

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

Page 1 of 12

SDS No.: 441059 V001.2

Revision: 21.05.2015

printing date: 21.02.2017

Replaces version from: 06.10.2014

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

#### 1.1. Product identifier

PP118 Super Steel 50g SFDN Resi

PP118 Super Steel 50g SFDN Resi

#### **Contains:**

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

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

Intended use:

2-Component epoxy adhesive

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

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@uk.henkel.com

## 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification (CLP):

	Category 2
H315 Causes skin irritation.	
	Category 2
H319 Causes serious eye irritation.	
	Category 1
H317 May cause an allergic skin reaction.	
•	Category 2
H411 Toxic to aquatic life with long lasting effects.	

#### 2.2. Label elements

## Label elements (CLP):

V001.2



Signal word:

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

P273 Avoid release to the environment. Precautionary statement:

P280 Wear protective gloves. Prevention

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

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

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

#### 2.3. Other hazards

None if used properly.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

## Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Reaction product: bisphenol-A-	500-033-5	40- 60 %	Skin Irrit. 2
(epichlorhydrin); epoxy resin (number	500-033-5		H315
average molecular weight <= 700)	01-2119456619-26		Skin Sens. 1
25068-38-6			H317
			Eye Irrit. 2
			H319
			Aquatic Chronic 2
			H411

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, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap.

Obtain medical attention if irritation persists.

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

MSDS-No.: 441059

V001.2

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

SKIN: Redness, inflammation.

SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

#### 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:

water, carbon dioxide, foam, powder

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

None known

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

Do not expose to direct heat.

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.

Wear protective equipment.

## **SECTION 6: Accidental release measures**

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

Ensure adequate ventilation.

Avoid skin and eye contact.

Wear protective equipment.

#### 6.2. Environmental precautions

Do not let product enter drains.

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

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

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

Avoid skin and eye contact.

Use only in well-ventilated areas.

Gloves and safety glasses should be worn

#### Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

Good industrial hygiene practices should be observed.

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

Store in sealed original container.

Store in a cool, well-ventilated place.

MSDS-No.: 441059 V001.2

7.3. Specific end use(s)2-Component epoxy adhesive

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

## 8.1. Control parameters

## **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Barium sulfate 7727-43-7 [BARIUM SULPHATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Barium sulfate 7727-43-7 [BARIUM SULPHATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Talc (Mg3H2(SiO3)4) 14807-96-6 [TALC, RESPIRABLE DUST]		1	Time Weighted Average (TWA):		EH40 WEL
Magnesium carbonate 546-93-0 [MAGNESITE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Magnesium carbonate 546-93-0 [MAGNESITE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL

## $\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
	•	•	mg/l	ppm	mg/kg	others	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (freshwater)					0,006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (marine water)					0,0006 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (intermittent releases)					0,018 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	STP					10 mg/L	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (freshwater)				0,996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (marine water)				0,0996 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	soil				0,196 mg/kg		
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	oral					11 mg/kg food	

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

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Dermal	Acute/short term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Dermal	Long term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Workers	Inhalation	Long term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Acute/short term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Long term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Inhalation	Acute/short term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Inhalation	Long term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Acute/short term exposure - systemic effects		0,75 mg/kg bw/day	
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Long term exposure - systemic effects		0,75 mg/kg bw/day	

#### **Biological Exposure Indices:**

None

## 8.2. Exposure controls:

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.

V001.2

Eye protection:

Tightly fitting safety goggles

Avoid eye contact.

Skin protection:

Wear suitable protective clothing.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance paste black
Odor mild

Odour threshold No data available / Not applicable

pH No data available / Not applicable
Initial boiling point No data available / Not applicable
Flash point No data available / Not applicable
Decomposition temperature No data available / Not applicable
Vapour pressure No data available / Not applicable

Density 1,8 g/cm<sup>3</sup>

()

Bulk density

No data available / Not applicable
Viscosity

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable

Solubility (qualitative) Insoluble

(Solvent: Water)

Solidification temperature No data available / Not applicable No data available / Not applicable Melting point No data available / Not applicable Flammability Auto-ignition temperature No data available / Not applicable Explosive limits No data available / Not applicable Partition coefficient: n-octanol/water No data available / Not applicable Evaporation rate No data available / Not applicable Vapor density No data available / Not applicable No data available / Not applicable Oxidising properties

#### 9.2. Other information

No data available / Not applicable

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Reaction with strong acids.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

No decomposition if used according to specifications. Avoid contact with acids and oxidizing agents.

#### 10.5. Incompatible materials

See section reactivity

## 10.6. Hazardous decomposition products

carbon oxides.

MSDS-No.: 441059

## **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.

## Oral toxicity:

May cause irritation to the digestive tract.

## Inhalative toxicity:

May cause irritation to respiratory system.

#### Skin irritation:

Causes skin irritation.

#### Eye irritation:

Causes serious eye irritation.

## Sensitizing:

May cause an allergic skin reaction.

## Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Reaction product:	LD50	> 2.000 mg/kg	oral		rat	
bisphenol-A-						
(epichlorhydrin); epoxy						
resin (number average						
molecular weight <= 700)						
25068-38-6						

#### Acute dermal toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Reaction product:	LD50	23.000 mg/kg	dermal		rabbit	
bisphenol-A-						
(epichlorhydrin); epoxy						
resin (number average						
molecular weight <= 700)						
25068-38-6						

## Skin corrosion/irritation:

Hazardous components		Result	Exposure	Species	Method
CAS-No.			time		
Reaction product:	slightly irritating		4 h	rabbit	OECD Guideline 404 (Acute
bisphenol-A-					Dermal Irritation / Corrosion)
(epichlorhydrin); epoxy					
resin (number average					
molecular weight <= 700)					
25068-38-6					

## Serious eye damage/irritation:

Hazardous components	Result	Exposure	Species	Method
CAS-No.		time		
Reaction product:	not irritating		rabbit	OECD Guideline 405 (Acute
bisphenol-A-				Eye Irritation / Corrosion)
(epichlorhydrin); epoxy				
resin (number average				
molecular weight <= 700)				
25068-38-6				

## Respiratory or skin sensitization:

Hazardous components	Result	Test type	Species	Method
CAS-No.				
Reaction product:	sensitising	Mouse	mouse	OECD Guideline 429 (Skin
bisphenol-A-		local		Sensitisation: Local Lymph
(epichlorhydrin); epoxy		lymphnod		Node Assay)
resin (number average		e assay		
molecular weight <= 700)		(LLNA)		
25068-38-6				

## Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	negative	bacterial reverse mutation assay (e.g Ames test)			OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)

## **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.

## 12.1. Toxicity

## **Ecotoxicity:**

Toxic to aquatic life with long lasting effects.

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

Hazardous components CAS-No.	Value type	Value	Acute Toxicity	Exposure time	Species	Method
CAD-110.	type		Study	time		
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LC50	1,750000 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
	LC50	1,75 mg/l	Fish	96 h	Oncorhynchus mykiss (reported as Salmo gairdneri)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	NOEC	2,4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	9,4 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
Reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	NOEC	0,3 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

## 12.2. Persistence and degradability

#### Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components	Result	Route of	Degradability	Method
CAS-No.		application		

MSDS-No.: 441059

V001.2

Reaction product: bisphenol- | aerobic | 5 % | OECD

Reaction product: bisphenol-	aerobic	5 %	OECD Guideline 301 F (Ready
A-(epichlorhydrin); epoxy			Biodegradability: Manometric
resin (number average			Respirometry Test)
molecular weight <= 700)			
25068-38-6			

#### 12.3. Bioaccumulative potential / 12.4. Mobility in soil

#### Mobility

Cured adhesives are immobile.

#### Bioaccumulative potential:

No data available.

## 12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
Reaction product: bisphenol-A-(epichlorhydrin);	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
epoxy resin (number average molecular weight	Bioaccumulative (vPvB) criteria.
<= 700)	
25068-38-6	

#### 12.6. Other adverse effects

No data available.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations.

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

## **SECTION 14: Transport information**

## 14.1. UN number

ADR	3077
RID	3077
ADN	3077
IMDG	3077
IATA	3077

## 14.2. UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Epoxy resin)

IATA Environmentally hazardous substance, solid, n.o.s. (Epoxy resin)

## 14.3. Transport hazard class(es)

ADR	9
RID	9
ADN	9
IMDG	9
IATA	9

## 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	Marine pollutant
IATA	not applicable

## 14.6. Special precautions for user

ADR	not applicable
	Tunnelcode: (E)
RID	not applicable
ADN	not applicable
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**

#### 15.2. Chemical safety assessment

A chemical safety assessment has not 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.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.

#### **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):

Xi - Irritant

N - Dangerous for the environment





#### Risk phrases:

- R36/38 Irritating to eyes and skin.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Safety phrases:

- S24 Avoid contact with skin.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37 Wear suitable gloves.
- S57 Use appropriate container to avoid environmental contamination.
- S60 This material and its container must be disposed of as hazardous waste.

#### Additional labeling:

Contains epoxy constituents. See information supplied by the manufacturer.

#### Contains

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

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.