

SAFETY DATA SHEET KNOT FILLER CLEAR

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY

1.1 Product identifier

Product name: KNOT FILLER CLEAR

Product Code: M319-6005

1.2 Relevant information of the substance/mixture and uses advised against

Use: For filling and repair of wood, such as pine, birch etc.

1.3 Details of the supplier of the Safety Data Sheet

Supplier: RPM Wood Finishes Group
P.O. Box 22000
Hickory, NC 28603
828-728-8266

1.4 Emergency telephone number

CHEMTREC: 800-424-9300
International: 703-527-3887 (collect)

2. HAZARDS IDENTIFICATION

2.1 Classifications of the product/mixture according to 1272/2008

Skin sensitisation. Category 1A (H317)

2.2 Classification according to CLP 1272/2008

Contains Maleic anhydride



Signal word: Danger

Danger sentence H317 – May cause an allergic skin reaction

Safety sentence P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302 + 350 – IF on skin: Gently wash with soap and water.
P333 + 313 - If skin irritation or a rash occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P501 - Dispose of contents/container to an approved incineration plant

2.3 Other information/dangers:

Safety/dangers: **Solid product:** None. **Melted product:** Burn hazards when melted (according to our knowledge the fumes coming from the material when applied do not show any danger). Nevertheless, we recommend use of ventilation at the working place. See §8.

PBY & vPvB: This product contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

3. COMPOSITION – INFORMATION ON INGREDIENTS

3.1/2 Ingredients/mixture

Chemical name: Polyamide

Chemical name	EC No	CAS No.	Weight- %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH Registration Number
Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene	271-867-2	68610-51-5	0.1- <1	Aquatic Chronic 4 (H413) Repr. 2 (H361d)		01-2119496062-39-XXXX
Maleic anhydride	203-571-6	108-31-6	0.0015- <0.01	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) Skin Sens. 1A (H317) STOT RE 1 (H372) (EUH071)	Skin Sens. 1A:: C>=0.001%	01-2119472428-31-xxxx

3.3 Other information

The full text of all H-danger sentences is shown in section 16. Exposure limits shown in section 8.

This product does not contain ingredients of very high concern in a concentration $\geq 0.1\%$ (Reach 1907/2006). VOC-content of

KNOT FILLER CLEAR is 0 % according to the VOC Directive 2010/75/EU.

4. FIRST AID MEASURES

4.1 Description of first aid measures

- In general: Burn hazards when melted (according to our knowledge the fumes coming from the material when applied do not show any danger).
- Inhalation: **Melted product:** Seek fresh air if you feel discomfort. See a doctor if you continue to feel discomfort. Show this MSDS.
Solid product: Not expected route of exposure.
- Skin contact: **Melted product:** rinse with plenty of cold water until pain disappears and continue another 15 min. Do not remove/tear off burnt product, moisturize skin with non-perfumed cream - see a doctor in case of severe burns. **Solid product:** wash skin with mild soap and water.
- Eye contact: **Melted product:** rinse with plenty of cold water immediately for minimum 15 min. See an ophthalmologist immediately and continue rinsing during transport.
Solid product: In case of eye contact, remove contact lenses and rinse immediately with plenty of water, also under eyelids, for at least 15 minutes.
- Ingestion: Get immediate medical advice/attention. Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Contact with melted product may cause burn hazards of skin and eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Burns caused by melted product must be treated by doctor/medical clinic. All burns to be treated as thermal burns after decontamination.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Extinguish media: All media are usable. Avoid using water jet as it may spread the fire.

5.2 Special hazards arising from the substance/mixture

Specific dangers: In case of high temperatures hazardous decomposition products may occur – Carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides, dust and fumes.

5.3 Advice for firefighters

Protection: Use protection clothes and self-contained breathing apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Protection person: See section 8

In general: Ensure adequate ventilation. If possible let melted product harden before removal.

6.2 Environmental precautions

Environment: Prevent any material from entering drains or waterways.

6.3 Methods and material for containment and cleaning up

Cleaning methods: **Solid product:** gather spillage into waste drums or plastic bags. **Melted product:** can be gathered after cooling / naturally solidified.

6.4 Reference to other sections

See section 8 and 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling: Use adequate ventilation in high temperature processing to prevent exposure to vapours. Facilities for quick drenching the body should be provided within the immediate work area for emergency use where there is a possibility of exposure.
See section 8 for personal protection. Avoid possible inhalation of fumes from melted product. Avoid contact with skin and eyes of melted product.

Hygiene: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off all contaminated clothing and wash it before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep in a dry place. Room temperature between 5° - 20° away from potential sources of heat, open flames, sunlight and other chemicals. Partially used bags should be closed tightly or the remaining Knot Filler should be transferred into an airtight container and kept in a cool dry place as this product slightly absorbs moisture from the air, which may cause foaming when the Knot Filler is melted and may result in adequate bonds.

7.3 Specific and use(s)

To be used only as specified in Technical Data Sheet plus section 1 of this SDS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits:

Derived No Effect level (DNEL)			
Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene (68610-51-5)			
Type	Exposure route	DNEL	Safety factor
Worker Long term Systemic health effects	Inhalation	0.29 mg/m ³	
Worker Long term Systemic health effects	Dermal	0.42 mg/kg bw/d	

Maleic anhydride (108-31-6)			
Type	Exposure route	DNEL	Safety factor
Worker Long term Systemic health effects	Inhalation	0.4 mg/m ³	
Worker Short term Systemic health effects	Inhalation	0.8 mg/m ³	
Worker Long term Local health effects	Inhalation	0.4 mg/m ³	
Worker Short term Local health effects	Inhalation	0.8 mg/m ³	

Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene (68610-51-5)			
Type	Exposure route	DNEL	Safety factor
Consumer Long term Systemic health effects	Inhalation	0.07 mg/m ³	
Consumer Long term Systemic health effects	Dermal	0.21 mg/kg bw/d	
Consumer Long term Systemic health effects	Oral	0.04 mg/kg bw/d	

Predicted No Effect Concentration (PNEC)	
Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene (68610-51-5)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.01 mg/l
Marine Water	0.001 mg/l
Sewage treatment plant	100 mg/l
Freshwater sediment	426 mg/kg dry weight
Marine sediment	85.25 mg/kg dry weight
Soil	85.16 mg/kg dry weight

Maleic anhydride (108-31-6)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.1 mg/l
Marine Water	0.01 mg/l
Sewage treatment plant	44.6 mg/l
Freshwater sediment	0.334 mg/kg dry weight
Marine sediment	0.333 mg/kg dry weight
Soil	0.042 mg/kg dry weight

8.2 Exposure controls

Tech. measures: Ensure adequate ventilation, especially in confined areas. Vapours/aerosols must be exhausted directly at the point of origin. Ensure access to eye rinsing bottle and emergency shower (relevant for melted product)

General:	Smoking, eating or drinking, as well as storage of tobacco, food and drinks not allowed in working area. Wash hands and other exposed areas with mild soap and water before ingestions of food and beverage or smoking, as well as at the end of work. Avoid contact with skin and eyes of melted product.
Personal means:	Personal means to be chosen in accordance with current CEN standards and in cooperation with the supplier of personal means.
Inhalation:	Ensure adequate ventilation of working area, especially in confined areas. Vapours/aerosols must be exhausted directly at the point of origin.
Hand:	Melted product: We recommend use of non-fusible, heat resistant gloves (i.e. cotton) Solid product: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn. Gloves must conform to standard EN 374
Eye:	Melted product: Use safety glasses with side shield or protection goggles if risk of contact with melted product according to standard EN 166. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the melted product.
Skin:	Standard non-fusible working clothes. Melted product: wear suitable protective clothing.
Environment:	Prevent any material from entering drains or waterways.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state Granules or sticks 12 or 43mm	Colour Walnut	Smell Low	Dynamic Viscosity 5.5 – 7.5 Pa.s at 190°
Flash point >200°C	Boiling point -	Vapour pressure 100°C -	Density ~1 @23°C
Ignition -	Auto ignition -	Softening point 120-130°C	Melting point -
		Solubility in water Non-soluble	

9.2 Other information

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10. STABILITY AND REACTIVITY

10.1 Reactivity	There is no reactivity if used as described in Technical Data Sheet plus section 1.2 of SDS.
10.2 Chemical stability	The product is stable if handled as described in Section 7. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	Keep away from strong heat and direct sunlight. Avoid static discharge (electrostatic discharge)
10.5 Incompatible materials	Strong oxidizing agents, strong acids and strong bases.
10.6 Hazardous decomposition prod.	In case of high temperatures hazardous decomposition products may occur – Carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides, dust and fumes. Avoid inhalation

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhalation:	Based on available data, the classification criteria are not met.
Eye contact:	Based on available data, the classification criteria are not met.
Skin contact	May cause sensitisation by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (Based on components)
Ingestion:	Based on available data, the classification criteria are not met.
Symptoms:	Itching. Rashes. Hives.
Acute toxicity	
Component information	

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene 68610-51-5	>5000 mg/kg (Rattus)	> 5010 mg/kg (Oryctolagus cuniculus)	>165 mg/l (Rattus) 1h
Maleic anhydride 108-31-6	LD50= 1090 mg/kg (Rattus) OECD 401	= 2620 mg/kg (Oryctolagus cuniculus)	>4.35 mg/l (Rattus) 1h

Skin corrosion/Irritation	Based on available data, the classification criteria are not met.
Serious eye damage/-irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	May cause sensitisation by skin contact.

Maleic anhydride (108-31-6)			
Method	Species	Exposure route	Results
OECD Test no. 429: Skin Sensitisation: Local Lymph Node Assay	Mouse	Injection	Sensitising
Not available	Rat	Inhalation	Sensitising

Germ cell mutagenicity	Based on available data, the classification criteria are not met.
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Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.

Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene (68610-51-5)		
Method	Species	Results
	Rabbit	NOAEL 15mg/kg bw/d

STOT-single exposure	Based on available data, the classification criteria are not met.
STOT repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Other information	Avoid inhalation of fumes from melted product. However, no hazards of inhalation have been registered.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity:

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene 68610-51-5	EC50 : >0.2 mg/L (72h Pseudokirchneriella subcapitata)	LC50 96h > 0.2 mg/L Fish (Oncorhynchus mykiss semi-static)	-	EC50 48h > 0.2 mg/L (Daphnia magna)		
Maleic anhydride 108-31-6	EC50 : =29mg/l. (72h Desmodesmus subspicatus)	LC50 (96h) = 75 mg/l. (Oncorhynchus mykiss)	-	EC50: =84mg/l (24h, Daphnia magna)		

12.2 Persistence and degradability No information available

12.3 Bioaccumulative potential No information available.

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene 68610-51-5	7.93	
Maleic anhydride 108-31-6	-2.61	

12.4 Mobility in soil No information available.

12.5 Results of PBT and vPvB assessment

Chemical name	PBT- and vPvB assessment
Phenol, 4-methyl-, reaction products with dicyclopentadiene and isobutylene 68610-51-5	The substance is not PBT/vPvB
Maleic anhydride 108-31-6	The substance is not PBT/vPvB. PBT assessment does not apply

12.6 Other adverse effects Prevent any material from entering the environment

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Gather residues into waste containers. Destroy according to the rules given by the local/national authorities.
Packaging (card boxes) to be disposed with other cardboard packaging.
European Waste Catalogue 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09.

Other information: Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

Non-dangerous product.

	ADR/RID	IMDG/IMO
14.1 UN-number	-	-
14.2 UN proper shipping name	-	-
14.3 Transport hazard class(es)	-	-
14.4 Packing group	-	-
14.5 Environmental hazard		
MP	-	-
EMS	-	-
14.6 Special precautions for user	-	-
14.7 Transport in bulk according to Annex II of Marpol 73/78 and the BIC Code	-	-
Other information	-	-

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EC Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents.
EC Directive 94/33/EC for the protection of young workers.
EC Directive 92/85/EC on the protection of pregnant and breastfeeding women at work.
EC Directive 1272/2008 (CLP), EC Directive 453/2010 (Update CLP)
EC Directive 2010/75 (VOC)
EU Directive 830/2015 Replacing Directive 67/548/EC and 1999/45/EC
EC Directive 1907/2006 (REACH)

SVHC: Substances of Very High Concern for Authorisation:

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) – Annex XVII – Substances subject to Restriction

This product does not contain substances subject to restriction (Regulation (EC) no. 1907/2006 (REACH), Annex XVII).

Substances subject to authorisation per REACH Annex XIV

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Persistent Organic Pollutants

Not applicable

15.2 Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at $>10\text{tps}$.
No chemical safety assessment has been made for the product.

16. OTHER INFORMATION

16.1 Full wording of H-sentences in section 3:

H302 – Harmful to the respiratory tract

H302 – Harmful if swallowed

H314 – Causes severe skin burns and eye damage

H317 – May cause an allergic skin reaction

H318 – Causes serious eye damage

H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 – Suspected of causing cancer - Route of exposure Inhalation Xu et al (2010), carcinogenic activity of nanoscale TiO2 administered by an intrapulmonary spraying (IPS)

H361d – Suspected of damaging the unborn child

H372 – Causes damage to organs through prolonged or repeated exposure

H413 – May cause long lasting harmful effects to aquatic life

TWA	TWA (Time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value
*	Skin designation
SVHC	Substance(s) of Very High Concern
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB	Very persistent and very Bioaccumulative (vPvB) Chemicals
STOT RE	Specific target organ toxicity – Repeated exposure
STOT SE	Specific target organ toxicity – Single exposure
EWC	European Waste Catalogue

Personnel to be instructed in correct use of the product. Personnel must read this Safety Data Sheet before using the product including the Technical Data Sheet.

To the best of our knowledge the information given herewith is accurate. However, no liability what so ever is assumed for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein we cannot guarantee that these are the only hazards that exist.