Safety Data Sheet

Pattex Nail Power PL 600

SDS No. : 365207
V002.7
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Section 1. Identification of the substance/preparation and of the company/undertaking

Product name:
Pattex Nail Power PL 600

Other means of identification:
PATTEX Nail Power PL600 TH
Product code:
IDH1344615
Recommended use of the chemical and restrictions on use

Intended use:
Assembly adhesives

Identification of manufacturer, importer or distributor
Manufacturer: Henkel AG & Co.KGaA, Sichelstr 1, D-30453 Hannover Germany, Phone: +49-511-2140-0 Fax: +49-511-2140-438

Importer: OJO Global Trading Co.,Ltd. Unit 322, 219/2, 3rd Floor, Asoke Towers,
Soi Asoke, Sukhumvit 21 Road, North Klongtoey, Wattana, Bangkok 10110
Tel: +662-1209631 Fax: +662-1209609

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 Class	Hazard Category	Target organ
Flammable Solid	Category 1	
Skin corrosion/irritation	Category 2	
Serious eye damage/eye irritation	Category 2	
Specific target organ toxicity - single exposure	Category 3	Central Nervous System
Chronic hazards to the aquatic environment	Category 3	

GHS label elements:

Hazard pictogram:

Signal word:
Danger

Hazard statement:
H228 Flammable solid.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precaution:

Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
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.
P304+P340+P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation 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.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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
Limestone 1317-65-3	30- 60 %	
Ethyl acetate 141-78-6	10- 30 %	Flammable liquids 2 H225 Serious eye damage/eye irritation 2A H319 Specific target organ toxicity - single exposure 3 H336
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	10- 30 %	Flammable liquids 2 H225 Skin corrosion/irritation 2 H315 Specific target organ toxicity - single exposure 3 H336 Aspiration hazard 1 H304 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411
n-Hexane 110-54-3	0.1- 1 %	Flammable liquids 2 H225 Skin corrosion/irritation 2 H315 Toxic to reproduction 2 H361 Specific target organ toxicity - single exposure 3 H336 Specific target organ toxicity - repeated exposure 2 H373 Aspiration hazard 1 H304 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, consult doctor if complaint persists.

Skin contact:
Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

Eye contact:
Rinse immediately with plenty of running water, seek medical advice if necessary.

Ingestion:
Rinse mouth and throat. Drink 1-2 glasses of water. 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, water spray jet, fine water spray

Improper extinguishing media:
High pressure waterjet

Specific hazards arising from the chemical:
In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released.

Special protection equipment and precautions for firefighters:
Wear self-contained breathing apparatus.
Wear protective equipment.

Additional fire fighting advice:
Cool endangered containers with water spray jet.

Section 6. Accidental release measures

Personal precautions:
Wear protective equipment.
Avoid contact with skin and eyes.
Ensure adequate ventilation.

Environmental precautions:
Do not empty into drains / surface water / ground water.

Clean-up methods:
Remove mechanically.
Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

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.
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.

Storage:
Protect from direct sunlight.
Store protected from heat influence.
Ensure adequate ventilation.
Keep only in original container.
Do not store together with highly flammable substances (F or F+).
Do not store together with oxidants.
Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

Section 8. Exposure controls / personal protection

Components with specific control parameters for workplace:

SILICA, AMORPHOUS 112945-52-5	**Value type**	Time Weighted Average (TWA):
	mg/m³	0.8
	Remarks	TH OEL
Silica, amorphous, fumed, crystal-free 112945-52-5	**Value type**	Time Weighted Average (TWA):
	mg/m³	10
	Remarks	ACGIH
Silica, amorphous, fumed, crystal-free 112945-52-5	**Value type**	Time Weighted Average (TWA):
	mg/m³	3
	Remarks	ACGIH
SILICA, AMORPHOUS 112945-52-5	**Value type**	Time Weighted Average (TWA):
	mg/m³	0.8
	Remarks	TH OEL The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

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 nitrile rubber are recommended according to EN 374.
material thickness > 0.4 mm
Perforation time > 10 minutes
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.
Protective eye equipment should conform to EN166.

Body protection:
Suitable protective clothing
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Engineering controls:
Ensure good ventilation/extraction.

Hygienic measures:
Do not eat, drink or smoke while working.
Wash hands before work breaks and after finishing work.

Section 9. Physical and chemical properties

Appearance:	beige solid
Odor:	of solvent
Odor threshold (CA):	No data available.
pH:	No data available.
Melting point / freezing point:	No data available.
Specific gravity:	No data available.
Boiling point:	No data available.
Flash point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Lower explosive limit:	2 %(V)
Upper explosive limit:	12.8 %(V)
Vapor pressure:	No data available.
Vapor density:	No data available.
Density:	1.23 - 1.29 g/cm3
Solubility:	No data available.
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:
Reaction with acids: production of heat and carbon dioxide.
Chemical stability:
Stable under recommended storage conditions.
Conditions to avoid:
None if used for intended purpose.
Hazardous decomposition products:
No decomposition if used according to specifications.

Section 11. Toxicological information

Health Effects:

Skin: Causes skin irritation.
Eyes: Causes serious eye irritation.
Inhalation: Vapours may cause drowsiness and dizziness.
Symptoms of Overexposure**:** SKIN: Redness, inflammation.

Acute oral toxicity:

Limestone 1317-65-3	Value type	LD50
	Value	> 5,000 mg/kg
	Species	rat
	Method	not specified
Ethyl acetate 141-78-6	Value type	LD50
	Value	6,100 mg/kg
	Species	rat
	Method	not specified
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	Value type	LD50
	Value	> 5,000 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
n-Hexane 110-54-3	Value type	LD50
	Value	16,000 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Ethyl acetate 141-78-6	Value type	LC50
	Value	200 mg/l
	Exposure time	1 h
	Species	rat
	Method	not specified
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	Value type	LC50
	Value	> 20 mg/l
	Exposure time	4 h
	Species	rat
	Method	OECD Guideline 403 (Acute Inhalation Toxicity)

Acute dermal toxicity:

Limestone 1317-65-3	Value type	LD50
	Value	> 5,000 mg/kg
	Species	rat
	Method	not specified
Ethyl acetate 141-78-6	Value type	LD50
	Value	> 20,000 mg/kg
	Species	rabbit
	Method	Draize Test
n-Hexane 110-54-3	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rabbit
	Method	not specified

Skin corrosion/irritation:

Limestone 1317-65-3	Result	not irritating
	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Ethyl acetate 141-78-6	Result	slightly irritating
	Exposure time	24 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Limestone 1317-65-3	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Ethyl acetate 141-78-6	Result	slightly irritating
	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
n-Hexane 110-54-3	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	not specified

Respiratory or skin sensitization:

Limestone 1317-65-3	Result	not sensitising
	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Ethyl acetate 141-78-6	Result	not sensitising
	Test type	Guinea pig maximisation test
	Species	guinea pig
	Method	OECD Guideline 406 (Skin Sensitisation)
n-Hexane 110-54-3	Result	not sensitising
	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Limestone 1317-65-3	Result	negative
	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)
Limestone 1317-65-3	Result	negative
	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)
Limestone 1317-65-3	Result	negative
	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)
Ethyl acetate 141-78-6	Result	negative
	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)
Ethyl acetate 141-78-6	Result	negative
	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)
Ethyl acetate 141-78-6	Result	negative
	Type of study / Route of administration	oral: gavage
	Metabolic activation / Exposure time	
	Species	hamster, Chinese
	Method	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
n-Hexane 110-54-3	Result	negative
	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)
n-Hexane 110-54-3	Result	negative
	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)
n-Hexane 110-54-3	Result	negative
	Type of study / Route of administration	inhalation: vapour
	Metabolic activation / Exposure time	
	Species	mouse
	Method	not specified
n-Hexane 110-54-3	Result	negative
	Type of study / Route of administration	inhalation: vapour
	Metabolic activation / Exposure time	
	Species	rat
	Method	not specified

Repeated dose toxicity:

Limestone 1317-65-3	Result	NOAEL=1,000 mg/kg
	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)
Ethyl acetate 141-78-6	Result	NOAEL=900 mg/kg
	Route of application	oral: gavage
	Exposure time / Frequency of treatment	90 ddaily
	Species	rat
	Method	EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
Ethyl acetate 141-78-6	Result	NOAEL=1.28 mg/l
	Route of application	inhalation
	Exposure time / Frequency of treatment	94 dcontinuous
	Species	rat
	Method	EPA OTS 798.2450 (90-Day Inhalation Toxicity)
n-Hexane 110-54-3	Result	NOAEL=586 mg/kg
	Route of application	oral: gavage
	Exposure time / Frequency of treatment	90 d5 d/w
	Species	rat
	Method	not specified
n-Hexane 110-54-3	Result	NOAEL=500 ppm
	Route of application	inhalation: vapour
	Exposure time / Frequency of treatment	90 d6 h/d; 5 d/w
	Species	mouse
	Method	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)

Section 12. Ecological information

General ecological information: Do not empty into drains, soil or bodies of water.

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Toxicity:

Limestone 1317-65-3	Value type	LC50
	Value	> 10,000 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	not specified
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Limestone 1317-65-3	Value type	EC50
	Value	> 1,000 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Limestone 1317-65-3	Value type	EC50
	Value	> 200 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	not specified
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Limestone 1317-65-3	Value type	EC50
	Value	> 1,000 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	3 h
	Species	activated sludge of a predominantly domestic sewage
	Method	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Ethyl acetate 141-78-6	Value type	LC50
	Value	270 mg/l
	Acute Toxicity Study	Fish
	Exposure time	48 h
	Species	Leuciscus idus melanotus
	Method	DIN 38412-15

Ethyl acetate 141-78-6	Value type	EC50
	Value	164 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia cucullata
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Ethyl acetate 141-78-6	Value type	EC50
	Value	> 2,000 mg/l
	Acute Toxicity Study	Algae
	Exposure time	96 h
	Species	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	2,000 mg/l
	Acute Toxicity Study	Algae
	Exposure time	96 h
	Species	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl acetate 141-78-6	Value type	EC10
	Value	2,900 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	18 h
	Species	
	Method	not specified
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	Value type	LC50
	Value	> 1 - 10 mg/l
	Acute Toxicity Study	Fish
	Exposure time	
	Species	
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	Value type	EC50
	Value	3 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	Value type	EC50
	Value	> 1 - 10 mg/l
	Acute Toxicity Study	Algae
	Exposure time	
	Species	
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
n-Hexane 110-54-3	Value type	LC50
	Value	> 1 - 10 mg/l
	Acute Toxicity Study	Fish
	Exposure time	
	Species	
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
n-Hexane 110-54-3	Value type	EC50
	Value	2.1 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
n-Hexane 110-54-3	Value type	EC50
	Value	> 1 - 10 mg/l
	Acute Toxicity Study	Algae
	Exposure time	
	Species	
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
n-Hexane 110-54-3	Value type	EC 50
	Value	> 1 - 10 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	
	Species	
	Method	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

Persistence and degradability:

Ethyl acetate 141-78-6	Result	readily biodegradable
	Route of application	aerobic
	Degradability	100 %
	Method	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	Result	readily biodegradable
	Route of application	aerobic
	Degradability	89 %
	Method	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
n-Hexane 110-54-3	Result	readily biodegradable, but failing 10-day window
	Route of application	aerobic
	Degradability	> 60 %
	Method	not specified

Bioaccumulative potential / Mobility in soil:

Ethyl acetate 141-78-6	LogPow	0.6
	Temperature	
	Method	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Naphtha (petroleum), hydrotreated light, < 0,1% benzene 64742-49-0	LogPow	4 - 5.7
	Temperature	
	Method	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
n-Hexane 110-54-3	LogPow	4
	Temperature	
	Method	not specified

Section 13. Disposal considerations

Product

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

Packaging

Disposal of uncleaned packages:
Use packages for recycling only when totally empty.

Section 14. Transport information

Road transport ADR:

Class:	4.1
Packing group:	II
Classification code:	F1
Hazard ident. number:	40
UN no.:	3175
Label:	4.1
Technical name:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (petroleum)

Railroad transport RID:

Class:	4.1
Packing group:	II
Classification code:	F1
Hazard ident. number:	40
UN no.:	3175
Label:	4.1
Technical name:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (petroleum)

Inland water transport ADN:

Class:	4.1
Packing group:	II
Classification code:	F1
Hazard ident. number:	
UN no.:	3175
Label:	4.1
Technical name:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (petroleum)

Marine transport IMDG:

Class:	4.1
Packing group:	II
UN no.:	3175
Label:	4.1
EmS:	F-A ,S-I
Seawater pollutant:	-
Proper shipping name:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (petroleum)

Air transport IATA:

Class:	4.1
Packing group:	II
Packaging instructions (passenger):	445
Packaging instructions (cargo):	448
UN no.:	3175
Label:	4.1
Proper shipping name:	Solids containing flammable liquid, n.o.s. (petroleum)

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:

Regulatory list	Notification
TSCA	yes
NDSL	yes
KECI (KR)	yes
PICCS (PH)	yes
IECSC	yes
NZIOC	yes

Section 16. Other information

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.