>3</sup>	
n-Butyl acetate 123-86-4	Workers	Inhalation	Long term exposure - systemic effects		480 mg/m <sup>3</sup>	
n-Butyl acetate 123-86-4	Workers	Inhalation	Long term exposure - local effects		480 mg/m <sup>3</sup>	
n-Butyl acetate 123-86-4	general population	Inhalation	Acute/short term exposure - systemic effects		859,7 mg/m <sup>3</sup>	
n-Butyl acetate 123-86-4	general population	Inhalation	Acute/short term exposure - local effects		859,7 mg/m <sup>3</sup>	
n-Butyl acetate 123-86-4	general population	Inhalation	Long term exposure - systemic effects		102,34 mg/m <sup>3</sup>	
n-Butyl acetate 123-86-4	general population	Inhalation	Long term exposure - local effects		102,34 mg/m <sup>3</sup>	

**Biological Exposure Indices:**

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Acetone 67-64-1	acetone	Urine	Sampling time: End of shift.	80 mg/l	DE BAT		
Acetone 67-64-1	acetone	Urine	Sampling time: End of shift.	80 mg/l	DE BAT		

**8.2. Exposure controls:**

Respiratory protection:

The product should only be used at workplaces with intensive ventilation/extraction. If intensive ventilation/extraction is not possible then self-contained independent respiratory protection should be worn.

**Hand protection:**

Recommended are gloves made from Nitril rubber ( Material thickness >0,1 mm, Perforation time < 30s).Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.

In the case of longer contact protective gloves made from butyl rubber are recommended according to EN 374.

Perforation time > 60 minutes

material thickness > 0,3 mm

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

**Eye protection:**

Goggles which can be tightly sealed.

**Skin protection:**

Suitable protective clothing

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	liquid clear colourless
Odor	typical, of solvent
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	-22 °C (-7.6 °F); DIN 51755 Closed cup flash point
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density (20 °C (68 °F))	0,87 g/cm <sup>3</sup>
Bulk density	No data available / Not applicable
Viscosity (Brookfield; Instrument: RVT; 20 °C (68 °F); speed of rotation: 50 min <sup>-1</sup> ; Spindle No: 5)	3.000 - 3.500 mPa.s
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Partially soluble
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 lower	0,9 % (V)
upper	14,3 % (V)
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 oxidants.

**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**

None known.

**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:**

In the event of protracted or repeated exposure, damage to health cannot be excluded.

The toxicity of the product is due to its narcotic effect after inhalation.

Vapors may cause drowsiness and dizziness.

**Skin irritation:**

Repeated exposure may cause skin dryness or cracking.

**Eye irritation:**

Causes serious eye irritation.

**Acute oral toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acetone 67-64-1	LD50	5.800 mg/kg	oral		rat	BASF Test
n-Butyl acetate 123-86-4	LD50	> 8.800 mg/kg	oral		rat	

**Acute inhalative toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acetone 67-64-1	LC50	76 mg/l		4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
n-Butyl acetate 123-86-4	LC50	> 23,4 mg/l		4 h	rat	

**Acute dermal toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acetone 67-64-1	LD50	> 15.688 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

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acetone 67-64-1	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
n-Butyl acetate 123-86-4	not irritating		rabbit	BASF Test

**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	

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Acetone 67-64-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
n-Butyl acetate 123-86-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		Ames Test

**Repeated dose toxicity**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Acetone 67-64-1	NOAEL=2500 ppm	oral: drinking water	13 weeks	rat	
Acetone 67-64-1	LOAEL=5000 ppm	oral: drinking water	13 weeks	rat	

**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, soil or bodies of water.

**12.1. Toxicity**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Acetone 67-64-1	LC50	8.120 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Acetone 67-64-1	EC50	6.098,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
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)

**12.2. Persistence and degradability**

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Acetone 67-64-1	readily biodegradable	aerobic	81 - 92 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)
n-Butyl acetate 123-86-4	readily biodegradable	aerobic	98 %	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
Acetone 67-64-1	0,24					
n-Butyl acetate 123-86-4	1,81				23 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)

**12.5. Results of PBT and vPvB assessment**

Hazardous components CAS-No.	PBT/vPvB
Acetone 67-64-1	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.

**12.6. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Product disposal:**

Dispose of waste and residues in accordance with local authority requirements.

**Disposal of uncleaned packages:**

Use packages for recycling only when totally empty.

**Waste code**

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

**SECTION 14: Transport information****14.1. UN number**

ADR	1133
RID	1133
ADN	1133
IMDG	1133
IATA	1133

**14.2. UN proper shipping name**

ADR	ADHESIVES
RID	ADHESIVES
ADN	ADHESIVES
IMDG	ADHESIVES
IATA	Adhesives

**14.3. Transport hazard class(es)**

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

**14.4. Packaging 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	not applicable
IATA	not applicable

**14.6. Special precautions for user**

ADR	Special provision 640H Tunnelcode: (D/E)
RID	Special provision 640H
ADN	Special provision 640H
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 83,4 %  
(VOCV 814.018 VOC regulation  
CH)

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**National regulations/information (Germany):**

WGK: 1, slightly water-endangering product. (German VwVwS of May 17, 1999 )  
Classification in conformity with the calculation method  
Storage class according to TRGS 510: 3

**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.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

**Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

**Label elements (DPD):**

F - Highly flammable

Xi - Irritant



**Risk phrases:**

- R11 Highly flammable.
- R36 Irritating to eyes.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

**Safety phrases:**

- S2 Keep out of the reach of children.
- S9 Keep container in a well-ventilated place.
- S16 Keep away from sources of ignition - No smoking.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S46 If swallowed, seek medical advice immediately and show this container or label.

**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.**

