



## Safety Data Sheet according to Regulation (EC) 'No. 2020/878

### SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1	Product Identifier	0297B	Revision Date:	26/07/2024
	Product Name:	CARBOTHERM 551 - B	Supersedes Date:	New SDS
			Version Number:	1
	UFI Code:	8N8N-42K9-C006-7RNA		
	Contain nanoform:	No		
1.2	Relevant identified uses of the substance or mixture and uses advised against	Hardener for 2 components coatings - Industrial use. Advised against: others than recommended Waterborne paint.		
	Product to be mixed with:	CARBOTHERM 551 - A		
	Mixing ratio by volume Part A/ Part B:	16 / 1		
1.3	Details of the supplier of the safety data sheet			
	Supplier:	Carboline Italia, S.p.a. Via Margherita Viganò De Vizzi, 77 20092 Cinisello Balsamo (MI) Italy		
		Regulatory / Technical Information: +32 67493710 Nivelles, Belgium +39 0294759236 Cinisello Balsamo, Italy		
	Datasheet Produced by:	Calcagno, Elena - hms@carboline.com		
1.4	Emergency telephone number:	CHEMTREC +1 703 5273887 (Outside US) 112 (24/7) Croatia +3851 2348 342 (24/7 in Croatian and English) Iceland 112 (24/7) Malta 112 (24/7)		

### SECTION 2: Hazards Identification

#### 2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

#### HAZARD STATEMENTS

Flammable Liquid, category 3

H226

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Warning

### Named Chemicals on Label

None

### HAZARD STATEMENTS

Flammable Liquid, category 3

H226

Flammable liquid and vapour.

### PRECAUTION PHRASES

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280

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

P303+P361+P353

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

## 2.3 Other hazards

No Information

### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

### Endocrine disrupting properties - Toxicity

Name According to EEC

CAS-No.

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

### Endocrine disrupting properties - Ecotoxicity

Name According to EEC

CAS-No.

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

## SECTION 3: Composition/Information On Ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

**Hazardous ingredients**

<u>Name According to EEC</u> <u>EINEC No.</u> <u>CAS-No.</u> <u>REACH Reg No.</u>	<u>%</u>	<u>Classifications</u>	SCL Value: ATE Value: M-Factor:	
1-methoxypropan-2-ol 203-539-1 107-98-2 01-2119457435-35 603-064-00-3	10 - <25	H226-336  Flam. Liq. 3, STOT SE 3 NE	SCL Value:	-
			ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-
1-(2-butoxy-1-methylethoxy) propan-2-ol 249-951-5 29911-28-2 01-2119451543-42	2.5 - <10		SCL Value:	-
			ATE Value:	-
			M-Factor: (acute)	-
			M-Factor: (chronic)	-

**Additional Information:** The text for CLP Hazard Statements shown above (if any) is given in Section 16.

## SECTION 4: First-aid Measures

### 4.1 Description of First Aid Measures

**GENERAL NOTES:** Show this safety data sheet to the doctor in attendance.

**AFTER INHALATION:** Move to fresh air. Provide fresh air, rest and warmth. Call a physician immediately. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position.

**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Do not use solvent or thinners to clean skin.

**AFTER EYE CONTACT:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

**AFTER INGESTION:** If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs. Provide fresh air, rest and warmth. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

**Self protection of the first aider:**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**4.2 Most important symptoms and effects, both acute and delayed**

No Information

**4.3 Indication of any immediate medical attention and special treatment needed**

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11. When symptoms persist or in all cases of doubt seek medical advice.

**SECTION 5: Firefighting Measures****5.1 Extinguishing Media:**

Carbon Dioxide, Dry Chemical, Foam

**FOR SAFETY REASONS NOT TO BE USED:** Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

**5.2 Special hazards arising from the substance or mixture**

Heating or fire conditions liberates toxic gas.

**5.3 Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Keep containers and surroundings cool with water spray.

**SECTION 6: Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures****6.1.1 For non-emergency personnel**

Ensure adequate ventilation. Use personal protective equipment.

**6.1.2 For emergency responders**

See Section 7, 8 and 10 for further information.

**6.2 Environmental precautions**

Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and material for containment and cleaning up**

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**6.4 Reference to other sections**

**FURTHER INSTRUCTIONS:** Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

**SECTION 7: Handling and Storage****7.1 Precautions for safe handling**

Electrical equipment should be protected to the appropriate standard. Wear personal protective equipment. Do not breathe vapours or spray mist. Apply technical measures to comply with the occupational exposure limits (see section 8). Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

**7.2 Conditions for safe storage, including any incompatibilities**

**CONDITIONS TO AVOID:** Avoid heat, sparks, flames and other ignition sources.

**STORAGE CONDITIONS:** Store in original container. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Protect from frost. Store in upright position only.

**7.3 Specific end use(s)**

No specific advice for end use available.

**SECTION 8: Exposure Controls/Personal Protection****8.1 Control parameters****Ingredients with Occupational Exposure Limits (EU)**

<u>Name</u>	<u>CAS-No.</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>
1-methoxypropan-2-ol	107-98-2	100	150	568	375
1-(2-butoxy-1-methylethoxy)propan-2-ol	29911-28-2				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
1-methoxypropan-2-ol	107-98-2	Sk
1-(2-butoxy-1-methylethoxy)propan-2-ol	29911-28-2	

**FURTHER ADVICE:** Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation. Annotations: Carc = Capable of causing cancer and/or heritable genetic damage, Sen = Capable of causing occupational asthma, Sk = Can be absorbed through the skin.

**Chemical Name:**

1-methoxypropan-2-ol

**EC No.:**

203-539-1

**CAS-No.:**

107-98-2

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required						3.3 mg/kg	
Inhalation	553.5 mg/m3	553.5 mg/m <sup>3</sup>		369 mg/m3				43.9 mg/m3
Dermal				183 mg/kg bw/day				18.1 mg/kg

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	10 mg/l
Fresh water sediments	100 mg/l
Marine water	1 mg/l
Marine sediments	5.2 mg/kg
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	5.49 mg/kg
Air	

**Chemical Name:**

1-(2-butoxy-1-methylethoxy)propan-2-ol

**EC No.:**

249-951-5

**CAS-No.:**

29911-28-2

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							16 mg/kg/day
Inhalation				189 mg/m <sup>3</sup>				56 mg/m <sup>3</sup>
Dermal				134 mg/kg/day				80 mg/kg/day

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0.519 mg/L
Fresh water sediments	2.96 mg/kg/day
Marine water	0.052 mg/L
Marine sediments	0.296 mg/kg/day
Food chain	
Microorganisms in sewage treatment	100 mg/L
soil (agricultural)	0.287 mg/kg/day
Air	

**8.2 Exposure controls****Personal Protection**

**RESPIRATORY PROTECTION:** Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). In case of insufficient ventilation wear suitable respiratory equipment. Combination filter: A2-P2.

**EYE PROTECTION:** If splashes are likely to occur, wear: Face-shield, tightly fitting safety goggles (EN 166).

**HAND PROTECTION:** Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Use chemical resistant gloves and lotions and barrier creams to prevent drying of the skin. Use chemical resistant gloves (EN 374): Neoprene, nitril rubber, butyl rubber. Recommended glove material for mixed product: Protective gloves complying with EN 374: Butyl rubber. Nitril rubber.

**OTHER PROTECTIVE EQUIPMENT:** Ensure that eyewash stations and safety showers are close to the workstation location.

**ENGINEERING CONTROLS:** Ensure adequate ventilation, especially in confined areas.

**SECTION 9: Physical and Chemical Properties****9.1 Information on basic physical and chemical properties**

Colour:	BLUE
Physical State	Liquid
Odor	MILD
Odor threshold	Not determined
pH	7.0 - 8.0
Melting point / freezing point (°C)	Not determined
Boiling point or initial boiling point and boiling range (°C)	120 - 122
Flash Point, (°C)	37
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined

Lower and upper explosive limit	1,5 - 13,7
Vapour Pressure	Not determined
Relative vapour density	>1 (air = 1)
Density and/or relative density	Not determined
Solubility in / Miscibility with water	Soluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	287
Decomposition temperature (°C)	Not determined
Kinematic viscosity	Not determined
Particle characteristics	Not applicable to liquids

## 9.2 Other information

VOC Content g/l:	36
Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.	
Specific Gravity (g/cm <sup>3</sup> )	1,05

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

No Information

### 10.4 Conditions to avoid

Avoid heat, sparks, flames and other ignition sources.

### 10.5 Incompatible materials

No Information

### 10.6 Hazardous decomposition products

In case of fire **hazardous decomposition products** may be produced such as: Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>).

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute Toxicity:

Oral LD50:	No information available.
Inhalation LC50:	No information available.
Dermal LD50:	No information available.

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

<b>Carcinogenicity:</b>	No information available.
<b>Mutagenicity:</b>	No information available.
<b>Toxicity for reproduction:</b>	No information available.
<b>STOT-single exposure:</b>	No information available.
<b>STOT-repeated exposure:</b>	No information available.
<b>Aspiration hazard:</b>	No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.  
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
107-98-2	1-methoxypropan-2-ol	4016 mg/kg (oral-rat)	>2000 mg/kg (dermal-rat)	21 mg/l	> 20000 ppm	No information
29911-28-2	1-(2-butoxy-1-methylethoxy)propan-2-ol	3700 mg/Kg (Oral, rat)	>2000 mg/kg (Dermal, rat)	No information	No information	No information

#### Additional Information:

May be harmful if swallowed. Not considered hazardous under normal conditions of use. Exposure to mist or spray may cause irritation.

#### 11.2 Information on other hazards

##### Endocrine disrupting properties - Toxicity

Name According to EEC

CAS-No.

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

## SECTION 12: Ecological Information

#### 12.1 Toxicity:

<b>EC50 48hr (Daphnia):</b>	No information
<b>IC50 72hr (Algae):</b>	No information
<b>LC50 96hr (fish):</b>	No information

**12.2 Persistence and degradability:** No information

**12.3 Bioaccumulative potential:** No information

**12.4 Mobility in soil:** No information

**12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

#### 12.6 Endocrine disrupting properties

##### Endocrine disrupting properties - Ecotoxicity

Name According to EEC

CAS-No.



Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

**12.7 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
107-98-2	1-methoxypropan-2-ol	>21000 mg/L (Daphnia)	No information	6812 mg/L (Leuciscus idus)
29911-28-2	1-(2-butoxy-1-methylethoxy)propan-2-ol	>1000 mg/L (CL50, 48h, Daphnia magna - static)	No information	841 mg/L (CL50, 96h, Poecilia reticulata)

## SECTION 13: Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

**European Waste Code:** No Information

**Packaging Waste Code:** No Information

## SECTION 14: Transport Information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN-number or ID number</b>	UN1263	UN1263	UN1263	UN1263
<b>14.2 UN proper shipping name</b>	PAINT	PAINT	PAINT	PAINT
<b>14.3 Transport Hazard Class(es)</b>	3	3	3	3
<b>14.4 Packing Group</b>	III	III	III	III
<b>14.5 Enviromental Hazards</b>	Environmental Hazard: NO	Environmental Hazard: NO	Marine Pollutant: NO	Environmental Hazard: NO

**14.6 Special precautions for user** Not applicable

**EmS-No.:** F-E, S-E

**14.7 Maritime transport in bulk according to IMO intruments** Not applicable

## SECTION 15: Regulatory Information

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

#### National Regulations:

**Denmark Product Registration Number:** Not available

**Danish MAL Code:** Not available

**Danish MAL Code - Mixture:** Not available

**Sweden Product Registration Number:** Not available

**Norway Product Registration Number:** Not available

**Germany WGK Class:** Not available

**Directive 2004/42/CE:** 140 g/L (subcat J)

Covered by Directive 2012/18/EC (Seveso III):

P5c

Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:

Entry 3, 40

**Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:****CAS-No.**      **Name According to EEC**

Not Applicable

**SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):****CAS-No.**      **Name According to EEC**

Not Applicable

**15.2 Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**SECTION 16: Other Information****Text for CLP Hazard Statements shown in Section 3 describing each ingredient:**

H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.

**Reasons for revision**

This is a new Safety Data Sheet (SDS). This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

**List of References:**

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in

Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects
IMO	International Maritime Organization
Note P:	The classification as a carcinogen or mutagen need not apply; the substance contains less than 0,1 % w/w benzene
Note 10:	The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$ .

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.