

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.14.2018

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**KNT Resin**

## SECTION 1: Identification

### Product identifier

**Product name:** KNT Resin

**Product code:** KNT-1

### Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable.

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

### Manufacturer or supplier details

**Manufacturer:**

**North America**

Gougeon Brothers, Inc.  
100 Patterson Ave.  
Bay City, MI 48706, U.S.A.  
310-882-2120  
safety@entropyresin.com

**Supplier:**

**Canada**

Composites One  
26596 Gloucester Way Unit #105  
Langley, BC V4W 4A8

### Emergency telephone number:

**North America**

**CHEMTREC**

800-424-9300 US

703-527-3887 International

## SECTION 2: Hazard identification

### GHS classification:

Eye irritation, category 2A

Skin irritation, category 2

Skin sensitization, category 1

### Label elements

#### Hazard pictograms:



**Signal word:** Warning

### Hazard statements:

H319 Causes serious eye irritation

H315 Causes skin irritation

H317 May cause an allergic skin reaction

### Precautionary statements:

P264 Wash skin thoroughly after handling

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

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

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

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P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P362 Take off contaminated clothing and wash before reuse  
P302+P352 If on skin: Wash with soap and water  
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention  
P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	88-90
CAS number: 17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	4-5
CAS number: 112945-52-5	Silica, amorphous, fumed, cryst.-free	<2.5

**Additional Information:** None

## SECTION 4: First-aid measures

### Description of first-aid measures

#### General notes:

Not determined or not available.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position  
Maintain an unobstructed airway  
Get medical advice/attention if you feel unwell

#### After skin contact:

Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention  
Wash affected area with soap and water  
Seek medical attention if symptoms develop or persist

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention  
Remove contact lens(es) if able to do so during rinsing  
Seek medical attention if irritation persists or if concerned

#### After ingestion:

Rinse mouth and then drink plenty of water  
Do not induce vomiting  
Get medical advice/attention if you feel unwell

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

#### Acute symptoms and effects:

Not determined or not available.

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### Delayed symptoms and effects:

Not determined or not available.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

## SECTION 5: Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Do not use water as an extinguisher

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

### Special precautions:

Heating causes a rise in pressure, risk of bursting and combustion

Shut off sources of ignition

Carbon monoxide and carbon dioxide may form upon combustion

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

### Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

### Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

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Avoid breathing mist or vapor.  
Use only with adequate ventilation.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.  
Store away from foodstuffs.

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

No occupational exposure limits noted for the ingredient(s).

### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Not determined or not applicable.

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.  
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

### Personal protection equipment

#### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

Select glove material impermeable and resistant to the substance.  
Select glove material based on rates of diffusion and degradation.

#### Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

### General hygienic measures:

Wash hands before breaks and at the end of work.  
Avoid contact with skin, eyes and clothing.  
Perform routine housekeeping.  
Wash contaminated clothing before reusing.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance (physical state, color):</b>	Resin
<b>Odor:</b>	Not determined or not available.
<b>Odor threshold:</b>	Not determined or not available.
<b>pH-value:</b>	Not determined or not available.
<b>Melting/Freezing point:</b>	Not determined or not available.
<b>Boiling point/range:</b>	Not determined or not available.
<b>Flash point:</b>	Not determined or not available.
<b>Evaporation rate:</b>	Not determined or not available.

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<b>Flammability (solid, gaseous):</b>	Not determined or not available.
<b>Explosion limit upper:</b>	Not determined or not available.
<b>Explosion limit lower:</b>	Not determined or not available.
<b>Vapor pressure:</b>	Not determined or not available.
<b>Vapor density:</b>	Not determined or not available.
<b>Density:</b>	Not determined or not available.
<b>Relative density:</b>	Not determined or not available.
<b>Solubilities:</b>	Not determined or not available.
<b>Partition coefficient (n-octanol/water):</b>	Not determined or not available.
<b>Auto/Self-ignition temperature:</b>	Not determined or not available.
<b>Decomposition temperature:</b>	Not determined or not available.
<b>Dynamic viscosity:</b>	Not determined or not available.
<b>Kinematic viscosity:</b>	Not determined or not available.
<b>Explosive properties</b>	Not determined or not available.
<b>Oxidizing properties</b>	Not determined or not available.

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

Does not react under normal conditions of use and storage.

### Chemical stability:

Stable under normal conditions of use and storage.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

### Conditions to avoid:

None known.

### Incompatible materials:

None known.

### Hazardous decomposition products:

None known.

## SECTION 11: Toxicological information

### Acute toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Skin corrosion/irritation

**Assessment:** Causes skin irritation

**Product data:** No data available.

**Substance data:**

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Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Irritating to the skin.
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	Irritating to the skin.
Silica, amorphous, fumed, cryst.-free	Irritating to the skin.

### Serious eye damage/irritation

**Assessment:** Causes serious eye irritation

**Product data:** No data available.

**Substance data:**

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Irritating effect on the eyes.
Silica, amorphous, fumed, cryst.-free	Irritating effect on the eyes.

### Respiratory or skin sensitization

**Assessment:** May cause an allergic skin reaction

**Product data:** No data available.

**Substance data:**

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Sensitization possible through skin contact.
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	Sensitization possible through skin contact.

### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):**

Name	Classification
Silica, amorphous, fumed, cryst.-free	Group 3 - Not classifiable as to its carcinogenicity to humans

**National Toxicology Program (NTP):** None of the ingredients are listed.

### Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

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**Substance data:** No data available.

### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

Name	Result
Silica, amorphous, fumed, cryst.-free	Component affects the respiratory system.

### Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	EC50 - Scenedesmus capricornutum - 9 mg/L - 48 h

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.

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### SECTION 13: Disposal considerations

#### Disposal methods:

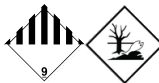
It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

### SECTION 14: Transport information

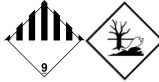
#### Canadian Transportation of Dangerous Goods (TDG)

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, Solid, N.O.S. Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran
<b>UN transport hazard class(es)</b>	9 
<b>Packing group</b>	III
<b>Environmental hazards</b>	Marine Pollutant Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran
<b>Special precautions for user</b>	None

#### International Maritime Dangerous Goods (IMDG)

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, Solid, N.O.S. Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran
<b>UN transport hazard class(es)</b>	9 
<b>Packing group</b>	III
<b>Environmental hazards</b>	Marine Pollutant Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran
<b>Special precautions for user</b>	None

#### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, Solid, N.O.S. Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran
<b>UN transport hazard class(es)</b>	9 
<b>Packing group</b>	III
<b>Environmental hazards</b>	Marine Pollutant Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran
<b>Special precautions for user</b>	None



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## SECTION 15: Regulatory information

### Canada regulations

#### Domestic substances list (DSL):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	Listed
112945-52-5	Silica, amorphous, fumed, cryst.-free	Listed

**Non-domestic substances list (NDSL):** Not determined.

## SECTION 16: Other information

**Abbreviations and Acronyms:** None

### Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 2-0-0

**HMIS:** 2-0-0

**Initial preparation date:** 02.14.2018

**End of Safety Data Sheet**