



Safety Data Sheet in compliance with Indian Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 2000

Page 1 of 8

LOCTITE 454 PRISM GEL

SDS No. : 427527

V001.2

Revision: 18.11.2019

printing date: 19.02.2020

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

Product identifier

LOCTITE 454 PRISM GEL

Material: 135462

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

Intended use:
Adhesive

Identification of manufacturer, importer or distributor:

Henkel Adhesives Tech. India Pvt Ltd.
L&T Seawoods, Grand Central 401, B Wing, 4th Floor, Tower 1
Seawoods
400706 Navi Mumbai, Maharashtra

India

Phone: +91 022-7130-1112

Fax-no.: +91 022-7130-1400

Emergency telephone number

IN HAT: +91 9272203768

In case of any emergency call Poison Information Centre, JSS Hospital, Mysore: 24x7 Helpline No: +916363539153/ Toll Free No: 18004250207/ Mobile: +91 9901218640.

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification (DPD):

Xi - Irritant
R36/37/38 Irritating to eyes, respiratory system and skin.

Label elements

Label elements (DPD):

Risk phrases:
R36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

Do not breathe vapour.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SECTION 3: Composition/information on ingredients**Declaration of ingredients according to DPD (EC) No 1999/45:**

Hazardous components CAS-No.	EC Number	content	Classification
Ethyl 2-cyanoacrylate 7085-85-0	230-391-5	>= 60 - <= 90 %	Xi - Irritant; R36/37/38
Pentafluorobenzonitrile 773-82-0	212-259-9	>= 0,1 - <= 5 %	R10
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	204-327-1	>= 0,1 - <= 5 %	R53 Toxic for reproduction - category 3.; Xn - Harmful; R62
Dibenzo-18-crown-6 14187-32-7	238-041-3	>= 0,1 - <= 5 %	Xi - Irritant; R36

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.
Substances without classification may have community workplace exposure limits available.

Section 4. First aid measures

Inhalation:	Move to fresh air, consult doctor if complaint persists.
Skin contact:	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. 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. 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.
Eye contact:	If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. 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).

Section 5. Fire fighting measures

Suitable extinguishing media:	water, carbon dioxide, foam, powder Fine water spray
Improper extinguishing media:	None known
Specific hazards arising from the chemical:	In the event of a fire, carbon monoxide (CO), carbon dioxide (CO ₂) and nitrogen oxides (NO _x) can be released. In case of fire, keep containers cool with water spray.
Special protection equipment and precautions for firefighters:	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Hazardous combustion products:	carbon oxides.

Section 6. Accidental release measures

Personal precautions:	Ensure adequate ventilation.
Environmental precautions:	Do not let product enter drains.
Clean-up methods:	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.

SECTION 7: Handling and storage**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

Conditions for safe storage, including any incompatibilities

For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)
Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

Section 8. Exposure controls / personal protection

Ingredient [Regulated substance]	Value type	ppm	mg/m ³	Remarks
----------------------------------	------------	-----	-------------------	---------

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
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. 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. The use of chemical resistant gloves such as Neoprene or Natural Rubber is recommended
Eye protection:	Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.
Body protection:	Wear suitable protective clothing.

Engineering controls:	Ensure good ventilation/extraction.
General protection and hygiene measures:	The workplace should be equipped with an emergency shower and eye-rinsing facility.
Hygienic measures:	Keep away from food, beverages and animal feed. Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. Good industrial hygiene practices should be observed.

SECTION 9: Physical and chemical properties

Appearance:	Colorless liquid
Odor:	irritating
Odor threshold (CA):	No data available.
pH:	No data available.
Melting point / freezing point:	No data available.
Specific gravity:	No data available.
Boiling point:	> 149 °C (> 300.2 °F)
Flash point: (Tagliabue closed cup)	80 - 93 °C (176 - 199.4 °F)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Lower explosive limit:	No data available.
Upper explosive limit:	No data available.
Vapor pressure: (no method; 50 °C (122 °F))	< 700 mbar
Vapor density:	3
Density:	1,05 g/cm ³
Solubility:	Solvent: , Polymerises in presence of water.
Partition coefficient: n-octanol/water:	No data available.
Auto ignition:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
VOC content:	No data available.

Section 10. Stability and reactivity

Reactivity/Incompatible materials:	Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols. See section reactivity.
Chemical stability:	Stable under recommended storage conditions.
Conditions to avoid:	Stable under normal conditions of storage and use.
Hazardous decomposition products:	None if used for intended purpose.

SECTION 11: Toxicological information**Information on toxicological effects****General toxicological information:**

No experimental toxicological data on the preparation as such is available.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	LD50	> 5.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	LD50	> 10.000 mg/kg	oral		rat	not specified
Dibenzo-18-crown-6 14187-32-7	LD50	2.600 mg/kg	oral		rat	not specified

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
---------------------------------	---------------	-------	-------------------------	------------------	---------	--------

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	LD50	> 2.000 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	LD50	> 10.000 mg/kg	dermal		rat	not specified

Skin corrosion/irritation:

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

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	irritating	72 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Dibenzo-18-crown-6 14187-32-7	moderately irritating		rabbit	not specified

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising		guinea pig	not specified

Germ cell mutagenicity:

Hazardous components 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)			OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

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

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

Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	EC 50	> 10.000 mg/l	Bacteria	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Ethyl 2-cyanoacrylate 7085-85-0	not readily biodegradable.	aerobic	57 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	under test conditions no biodegradation observed	aerobic	0 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

Bioaccumulative potential / Mobility in soil

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Ethyl 2-cyanoacrylate 7085-85-0	0,776				22 °C	EU Method A.8 (Partition Coefficient)
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1		320 - 780	60 d	Cyprinus carpio		OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	6,25				20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB

Ethyl 2-cyanoacrylate 7085-85-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

Section 13. Disposal considerations

Waste disposal of product: Dispose of in accordance with local and national regulations.

Disposal for uncleaned package: Dispose of in accordance with local and national regulations.

Section 14. Transport information

Road transport ADR:

Not dangerous goods

Railroad transport RID:

Not dangerous goods

Inland water transport ADN:

Not dangerous goods

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Class:	9
Packing group:	III
Packing instructions (passenger)	964
Packing instructions (cargo)	964
UN no.:	3334
Label:	9
Proper shipping name:	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)

Section 15. Regulations - classification and identification

Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane
No reference to national Indian legislation is to be made, as there are no hazardous ingredient present.

OECD. Program to investigate the potential hazards of high production volume chemicals (HPV), including decisions on the need for further work.

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:

R10 Flammable.

R36 Irritating to eyes.

R36/37/38 Irritating to eyes, respiratory system and skin.

R53 May cause long-term adverse effects in the aquatic environment.

R62 Possible risk of impaired fertility.

Further information:

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.

Disclaimer:

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.

This Safety Data Sheet has been generated based on the Indian Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 2000 and provides information in accordance with Indian law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. For assistance, please contact Henkel Product safety and Regulatory affairs for additional assistance.