

# SAFETY DATA SHEET

## Section 1 - Chemical Product and Company Information

Product Name: 1201 low VOC 2 Red Enamel Product Code: 1201 low VOC 2

Trade Name: Glyptal

Manufactured by:

*IN CASE OF EMERGENCY:*

GLYPTAL, INC.  
305 Eastern Ave.  
Chelsea, MA 02150  
Telephone (617) 884-6918

CHEMTREC 1-800-424-9300

Product Use: Coatings

Not recommended for: Nonindustrial Use

## Section 2 - Hazards Identification

NFPA Ratings, risk phrases, and suggested WHMIS Hazard Categories:

### GHS Ratings:

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive	3	Reversible adverse effects in dermal tissue, Draize score: >= 1.5 < 2.3
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days

### GHS Hazards

H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H316	Causes mild skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

### GHS Precautions

P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/.../equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash skin thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
P362	Take off contaminated clothing and wash before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously 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

P370+P378  
P403+P233  
P403+P235  
P501

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction  
Store in a well ventilated place. Keep container tightly closed  
Store in a well ventilated place. Keep cool  
Dispose of contents/container to an approved waste disposal plant

**Signal Word: Danger**



### Section 3 - Composition/Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Dimethyl Carbonate	616-38-6	20.00% - 30.00%
Methyl Normal Amyl Ketone	110-43-0	10.00% - 20.00%

### Section 4 - First Aid Measures

**INHALATION** - Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician as further medical treatment may be necessary. Administer oxygen if a qualified operator is available.

**EYE CONTACT** - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. If irritation persists, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

**SKIN CONTACT** - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water. If symptoms persist, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

**INGESTION** - If material is ingested, seek immediate medical attention. Do not induce vomiting. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Contact a poison control center, emergency room, or physician as further medical treatment will be necessary.

### Section 5 - Fire Fighting Measures

Flash Point: 17 C (63 F)

LEL: 1.00

UEL: 13.00

**EXTINGUISHING MEDIA:** Use carbon dioxide (CO<sub>2</sub>), "alcohol" foam, dry chemical

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Closed containers may explode or burst when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat.

**HAZARDOUS COMBUSTION PRODUCTS:** See section 10 for a list of hazardous decomposition products for this

mixture.

**FIRE FIGHTING:** Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

**FIRE FIGHTING EQUIPMENT:** Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

**SPILL AND LEAK PROCEDURES:** Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

**SMALL SPILLS:** Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

**LARGE SPILLS:** Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

## Section 7 - Handling and Storage

**HANDLING PRECAUTIONS:** Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 50 to 85 F (10 to 30 C).

**STORAGE:** Prevent from freezing. Do not store above 95 F (35 C).

Store only in original containers.

## Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Dimethyl Carbonate 616-38-6	Not Established	400 ppm STEL	Not Established
Methyl Normal Amyl Ketone 110-43-0	PEL 100 ppm - TWA VPEL 100 ppm - TWA	TLV 50 ppm - TWA TLV 233 mg/m3 - TWA	Not Established

**ENGINEERING:** Provide general dilution of local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

**VENTILATION:** Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108.

### PERSONAL PROTECTIVE EQUIPMENT

#### EYES:

Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

#### PROTECTIVE GLOVES:

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. If necessary, wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

#### RESPIRATORY PROTECTION:

Respiratory protection may not be needed if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. Where ventilation is inadequate, use a NIOSH/MSHA-approved, air-purifying respirator equipped with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

**CONTAMINATED EQUIPMENT:** Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

## Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

<b>Appearance</b> Red Liquid <b>Physical State</b> Liquid <b>Vapor Pressure</b> 23.9 hPa @ 21.1 C <b>Boiling Range</b> 90 to 149 °C	<b>Odor</b> Solvent odor <b>Vapor Density</b> Heavier than air <b>Evaporation Rate</b> Slower than ether <b>Specific Gravity (SG)</b> 1.245
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**Lbs VOC/Gallon Solids 2.3**

**Lbs VOC/Gallon Less Water 1.72  
and Exempt Solvent**

## Section 10 - Stability and Reactivity

**Stability:**

STABLE

**Components of this mixture are incompatible with the following materials:**

Strong oxidizing agents, strong acids

Strong oxidizing agents

**This mixture is likely to exhibit the following combustion products:**

Carbon Dioxide, Carbon Monoxide

Hazardous polymerization will not occur.

## Section 11 - Toxicological Information

**Component Toxicity**

110-43-0

Methyl Normal Amyl Ketone

Oral LD50: 1,600 mg/kg (Rat) Dermal LD50: 5,000 mg/kg (Rat) Inhalation LC50: 17 mg/L (Rat)

Toxicological information: The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 3 and 15 for details.

**Routes of Entry:**

Inhalation

Skin Contact

Eye Contact

Exposure to this material may affect the following organs:

Liver

**Effects of Overexposure**

**110-43-0**

**MAK**

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).

Eye Contact

May cause mild irritation. Symptoms include stinging tearing, and redness.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing larger amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommend exposure limits.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Skin Contact

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**1330-20-7**

**Xylene (mixed)**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

Eye Contact	May cause mild irritation. Symptoms include stinging, tearing, and redness.
Ingestion	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Inhalation	Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.
Skin Contact	Can cause skin irritation. Prolonged and repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of the skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use .

**616-38-6**

**Dimethyl Carbonate**

Eye Contact	May cause mild irritation. Symptoms include stinging, tearing, and redness.
Ingestion	Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.
Inhalation	Inhalation of mists or vapors may cause irritation to upper respiratory tract and mucous membranes. Inhalation of vapors can cause anesthetic effect leading to death in poorly ventilated areas.
Skin Contact	Exposure to liquid dimethyl ether may cause frostbite. If contact with the liquid is prolonged or widespread, the skin may absorb potentially harmful amounts of material.

**Carcinogenicity:** The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing) . See Section 15 for carcinogenicity assessment.

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None			N/A

<b>Section 12 - Ecological Information</b>
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**Component Ecotoxicity**

Dimethyl Carbonate

12.1 Toxicity  
no data available

12.2 Persistence and degradability  
no data available

12.3 Bioaccumulative potential  
no data available

12.4 Mobility in soil  
no data available

12.5 Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects  
no data available

Methyl Normal Amyl Ketone

12.1 Toxicity  
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) -  
126 - 137 mg/l - 96 h

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - > 90.1 mg/l -  
48 h  
other aquatic  
invertebrates  
semi-static test

Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (algae) -  
98.2 mg/l - 72 h  
(OECD Test Guideline 201)

12.2 Persistence and degradability  
Biodegradability aerobic - Exposure time 28 d  
Result: 69 % - Readily biodegradable  
(OECD Test Guideline 310)  
Ratio BOD/ThBOD 1.77 %

12.3 Bioaccumulative potential  
No data available

12.4 Mobility in soil  
No data available

12.5 Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects  
No data available

## Section 13 - Disposal Considerations

The provisions of Council Directive 91/689/EEC and subsequent Amendments and Decisions apply to wastes for the product as supplied.

Do not allow into drains or water courses.

Waste and emptied containers must be disposed of in accordance with:

- Control of Pollution Act of 1974,
- Special Waste Regulations 1996,
- Duty of Care Regulations 1992.

Waste should be recycled or disposed of through a licensed waste management facility .

## Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Paint	1263	II	3

## Section 15 - Regulatory Information

According to the Directive (1999/45/EC), relating to the classification, packaging and labelling of dangerous substances and preparations, the product is labelled as follows:

**State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** WARNING!

This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- None

**Carcinogenicity:**

**IARC** - No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH** - No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA** - No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** - No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

- Methyl Normal Amyl Ketone 110-43-0
- Dimethyl Carbonate 616-38-6

**Commonwealth of Massachusetts "Right to Know":** This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

- Dimethyl Carbonate 20 to 30 %

**New Jersey Worker and Community Right To Know Hazardous Substance List:** The following substances appear on the New Jersey Right To Know Hazardous Substance List.

- Methyl Normal Amyl Ketone 10 to 20 %
- Dimethyl Carbonate 20 to 30 %

**Commonwealth of Pennsylvania Worker and Community Right-To-Know Act:** This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

- 110-43-0
- 616-38-6

WHMIS Classification B2 Flammable Liquid / D2A Very Toxic Material  
- None

WHMIS Classification B2 Flammable Liquid / D2B Toxic Material  
- None

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
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**Toxic Substances Control Act (TSCA):** All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

**Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).** This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations, part 372.

## Section 16 - Other Information

### Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	F

#### HMIS & NFPA Hazard Rating

##### Legend

\* = Chronic Health Hazard

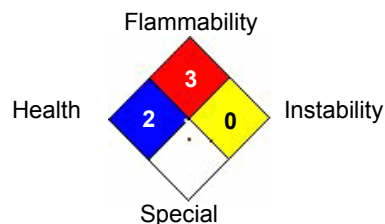
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

### National Fire Protection Association (NFPA)



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Reviewer Revision

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