

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

Page 1 of 12

454 Prism(R) Surface Insensitive Instant Adhesive Gel

SDS No. : 649680 V003.0 Revision: 02.01.2023 printing date: 17.04.2023 Replaces version from: 02.06.2022

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

#### 1.1. Product identifier

454 Prism(R) Surface Insensitive Instant Adhesive Gel

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

## 1.3. Details of the supplier of the safety data sheet

Henkel Ireland Operations and Research Limited Tallaght Business Park, Whitestown 24 Dublin

Ireland

Phone: +353 (0353) 1 404 6444

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

SDSinfo.Adhesive@henkel.com

### 1.4. Emergency telephone number

00353 14046280

National Poisons Information Centre: Members of Public: +353 (1) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week) Healthcare Professionals: +353 (1) 809 2566 (24-hour service)

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification (CLP):	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	

#### 2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Contains	Ethyl 2-cyanoacrylate
Signal word:	Warning
Hazard statement:	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Supplemental information	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
Precautionary statement: Prevention	P261 Avoid breathing vapors. P280 Wear protective gloves/eye protection.
Precautionary statement: Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention.
Precautionary statement: Disposal	P501 Dispose of contents/container in accordance with national regulation.

#### 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
Ethyl 2-cyanoacrylate 7085-85-0 230-391-5 01-2119527766-29	50- 100 %	Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315	STOT SE 3; H335; C >= 10 %	

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:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth.

Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.

Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn.

Burns should be treated normally after the adhesive has been removed from the skin.

Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water.

Eye contact:

If the eye is bonded closed, release eyelashes with warm water by covering with wet pad.

Keep eye covered until debonding is complete, usually within 1-3 days.

Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.

Ingestion:

Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

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

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

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: Foam, extinguishing powder, carbon dioxide. Fine water spray

**Extinguishing media which must not be used for safety reasons:** None known

5.2. Special hazards arising from the substance or mixture

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 Ensure adequate ventilation.Avoid contact with skin and eyes.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

Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

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

Ventilation (low level) is recommended when using large volumes Use of dispensing equipment is recommended to minimise the risk of skin or eye contact Avoid skin and eye contact. See advice in section 8

Hygiene measures:

Good industrial hygiene practices should be observed. 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

Refer to Technical Data Sheet

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

**SECTION 8: Exposure controls/personal protection** 

### 8.1. Control parameters

## **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ррт	mg/m <sup>3</sup>	• •	Short term exposure limit category / Remarks	Regulatory list
Ethyl 2-cyanoacrylate 7085-85-0 [ETHYL 2-CYANOACRYLATE; ETHYL CYANOACRYLATE]	1		Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
Ethyl 2-cyanoacrylate 7085-85-0 [ETHYL 2-CYANOACRYLATE; ETHYL CYANOACRYLATE]	0,2		Time Weighted Average (TWA):		IR_OEL

#### **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ррт	mg/m <sup>3</sup>	~ 1	Short term exposure limit category / Remarks	Regulatory list
Ethyl 2-cyanoacrylate 7085-85-0	0,3	·	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
[ETHYL CYANOACRYLATE]					

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Ethyl 2-cyanoacrylate 7085-85-0	Workers	Inhalation	Long term exposure - local effects		9,25 mg/m3	
Ethyl 2-cyanoacrylate 7085-85-0	Workers	Inhalation	Long term exposure - systemic effects		9,25 mg/m3	
Ethyl 2-cyanoacrylate 7085-85-0	General population	Inhalation	Long term exposure - local effects		9,25 mg/m3	
Ethyl 2-cyanoacrylate 7085-85-0	General population	Inhalation	Long term exposure - systemic effects		9,25 mg/m3	

#### **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 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;  $\geq 0.4$  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.

Polyethylene or polypropylene gloves are recommended when using large volumes.

Do not use PVC, rubber or nylon gloves.

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Protective eye equipment should conform to EN166.

Skin protection: Wear 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: P	SECTION 9: Physical and chemical properties					
9.1. Information on basic physical and chemical p	avanautica					
Physical state	liquid					
Delivery form	liquid					
Colour	clear, Colorless					
Odor	irritating					
Melting point	Not applicable, Product is a liquid					
Solidification temperature	< -25 °C (< -13 °F)					
Initial boiling point	> 149 °C (> 300.2 °F)					
Flammability	The product is not flammable.					
Explosive limits	Not applicable, The product is not flammable.					
Flash point	80 - 93 °C (176 - 199.4 °F)					
Auto-ignition temperature	Not applicable, The product is not flammable.					
Decomposition temperature	Not applicable, Substance/mixture is not self-reactive, no organic peroxide and does not decompose under foreseen conditions of use					
pH	Not applicable, Product reacts with water.					
Viscosity (kinematic)	> 20,5  mm2/s					
(40 °C (104 °F); )						
Viscosity, dynamic	18.000,00 - 40.000,00 mPa.s LCT STM 10; Viscosity					
(BROOKFIELD WITH HELIPATH;	Brookfield					
Instrument: RVT; 25 °C (77 °F); speed of						
rotation: 20 min-1; Spindle No: TC)						
Solubility (qualitative)	Polymerises in presence of water.					
(20 °C (68 °F); Solvent: Water)						
Partition coefficient: n-octanol/water	Not applicable					
	Mixture					
Vapour pressure	< 0,5 mm hg;no method					
(20 °C (68 °F))						
Vapour pressure	< 700 mbar;no method					
(50 °C (122 °F))						
Density	1,05 g/cm3 no method					
(20 °C (68 °F))						
Relative vapour density:	>1					
(20 °C)						
Particle characteristics	Not applicable					
	Product is a liquid					

## **9.2.** Other information Other information not applicable for this product

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.

## 10.2. Chemical stability

Stable under recommended storage conditions.

## 10.3. Possibility of hazardous reactions

See section reactivity

## 10.4. Conditions to avoid

Stable under normal conditions of storage and use.

#### **10.5. Incompatible materials**

See section reactivity.

#### 10.6. Hazardous decomposition products

None if used for intended purpose.

## **SECTION 11: Toxicological information**

#### General toxicological information:

Cyanoacrylates are considered to have relatively low toxicity. Acute oral LD50 is >5000mg/kg (rat). It is almost impossible to swallow as it rapidly polymerises in the mouth.

Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals In dry atmosphere with < 50% humidity, vapours may irritate the eyes and respiratory system

#### 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
Ethyl 2-cyanoacrylate 7085-85-0	LD50	> 5.000 mg/kg	rat	equivalent or similar to OECD Guideline 423 (Acute Oral toxicity)

#### 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
Ethyl 2-cyanoacrylate 7085-85-0	LD50	> 2.000 mg/kg	rabbit	equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)

#### Acute inhalative toxicity:

No data available.

#### Skin corrosion/irritation:

Bonds skin in seconds. Considered to be of low toxicity: acute dermal LD50 (rabbit)>2000mg/kg Due to polymerisation at the skin surface allergic reaction is unlikely to occur

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	slightly irritating	24 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

#### Serious eye damage/irritation:

Liquid product will bond eyelids. In a dry atmosphere (RH<50%) vapours may cause irritation and lachrymatory effect

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	irritating		rabbit	equivalent or similar to 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
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising	Skin sensitisation	guinea pig	not specified

## 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
Ethyl 2-cyanoacrylate 7085-85-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Ethyl 2-cyanoacrylate 7085-85-0	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (În vitro Mammalian Chromosome Aberration Test)
Ethyl 2-cyanoacrylate 7085-85-0	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:**

No data available.

## STOT-single exposure:

No data available.

## STOT-repeated exposure::

No data available.

## 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 / surface water / ground water. Biological and Chemical Oxygen Demands (BOD and COD) are insignificant.

#### 12.1. Toxicity

### Toxicity (Fish):

No data available.

## Toxicity (Daphnia):

No data available.

### Chronic toxicity to aquatic invertebrates

No data available.

## Toxicity (Algae):

No data available.

#### Toxicity to microorganisms

No data available.

#### 12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Ethyl 2-cyanoacrylate	not readily biodegradable.	aerobic	57 %	28 d	OECD Guideline 301 D (Ready
7085-85-0					Biodegradability: Closed Bottle
					Test)

## 12.3. Bioaccumulative potential

No data available.

## 12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
Ethyl 2-cyanoacrylate 7085-85-0	0,776	22 °C	EU Method A.8 (Partition Coefficient)

### 12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
5 5 5	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:

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

Dispose of in accordance with local and national regulations.

Cured adhesive: Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under controlled conditions.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

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

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	UN number or ID number			
	ADR	Not dangerous goods			
	RID	Not dangerous goods			
	ADN	Not dangerous goods			
	IMDG	Not dangerous goods			
	IATA	3334			
14.2.	UN proper	shipping name			
	ADR	Not dangerous goods			
	RID	Not dangerous goods			
	ADN	Not dangerous goods			
	IMDG	Not dangerous goods			
	IATA	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)			
14.3.	<b>Transport</b>	hazard class(es)			
	ADR	Not dangerous goods			
	RID	Not dangerous goods			
	ADN	Not dangerous goods			
	IMDG	Not dangerous goods			
	IATA	9			
14.4.	Packing gro	oup			
	ADR	Not dangerous goods			
	RID	Not dangerous goods			
	ADN	Not dangerous goods			
	IMDG	Not dangerous goods			
	IATA	III			
14.5.	Environmo	ntal hazards			
14.3.					
	ADR	not applicable			
	RID	not applicable			
	ADN	not applicable			
	IMDG	not applicable			
	IATA	not applicable			

### 14.6. Special precautions for user

ADR not applicable

RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

#### 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): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021): VOC content <3% (2010/75/EC) Not applicable Not applicable Not applicable

#### 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:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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

#### **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 (SDSinfo.Adhesive@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.

#### Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your\_company.com).

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.

## Annex - Exposure Scenarios:

Exposure Scenarios for ethyl 2-cyanoacrylate can be downloaded under the following link: https://mysds.henkel.com/index.html#/appSelection