

Safety Data Sheet

Page 1 of 13

SDS No.: 157281

V001.10 Revision: 23.09.2019

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Section 1. Identification of the substance/preparation and of the company/undertaking

Product name:

PATTEX STEEL QUICKSET #27

Other means of identification:

PATTEX STEEL QUICKSET #27

PATTEX STEEL QUICKSET #27

Product code:

IDH2039663

Recommended use of the chemical and restrictions on use

Intended use:

Epoxy resin

Identification of manufacturer, importer or distributor

Manufacturer: Henkel Corporation, Cleveland, 18731 Cranwood Parkway, Cleveland, OH 44128, United States.

Phone: 001 216 475 3600 Fax: 001 216

Importer: Henkel Thailand Ltd The Offices at Centralworld, 35th Floor, 999/9 Rama 1 Rd, Kwang Patumwan, Khet

Patumwan, Bangkok 10330, Thailand. Phone: +6622098000 Fax: +6622098008

E-mail address of person responsible for Safety Data Sheet:

ap-ua-psra.sea@henkel.com

Emergency information:

FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call CHEMTREC: +1 703-741-5970

Section 2. Hazards identification

GHS Classification:

Hazard ClassHazard CategorySkin corrosion/irritationCategory 2

Serious eye damage/eye irritation
Skin sensitizer
Category 2
Category 1

Chronic hazards to the aquatic Category 2

environment

GHS label elements:

Hazard pictogram:



Signal word:

Warning

Hazard statement:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precaution:

Prevention:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

Disposal:

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Section 3. Composition / information on ingredients

Substance or Mixture:

Mixture

Declaration of hazardous chemical:

Hazard component CAS-No.	Content	GHS Classification
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	30- 60 %	Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1 H317 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411
Calcium carbonate 471-34-1	10- 30 %	
Barium sulfate 7727-43-7	10- 30 %	
Bisphenol A, polymer with formaldehyde and epichlorohydrin 28906-96-9	1- 10 %	Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1 H317
2,2'-[methylenebis(p-phenyleneoxymethylene)]bisoxirane 2095-03-6	0.1- 1%	Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1 H317 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411

Section 4. First aid measures

Inhalation:

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

Skin contact:

Rinse with running water and soap.

Seek medical advice.

Eve contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.

Seek medical advice.

Indication of immediate medical attention and special treatment needed:

See section: Description of first aid measures

Section 5. Fire fighting measures

Suitable extinguishing media:

Carbon dioxide, foam, powder

Specific hazards arising from the chemical:

In case of fire, keep containers cool with water spray.

Special protection equipment and precautions for firefighters:

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Hazardous combustion products:

Oxides of carbon, oxides of nitrogen, irritating organic vapors. Sulphur oxides

Section 6. Accidental release measures

Personal precautions:

Avoid skin and eye contact. See advice in section 8

Environmental precautions:

Do not let product enter drains.

Clean-up methods:

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

For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Section 7. Handling and storage

Handling:

Use only in well-ventilated areas.

Avoid skin and eye contact.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Storage:

Store in a cool, well-ventilated place.

Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

Section 8. Exposure controls / personal protection

Components with specific control parameters for workplace:

CALCIUM CARBONATE, INHALABLE DUST 471-34-1	Value type	Time Weighted Average (TWA):
	mg/m ³	15
	Remarks	TH OEL
Calcium carbonate 471-34-1	Value type	Time Weighted Average (TWA):
	mg/m ³	10
CALCIUM CARBONATE, RESPIRABLE DUST 471-34-1	Value type	Time Weighted Average (TWA):
	mg/m ³	5
	Remarks	TH OEL
BARIUM SULFATE, INHALABLE FRACTION 7727-43-7	Value type	Time Weighted Average (TWA):
	mg/m ³	5
	Remarks	ACGIH The value is for particulate matter containing no asbestos and <1% crystalline silica.
BARIUM SULFATE, INHALABLE DUST 7727-43-7	Value type	Time Weighted Average (TWA):
	mg/m ³	15
	Remarks	TH OEL
BARIUM SULFATE, RESPIRABLE DUST 7727-43-7		Time Weighted Average (TWA):
	mg/m ³	5
İ	Remarks	TH OEL

Respiratory protection:

Use only in well-ventilated areas.

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:

Wear protective glasses.

Protective eye equipment should conform to EN166.

Body protection:

Wear suitable protective clothing.

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

SDS No.: 157281 V001.10

PATTEX STEEL QUICKSET #27

Engineering controls:

Ensure good ventilation/suction at the workplace.

General protection and hygiene measures:

The workplace should be equipped with an emergency shower and eye-rinsing facility.

Hygienic 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.

Section 9. Physical and chemical properties

black Appearance: paste

Odor: characteristic No data available. Odor threshold (CA): No data available. pH: **Melting point / freezing point:** No data available.

Specific gravity: 1.82

Boiling point: > 149 °C (> 300.2 °F) Flash point: > 204 °C (> 399.2 °F)

(Pensky Martens closed cup)

Evaporation rate: No data available. Flammability (solid, gas): No data available. Lower explosive limit: No data available. No data available. **Upper explosive limit:** Vapor pressure: No data available. Vapor density: No data available. Density: No data available. Insoluble

Solubility:

Partition coefficient: n-No data available.

octanol/water:

Auto ignition: No data available. **Decomposition temperature:** No data available. Viscosity: No data available.

VOC content: < 3 %

(2010/75/EC)

Section 10. Stability and reactivity

Reactivity/Incompatible materials:

Reaction with strong acids.

Reacts with strong oxidants.

Chemical stability:

Stable under recommended storage conditions.

Conditions to avoid:

Stable under normal conditions of storage and use.

Hazardous decomposition products:

carbon oxides.

Section 11. Toxicological information

Symptoms of Overexposure: SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis. SKIN: Redness, inflammation.

Acute oral toxicity:

reaction product: bisphenol-A-	Value type	LD50
(epichlorhydrin)	Value	> 2,000 mg/kg
25068-38-6	Species	rat
	Method	OECD Guideline 420 (Acute Oral Toxicity)
Calcium carbonate	Value type	LD50
471-34-1	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 420 (Acute Oral Toxicity)
Barium sulfate	Value type	LD50
Darium sunacc	value type	ED30
7727-43-7	Value	> 15,000 mg/kg
	71	
	Value	> 15,000 mg/kg
	Value Species	> 15,000 mg/kg rat
7727-43-7	Value Species Method	> 15,000 mg/kg rat not specified
7727-43-7 2,2'-[methylenebis(p-	Value Species Method Value type	> 15,000 mg/kg rat not specified LD50

Acute inhalative toxicity:

Calcium carbonate	Value type	LC50
471-34-1	Value	> 3 mg/l
	Exposure time	4 h
	Species	rat
	Method	OECD Guideline 403 (Acute Inhalation Toxicity)

Acute dermal toxicity:

reaction product: bisphenol-A-	Value type	LD50
(epichlorhydrin)	Value	> 2,000 mg/kg
25068-38-6	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
Calcium carbonate	Value type	LD50
471-34-1	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
Barium sulfate	Value type	LD50
7727-43-7	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
2,2'-[methylenebis(p-	Value type	LD50
2,2 -[metryreneors(p-	value type	LD30
phenyleneoxymethylene)]bisoxiran	Value	> 2,000 mg/kg
	7.1	

Skin corrosion/irritation:

reaction product: bisphenol-A-	Result	moderately irritating
(epichlorhydrin)	Exposure time	24 h
25068-38-6	Species	rabbit
	Method	Draize Test
Calcium carbonate	Result	not irritating
471-34-1	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Barium sulfate	Result	not irritating
7727-43-7	Exposure time	15 min
	Species	Human, EpiSkinTM (SM), Reconstructed Human Epidermis
		(RHE)
	Method	EPISKIN Method

Serious eye damage/irritation:

reaction product: bisphenol-A-	Result	not irritating
(epichlorhydrin)	Exposure time	
25068-38-6	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Calcium carbonate	Result	not irritating
471-34-1	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Barium sulfate	Result	not irritating
7727-43-7	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

reaction product: bisphenol-A-	Result	sensitising
(epichlorhydrin)	Test type	Mouse local lymphnode assay (LLNA)
25068-38-6	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Calcium carbonate	Result	not sensitising
471-34-1	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Barium sulfate	Result	not sensitising
7727-43-7	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2,2'-[methylenebis(p-	Result	sensitising
phenyleneoxymethylene)]bisoxirar	Test type	Mouse local lymphnode assay (LLNA)
e	Species	mouse
2095-03-6	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

reaction product: bisphenol-A-	Result	negative
(epichlorhydrin)	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
25068-38-6	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 472 (Genetic Toxicology: Escherichia
		coli, Reverse Mutation Assay)
reaction product: bisphenol-A-	Result	negative
(epichlorhydrin)	Type of study / Route of administration	oral: gavage
25068-38-6	Metabolic activation / Exposure time	
	Species	mouse
	Method	not specified
Calcium carbonate	Result	negative
471-34-1	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Calcium carbonate	Result	negative
471-34-1	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome
		Aberration Test)
Calcium carbonate	Result	negative
471-34-1	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene
		Mutation Test)
Barium sulfate	Result	negative
7727-43-7	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Barium sulfate	Result	negative
7727-43-7	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome
		Aberration Test)
Barium sulfate	Result	negative
7727-43-7	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene
		Mutation Test)

Repeated dose toxicity:

reaction product: bisphenol-A-	Result	NOAEL=50 mg/kg
(epichlorhydrin)	Route of application	oral: gavage
25068-38-6	Exposure time / Frequency of treatment	14 wdaily
	Species	rat
	Method	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Calcium carbonate	Result	NOAEL=1,000 mg/kg
471-34-1	Route of application	oral: gavage
	Exposure time / Frequency of treatment	48 ddaily
	Species	rat
	Method	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Barium sulfate	Result	NOAEL=2000 ppm
7727-43-7	Route of application	oral: drinking water
	Exposure time / Frequency of treatment	92 ddaily
	Species	rat
	Method	not specified

Section 12. Ecological information

SDS No.: 157281 V001.10

PATTEX STEEL QUICKSET #27

General ecological information: Do not empty into drains / surface water / ground water.

Ecotoxicity: Toxic to aquatic life with long lasting effects.

Toxicity:

reaction product: bisphenol-A-	Value type	LC50
(epichlorhydrin)	Value	1.75 mg/l
25068-38-6	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Oncorhynchus mykiss
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
reaction product: bisphenol-A-	Value type	EC50
(epichlorhydrin)	Value	1.7 mg/l
25068-38-6	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
reaction product: bisphenol-A-	Value type	EC50
(epichlorhydrin)	Value	> 11 mg/l
25068-38-6	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Scenedesmus capricornutum
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	4.2 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Scenedesmus capricornutum
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
reaction product: bisphenol-A-	Value type	IC50
(epichlorhydrin)	Value	> 100 mg/l
25068-38-6	Acute Toxicity Study	Bacteria
	Exposure time	3 h
	Species	activated sludge, industrial
	Method	other guideline:
Calcium carbonate	Value type	NOEC
471-34-1	Value	14 mg/l
.,	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Barium sulfate	Value type	ECO
7727-43-7	Value	> 10,000 mg/l
1121 43 1	Acute Toxicity Study	Bacteria
	Exposure time	30 min
	Species	50 mm
	Method	not specified
2,2'-[methylenebis(p-	Value type	LC50
phenyleneoxymethylene)]bisoxiran		> 1 - 10 mg/l
e	Acute Toxicity Study	Fish
2095-03-6	Exposure time	96 h
	Species	not specified
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,2'-[methylenebis(p-		EC50
2,2 -[metnyleneois(p- phenyleneoxymethylene)]bisoxiran	Value type Value	> 1 - 10 mg/l
e		
2095-03-6	Acute Toxicity Study	Daphnia 48 h
20/3 03 0	Exposure time	Daphnia magna
	Species	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
	Method	OECD Guideline 202 (Dapinia sp. Acute Immobilisation Test)

Persistence and degradability:

reaction product: bisphenol-A-	Result	not readily biodegradable.
(epichlorhydrin)	Route of application	aerobic
25068-38-6	Degradability	5 %
	Method	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry
		Test)
Calcium carbonate	Result	readily biodegradable
471-34-1	Route of application	aerobic

	Degradability	90 %
	Method	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2,2'-[methylenebis(p-	Result	not readily biodegradable.
phenyleneoxymethylene)]bisoxir	Route of application	aerobic
ane	Degradability	< 10 %
2095-03-6	Method	OECD 301 A - F

Bioaccumulative potential / Mobility in soil:

reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	LogPow	3.242
	Temperature	25 °C
	Method	EU Method A.8 (Partition Coefficient)
Calcium carbonate 471-34-1	LogPow	-2.12
	Temperature	
	Method	QSAR (Quantitative Structure Activity Relationship)
Barium sulfate 7727-43-7	Bioconcentration factor (BCF)	74.4
	Exposure time	
	Species	Lepomis macrochirus
	Temperature	
	Method	other guideline:

Section 13. Disposal considerations

Product

Method of disposal:

Dispose of in accordance with local and national regulations.

Packaging

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.

Section 14. Transport information

Road transport ADR:

Class: 9
Packing group: III
Classification code: M6
Hazard ident. number: 90
UN no.: 3082
Label: 9

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Bisphenol-A Epichlorhydrin resin)

Railroad transport RID:

Class: 9
Packing group: III
Classification code: M6
Hazard ident. number: 90
UN no.: 3082
Label: 9

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

 $N.O.S.\ (Bisphenol-A\ Epichlorhydrin\ resin)$

Inland water transport ADN:

Class: 9
Packing group: III
Classification code: M6

Hazard ident. number:

UN no.: 3082 Label: 9

Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Bisphenol-A Epichlorhydrin resin)

Marine transport IMDG:

Class: 9
Packing group: III
UN no.: 3082
Label: 9
EmS: F-A ,S-F
Seawater pollutant: Marine pollutant

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Bisphenol-A Epichlorhydrin resin)

Air transport IATA:

Class: 9
Packing group: III
Packaging instructions (passenger): 964
Packaging instructions (cargo): 964
UN no.: 3082
Label: 9

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A

Epichlorhydrin resin)

Further information for transport:

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.

Section 15. Regulatory information

Regulatory Information:

Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555

Global inventory status:

Notification Regulatory list EINECS ves **TSCA** yes **AICS** yes DSL yes KECI (KR) yes PICCS (PH) yes **IECSC** yes ISHL (JP) yes **NZIOC** yes

Section 16. Other information

Disclaimer:

This Safety Data Sheet has been generated based on Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555 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. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance. 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.

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