SAFETY DATA SHEET

SECTION 1 - Chemical Product and Company Information

Product Name: PALLET MARKING PAINT Product Code: 48FORTY

Manufactured by:
Gemini Coatings
2300 Holloway Drive
El Reno, OK 73036
800-262-5710

24- Hour Emergency (Spill, Leak, Exposure or Accident):
INFOTRAC 800-535-5053
Outside USA, Call Collect 1-352-323-3500

24- Hour Emergency HAZMAT Response and MSDS Help:
EMI 800-510-8510

Product Use: A protective and/or decorative finish or accompanying product (reference label or product data sheet for more information).
Not recommended for: A protective and/or decorative finish or accompanying product (reference label or product data sheet for more information).

SECTION 2 - Hazards Identification

GHS Ratings:

Flammable gas	1	Flammable gas class 1
Gas under pressure	Compressed g	Entirely gaseous at -50°C
Flammable liquid	1	Flash point < 23°C and initial boiling point <= 35°C (95°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Skin sensitizer	1	Skin sensitizer
Mutagen	1B	Known to produce heritable mutations in human germ cellsSubcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
Carcinogen	1A	Known Human Carcinogen Based on human evidence
Reproductive toxin	1A	Based on human evidence
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ? 20.5 mm2/s at 40° C.

GHS Hazards

H220	Extremely flammable gas
H224	Extremely flammable liquid and vapour
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H340	May cause genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child

GHS Precautions

P201	Obtain special instructions before use.
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/mixers/equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing dust/fume/gas/mist/vapours/spray

P264	Wash any exposed skin thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P321	Specific treatment (see First Aid section on this label)
P331	Do NOT induce vomiting
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P377	Leaking gas fire – do not extinguish unless leak can be stopped safely
P381	Eliminate all ignition sources if safe to do so
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P337+P313	Get medical advice/attention
P370+P378	In case of fire: Use the NFPA Class B extinguisher for extinction
P403	Store in a well ventilated place
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P410+P403	Protect from sunlight. Store in a well ventilated place
P501	Do not flush to sewer, watershed or waterway. Dispose of product in accordance with applicable local, county, state and federal regulations.

Signal Word: Danger

SECTION 3 - Composition/Information on Ingredients			
Chemical Name / CAS No.	**OSHA Exposure Limits**	**ACGIH Exposure Limits**	**Other Exposure Limits**

Propane 74-98-6 17%	1000 ppm TWA; 1800 mg/m3 TWA	See Appendix F: Minimal Oxygen Content, explosion hazard	NIOSH: 1000 ppm TWA; 1800 mg/m3 TWA
TOLUENE 108-88-3 10% - 20%	200 ppm TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
ETHYL ACETATE 141-78-6 15%	400 ppm TWA; 1400 mg/m3 TWA	400 ppm TWA	NIOSH: 400 ppm TWA; 1400 mg/m3 TWA
ISOBUTYL ACETATE 110-19-0 15%	150 ppm TWA; 700 mg/m3 TWA	150 ppm STEL (listed under Butyl acetates, all isomers) 50 ppm TWA (listed under Butyl acetates, all isomers)	NIOSH: 150 ppm TWA; 700 mg/m3 TWA
Butane 106-97-8 8%		1000 ppm STEL (explosion hazard, listed under Butane, isomers)	NIOSH: 800 ppm TWA; 1900 mg/m3 TWA
Titanium dioxide 13463-67-7 5%	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	NIOSH: 2.4 mg/m3 TWA (CIB 63, fine); 0.3 mg/m3 TWA (CIB 63, ultrafine, including engineered nanoscale)
Nitrocellulose 9004-70-0 4%			
DOA PLASTICIZER 103-23-1 3%			
Ethyl alcohol 64-17-5 2%	1000 ppm TWA; 1900 mg/m3 TWA	1000 ppm STEL	NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA
Isopropyl alcohol 67-63-0 2%	400 ppm TWA; 980 mg/m3 TWA	400 ppm STEL 200 ppm TWA	NIOSH: 400 ppm TWA; 980 mg/m3 TWA 500 ppm STEL; 1225 mg/m3 STEL
Propylene glycol monomethyl ether acetate 108-65-6 1%			
2-BUTOXYETHANOL 111-76-2 0.9%	50 ppm TWA; 240 mg/m3 TWA	20 ppm TWA	NIOSH: 5 ppm TWA; 24 mg/m3 TWA

SECTION 4 - First Aid Measures

Inhalation:
Remove exposed individual to fresh air and assist breathing if necessary. Seek medical attention.
Eye Contact:
Flush eyes with lukewarm water for 15 minutes. Seek medical attention immediately.
Skin:
Remove contaminated clothing, wash area immediately with soap and water. See physician if irritation persists.
Ingestion:
Rinse mouth out immediately. Drink 1 or 2 glasses of water to dilute. DO NOT induce vomiting. Contact physician or poison control center immediately.

SECTION 5 - Fire Fighting Measures

Alcohol Foam, CO2, Dry Chemical
Do not puncture or incinerate container. Exposure to heat or prolonged exposure to sun may cause container to

burst. Do not expose to heat or store at temperatures above 120 degrees F. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, sparks, heaters, smoking, electrical motors or static discharge distant from handling pot.
Burning may produce oxides of nitrogen and carbon.
Clear fire area of unprotected personnel. Do not enter confined space without helmet, face shield, bunker coat, gloves, rubber boots and a positive pressure NIOSH-approved self-contained breathing apparatus. A water stream can scatter flames. A spray of water may be used to cool closed containers to prevent pressure buildup and possible auto ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

SECTION 6 - Accidental Release Measures

Stay upwind and away from spill or leak unless wearing appropriate protective equipment. Stop and/or contain discharge if it may be done safely. Keep all sources of ignition away. Ventilate area of spill. Use non-sparking tools for clean up. Cover with inert material to reduce fumes. Keep out of drains, sewer or waterways.

If large spill occurs, alert spill response teams. Contact fire authorities. Notify local health and pollution control agencies.

SECTION 7- Handling and Storage

Handling:
Personnel should avoid inhalation of vapors. Personal contact with the product should be avoided. Should contact be made, remove saturated clothing and flush affected skin areas with water. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazardous precautions given in thes sheet must be observed.

Storage:
Keep product containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. DO NOT SMOKE in or near storage areas.

SECTION 8 - Exposure Controls/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Propane 74-98-6	1000 ppm TWA; 1800 mg/m3 TWA	See Appendix F: Minimal Oxygen Content, explosion hazard	NIOSH: 1000 ppm TWA; 1800 mg/m3 TWA
TOLUENE 108-88-3	200 ppm TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
ETHYL ACETATE 141-78-6	400 ppm TWA; 1400 mg/m3 TWA	400 ppm TWA	NIOSH: 400 ppm TWA; 1400 mg/m3 TWA
ISOBUTYL ACETATE 110-19-0	150 ppm TWA; 700 mg/m3 TWA	150 ppm STEL (listed under Butyl acetates, all isomers) 50 ppm TWA (listed under Butyl acetates, all isomers)	NIOSH: 150 ppm TWA; 700 mg/m3 TWA
Butane 106-97-8		1000 ppm STEL (explosion hazard, listed under Butane, isomers)	NIOSH: 800 ppm TWA; 1900 mg/m3 TWA
Titanium dioxide 13463-67-7	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	NIOSH: 2.4 mg/m3 TWA (CIB 63, fine); 0.3 mg/m3 TWA (CIB 63, ultrafine, including engineered nanoscale)
Nitrocellulose 9004-70-0			
DOA PLASTICIZER 103-23-1			
Ethyl alcohol 64-17-5	1000 ppm TWA; 1900 mg/m3 TWA	1000 ppm STEL	NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA

Isopropyl alcohol 67-63-0	400 ppm TWA; 980 mg/m3 TWA	400 ppm STEL 200 ppm TWA	NIOSH: 400 ppm TWA; 980 mg/m3 TWA 500 ppm STEL; 1225 mg/m3 STEL
Propylene glycol monomethyl ether acetate 108-65-6			
2-BUTOXYETHANOL 111-76-2	50 ppm TWA; 240 mg/m3 TWA	20 ppm TWA	NIOSH: 5 ppm TWA; 24 mg/m3 TWA

Use local exhaust as required to control vapor concentrations.
Avoid prolonged or repeated breathing of vapors.

Respiratory Protection:
If exposure exceeds TLV or PELs, use NIOSH approved respirator to prevent overexposure.

Skin Protection:
Required for prolonged or repeated contact. Wear resistant gloves such as natural rubber, neoprene, buna N or nitrile. An apron should be worn to avoid skin contact.

Eye Protection:
Wear splash proof googles and face shield if there is a likelihood of contact with eyes.

Hygenic Practices
Wash hands thoroughly before eating or using the restroom. Remove contaminated clothing immediately and do not wear again until it has been properly laundered.

SECTION 9 - Physical and Chemical Properties

Vapor Density	Heavier Than Air	**Evaporation Rate**	Faster than Butyl Acetate
Boiling range:	34 - 3000°C	**Melting point:**	N/A
Freezing point:	N/A	**Flash point:**	-139°F,-95°C
Flammability:	N/A	**Explosive Limits:**	N/A
Autoignition temperature:	170°C	**Decomposition temperature:**	N/A
Relative Density:	N/A	**Vapor Pressure**	N/A
Odor threshold:	N/A	**pH:**	N/A
SPECIFIC GRAVITY	0.8125	**Solubility:**	N/A
Partition coefficient (n-octanol/water):	N/A	**Viscosity:**	N/A
Grams VOC less water:	N/A	**% VOLUME VOLATILE (VOC)**	88.3081
% WT. VOLATILE (VOC)	79.1023	**% Pig. by wt.**	6.6306
Lbs VOC/Gallon Solids	46.4712	**VOLATILE WT%**	79.3182
SOLIDS VOL%	11.5165	**DENSITY (Lb/Gal)**	6.7657
SPREAD @ 1 MIL	184.7244	**HAPS (lbs/gl)**	1.0755
Appearance	Sprayed Liquid Aerosol	**Odor**	N/A
Physical State	Liquid Aerosol	**Material VOC (g/l)**	641.3122
Coating VOC (g/l)	642.4392	**Material VOC (Lb/Gl)**	5.3519
Coating VOC (Lb/Gl)	5.3613		

SECTION 10 - Stability and Reactivity

Stability: Stable under normal conditions.

Materials to Avoid: Strong oxidizing agents, strong alkalines, strong mineral acids.

Conditions to avoid: high heat, sparks, flames, static discharge.

Hazardous Decomposition: Oxidation may produce carbon and nitrogen oxides.
Hazardous polymerization will not occur.

SECTION 11 - Toxicological Information

Mixture Toxicity

Inhalation Toxicity LC50: 75mg/L

Component Toxicity

108-88-3	TOLUENE Oral LD50: 2,600 mg/kg (Rat) Inhalation LC50: 13 mg/L (Rat)
141-78-6	ETHYL ACETATE Inhalation LC50: 4,000 ppm (Rat)
67-63-0	Isopropyl alcohol Oral LD50: 1,870 mg/kg (Rat) Dermal LD50: 4,059 mg/kg (Rabbit)
108-65-6	Propylene glycol monomethyl ether acetate Dermal LD50: 5 g/kg (Rabbit)
111-76-2	2-BUTOXYETHANOL Oral LD50: 470 mg/kg (Rat) Dermal LD50: 435 mg/kg (Rabbit) Inhalation LC50: 486 ppm

Primary Routes of Entry: Inhalation, Skin Contact, Eyes, Ingestion

Skin:
Skin contact can cause redness, dryness or rash. Prolonged contact can cause irritation, dry skin, cracks, and dermititis.

Ingestion:
Can cause vomiting, nausea, diarrhea, and gastrointestinal irritation.

Inhalation:
Excessive inhalation of vapors can cause nasal and repiratory irritation, dizziness, weakness, fatigue, nausea, headache possible unconsciousness and even asphyxiation. High vapor concentrations or porlonged breathing of lower concentrations may result in damage to the liver, kidneys, lungs and blood forming organs. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Eyes:
Can cause irritation, redness, tearing and blurred vision.

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).

CAS Number	Description	% Weight	Carcinogen Rating
106-97-8	Butane	8%	Butane: EU REACH: Present (C) (containing >=0.1% Butadiene)
13463-67-7	Titanium dioxide	5%	Titanium dioxide: NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed
64-17-5	Ethyl alcohol	2%	Ethyl alcohol: IARC: Human carcinogen OSHA: listed

SECTION 12 - Ecological Information

Ecological Information:
Uncontrolled release of the product may result in contamination of air, ground, waterways and/or sewers.

Component Ecotoxicity

TOLUENE	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through] (1 day old, EPA); LC50 96 h Pimephales promelas 12.6 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through] (EPA); LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static] (EPA); LC50 96 h Lepomis macrochirus 11.0 - 15.0 mg/L [static] (EPA); LC50 96 h Oryzias latipes 54 mg/L [static] (EPA); LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static] (EPA); LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static] (EPA) EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [Static] (EPA); EC50 48 h Daphnia magna 11.5 mg/L (IUCLID) EC50 96 h Pseudokirchneriella subcapitata >433 mg/L (IUCLID); EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static] (EPA)
ETHYL ACETATE	LC50 96 h Pimephales promelas 220 - 250 mg/L [flow-through] (EPA); LC50 96 h Oncorhynchus mykiss 484 mg/L [flow-through] (IUCLID); LC50 96 h Oncorhynchus mykiss 352 - 500 mg/L [semi-static] (EPA) EC50 48 h Daphnia magna 560 mg/L [Static] (EPA)
ISOBUTYL ACETATE	LC50 96 h Oryzias latipes 17 mg/L (ECHA)
DOA PLASTICIZER	LC50 96 h Lepomis macrochirus 0.48 - 0.85 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 0.48 - 0.85 mg/L [static] (EPA); LC50 96 h Pimephales promelas 0.48 - 0.85 mg/L [static] (EPA) EC50 48 h Daphnia magna >1.6 mg/L (IUCLID) EC50 72 h Desmodesmus subspicatus >500 mg/L (IUCLID)
Ethyl alcohol	LC50 96 h Oncorhynchus mykiss 12.0 - 16.0 mL/L [static] (EPA); LC50 96 h Pimephales promelas >100 mg/L [static] (EPA); LC50 96 h Pimephales promelas 13400 - 15100 mg/L [flow-through] (EPA) LC50 48 h Daphnia magna 9268 - 14221 mg/L (IUCLID); EC50 48 h Daphnia magna 2 mg/L [Static] (EPA)
Isopropyl alcohol	LC50 96 h Pimephales promelas 9640 mg/L [flow-through] (IUCLID); LC50 96 h Pimephales promelas 11130 mg/L [static] (IUCLID); LC50 96 h Lepomis macrochirus >1400000 µg/L (EPA) EC50 48 h Daphnia magna 13299 mg/L (IUCLID) EC50 96 h Desmodesmus subspicatus >1000 mg/L (IUCLID); EC50 72 h Desmodesmus subspicatus >1000 mg/L (IUCLID)
Propylene glycol monomethyl ether acetate	LC50 96 h Pimephales promelas 161 mg/L [static] (IUCLID) EC50 48 h Daphnia magna >500 mg/L (IUCLID)
2-BUTOXYETHANOL	LC50 96 h Lepomis macrochirus 1490 mg/L [static] (EPA); LC50 96 h Lepomis macrochirus 2950 mg/L (IUCLID) EC50 48 h Daphnia magna >1000 mg/L (EPA)

SECTION 13 - Disposal Considerations

Do not flush to sewer, watershed or waterway. Dispose of product in accordance with applicable local, county, state and federal regulations. See Section 8 for information on exposure control and necessary personal protective equipment.

SECTION 14 - Transportation Information

Ship according to the Department of Transportation (DOT) 49 CFR regulations.

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	AEROSOLS, FLAMMABLE	UN1950		2.1

Freight Class:

SECTION 15 - Regulatory Information

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):
This product contains the follosing listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

64-17-5 Ethyl alcohol
13463-67-7 Titanium dioxide
108-88-3 TOLUENE

The following ingredients are listed in the TSCA Section 8(b) Inventory (Hydrated forms of chemical substances are exempt from the inventory as mixtures; the anhydrous chemical substances, however, are reportable for the Inventory):

111-76-2 2-BUTOXYETHANOL
108-65-6 Propylene glycol monomethyl ether acetate
67-63-0 Isopropyl alcohol
64-17-5 Ethyl alcohol
103-23-1 DOA PLASTICIZER
9004-70-0 Nitrocellulose
13463-67-7 Titanium dioxide
106-97-8 Butane
110-19-0 ISOBUTYL ACETATE
141-78-6 ETHYL ACETATE
108-88-3 TOLUENE
74-98-6 Propane

US CAA Section 112 Hazardous Air Pollutants (HAPs) List

108-88-3 TOLUENE

US EPCRA (SARA Title III) Section 313 - Toxic Chemical:

67-63-0 Isopropyl alcohol
108-88-3 TOLUENE

Hazardous Material Information System (HMIS)

HMIS & NFPA Hazard Rating Legend
*** = Chronic Health Hazard**
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

SECTION 16 - Disclaimer

Date Prepared: 1/10/2023
Date revised: 2023-01-10 Reviewer Revision

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