# SAFETY DATA SHEET



### **GALVAPRIME DILUENT**

### Section 1. Identification

**Product identifier** : GALVAPRIME DILUENT

**Product code** : FVE160000XXX Other means of : Not available.

identification

**Product type** : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** 

Not applicable.

**Uses advised against** 

Not applicable.

: Berger Paints Singapore Pte Ltd Supplier's details

> 22 Benoi Sector, Singapore - 629854 Email: Berger@bergeronline.com.sg

Tele: +65 6801 7000 Fax: +65 6265 6356

**Emergency telephone** number (with hours of

operation)

: Tele: +65 9636 4852

### Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation

toxicity: 11%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.6%

GHS label elements, including precautionary statements

**Hazard pictograms** 





Signal word : Warning

**Hazard statements** : H226 - Flammable liquid and vapor.

H332 - Harmful if inhaled.

**Precautionary statements** 

**Prevention** : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P241 - Use explosion-proof electrical, ventilating or lighting equipment.

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

P261 - Avoid breathing vapor.

: P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Response

**Storage** : P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. **Disposal** 

: P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

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### Section 2. Hazards identification

Other hazards which do not : None known.

result in classification

### Section 3. Composition/information on ingredients

Substance/mixture Mixture Other means of

identification

Not available.

Ingredient name	%	CAS number
2-methylpropan-1-ol	≥75 - ≤90	78-83-1
Phosphoric acid	≤10	7664-38-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Chemical formula : Not applicable.

### Section 4. First aid measures

### **Description of necessary first aid measures**

**Eye contact** 

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention if irritation occurs.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen

tight clothing such as a collar, tie, belt or waistband.

: Flush contaminated skin with plenty of water. Remove contaminated clothing and Skin contact shoes. Get medical attention if symptoms occur. Wash clothing before reuse.

Clean shoes thoroughly before reuse.

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such

as a collar, tie, belt or waistband.

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

### Potential acute health effects

Ingestion

**Eye contact** : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled.

: No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Ingestion

#### Over-exposure signs/symptoms

**Eye contact** : No specific data. Inhalation : No specific data.

### Section 4. First aid measures

: No specific data. Skin contact Ingestion : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** 

No specific treatment.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Hazardous thermal** decomposition products : Decomposition products may include the following materials: carbon dioxide carbon monoxide

phosphorus oxides

**Special protective actions** for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective** equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

### Section 6. Accidental release measures

### **Small spill**

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

### Precautions for safe handling

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

# including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

### Occupational exposure limits

Ingredient name	Exposure limits
2-methylpropan-1-ol	Workplace Safety and Health Act (Singapore, 2/2006).
	PEL (long term): 50 ppm 8 hours. PEL (long term): 152 mg/m³ 8 hours.
Phosphoric acid	Workplace Safety and Health Act
	(Singapore, 2/2006).
	PEL (long term): 1 mg/m³ 8 hours. PEL (short term): 3 mg/m³ 15 minutes.

#### **Biological exposure indices**

No exposure indices known.

# Section 8. Exposure controls/personal protection

# Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### **Skin protection**

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### **Appearance**

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

PH : Not available.

Melting point/freezing point : Not available.

Boiling point, initial boiling : Not available.

point, and boiling range

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# Section 9. Physical and chemical properties and safety characteristics

Flash point Closed cup: 32°C (89.6°F)

**Flammability** : Not available. Lower and upper explosion limit/flammability limit

: Not available.

Vapor pressure

	V	Vapor Pressure at 20°C			Vapor pressure at 50°		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
water	17.5	2.3					
2-methylpropan-1-ol	<12.00102	<1.6	DIN EN 13016-2				
Phosphoric acid	0.03	0.004					

Relative vapor density Not available. **Relative density** : Not available.

**Density** : 0.85 g/cm³ [25°C (77°F)]

Solubility in water : Not available. Partition coefficient: n-: Not applicable.

octanol/water

**Auto-ignition temperature** 

Ingredient name	°C	°F	Method
2-methylpropan-1-ol	415	779	

**Decomposition temperature** : Not available. : Not available. **Viscosity** 

**Particle characteristics** 

Median particle size : Not applicable.

## Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

: Reactive or incompatible with the following materials: Incompatible materials

oxidizing materials

**Hazardous decomposition** 

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

**SADT** : Not available.

# Section 11. Toxicological information

### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	19200 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	2460 mg/kg	-
Phosphoric acid	LD50 Oral	Rat	1.25 g/kg	-

#### **Irritation/Corrosion**

Not available.

### **Sensitization**

Not available.

### **Mutagenicity**

Not available.

### **Carcinogenicity**

Not available.

### **Reproductive toxicity**

Not available.

### **Teratogenicity**

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### **Aspiration hazard**

Not available.

### Information on the likely

routes of exposure

: Not available.

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled.

Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

# Section 11. Toxicological information

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General: No known significant effects or critical hazards.Carcinogenicity: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.Reproductive toxicity: No known significant effects or critical hazards.

### **Numerical measures of toxicity**

### **Acute toxicity estimates**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
GALVAPRIME DILUENT	13369.0	N/A	N/A	19.2	N/A
2-methylpropan-1-ol	2460	3400	N/A	19.2	N/A
Phosphoric acid	1250	N/A	N/A	N/A	N/A

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
2-methylpropan-1-ol	Acute LC50 600 mg/l Marine water Acute LC50 1030000 µg/l Fresh water	Crustaceans - <i>Artemia salina</i> Daphnia - <i>Daphnia magna</i> - Neonate	48 hours 48 hours
Phosphoric acid	Acute LC50 1330000 µg/l Fresh water Chronic NOEC 4 mg/l Fresh water Acute LC50 89 mg/l Fresh water Acute LC50 60 ppm Fresh water	Fish - Oncorhynchus mykiss Daphnia - Daphnia magna Daphnia - Daphnia magna Fish - Lepomis macrochirus	96 hours 21 days 48 hours 96 hours

### Persistence/degradability

Not available.

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
2-methylpropan-1-ol	1	-	Low

### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

### Section 13. Disposal considerations

#### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

## **Section 14. Transport information**

	UN	IMDG	IATA	ADR/RID	ADN
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3	3	3
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.

### **Additional information**

ADR/RID : Tunnel code (D/E)

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according: Not available. to IMO instruments

# Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

**International regulations** 

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

**Montreal Protocol** 

Not listed.

**Stockholm Convention on Persistent Organic Pollutants** 

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

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## Section 15. Regulatory information

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### **Inventory list**

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

**Eurasian Economic Union** 

: Russian Federation inventory: All components are listed or exempted.

Japan

: Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted.

New Zealand: All components are listed or exempted.Philippines: All components are listed or exempted.Republic of Korea: All components are listed or exempted.Taiwan: All components are listed or exempted.Thailand: All components are listed or exempted.

Turkey: Not determined.

United States : All components are active or exempted.Viet Nam : All components are listed or exempted.

### Section 16. Other information

**History** 

Date of printing : 8/15/2024

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revision

Date of previous issue : 3/5/2021 Version : 2.03

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

### Procedure used to derive the classification

Classification	Justification
3 7	On basis of test data Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

#### **Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever 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 hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.