

**Safety Data Sheet (HazCom 2012)**  
**PA-2 Primer - PA2**

**Safety Data Sheet date: 1/8/2025, version 1**

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## 1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: PA-2 Primer

Other means of identification:

SDS code: PA2

Recommended use of the chemical and restrictions on use

Recommended use:

Industrial uses

Restrictions on use:

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Manufacturers:

Flamemaster Corp., 13576 Desmond Street, Pacoima, CA 91331 - USA CAGE Code: 14439

Distributors:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, www.flamemaster.com

Competent person responsible for the safety data sheet:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, www.flamemaster.com

Emergency phone number:


CHEMTEL: +1-813-248-0585 (International); 1-800-255-3924 (USA)


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## 2. HAZARD(S) IDENTIFICATION

Classification of the chemical


 Danger, Flam. Liq. 2, Highly flammable liquid and vapour.


 Warning, Eye Irrit. 2A, Causes serious eye irritation.

 Warning, Skin Sens. 1, May cause an allergic skin reaction.


 Warning, Muta. 2, Suspected of causing genetic defects.

 Danger, Repr. 1B, May damage fertility or the unborn child.

 Danger, STOT SE 1, Causes damage to organs.

 Danger, STOT RE 1, Causes damage to organs through prolonged or repeated exposure.

Aquatic Acute 2, Toxic to aquatic life.

 Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Label elements

Hazard pictograms:



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**Danger**

**Hazard statements:**

- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H341 Suspected of causing genetic defects.
- H360 May damage fertility or the unborn child.
- H370 Causes damage to organs.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H401 Toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

- 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/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/clothing and eye/face protection.
- P302+P352 IF ON SKIN: Wash with plenty of water/...
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/...
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P370+P378 In case of fire: Use Alcohol foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water spray/water fog to extinguish.
- P391 Collect spillage.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with applicable regulations.

**Special Provisions:**

None

Hazards not otherwise classified identified during the classification process:

None

Ingredient(s) with unknown acute toxicity:

None.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances

N.A.

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### Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 10% - < 12.5% Dibutyltin dilaurate

CAS: 77-58-7



A.3/2A Eye Irrit. 2A H319



A.4.2/1 Skin Sens. 1 H317



A.5/2 Muta. 2 H341



A.7/1B Repr. 1B H360



A.8/1 STOT SE 1 H370



A.9/1 STOT RE 1 H372



US-HAE/A1 Aquatic Acute 1 H400



US-HAE/C1 Aquatic Chronic 1 H410

>= 3% - < 5% tetraethyl silicate; ethyl silicate

REACH No.: 01-2119496195-28, Index number: 014-005-00-0, CAS: 78-10-4, EC: 201-083-8



B.6/3 Flam. Liq. 3 H226



A.3/2A Eye Irrit. 2A H319



A.8/3 STOT SE 3 H335



A.1/4/Inhal Acute Tox. 4 H332

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## 4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting. Obtain a medical examination.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

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Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No particular treatment.

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### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

In case of fire: Use Alcohol foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water spray/water fog to extinguish.

Unsuitable extinguishing media

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products:

None

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

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### 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Do not use on extensive surface areas in premises where there are occupants.

Don't use empty container before they have been cleaned.

Before making transfer operations, ensure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Avoid accumulating electrostatic charge.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

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Safety electric system.  
 Storage temperature:  
 Store at ambient temperature.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

Dibutyltin dilaurate - CAS: 77-58-7

- OEL Type: ACGIH - TWA: 0.1 mg/m<sup>3</sup>
- OEL Type: STEL - TWA: 0.2 mg/m<sup>3</sup>
- OEL Type: OSHA PEL - TWA: 0.1 mg/m<sup>3</sup>
- OEL Type: NIOSH REL - TWA: 0.1 mg/m<sup>3</sup>
- OEL Type: TWA - TWA: 0.1 mg/m<sup>3</sup>

tetraethyl silicate; ethyl silicate - CAS: 78-10-4

- OEL Type: EU - TWA(8h): 44 mg/m<sup>3</sup>, 5 ppm
- OEL Type: ACGIH - TWA(8h): 10 ppm - Notes: URT and eye irr, kidney dam
- OEL Type: National - TWA(8h): 44 mg/m<sup>3</sup>, 5 ppm - Notes: France INRS VLEI

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

tetraethyl silicate; ethyl silicate - CAS: 78-10-4

- Target: Fresh Water - Value: 0.192 mg/l
- Target: Marine water - Value: 0.0192 mg/l
- Target: Freshwater sediments - Value: 0.83 mg/kg
- Target: Marine water sediments - Value: 0.083 mg/kg
- Target: Soil - Value: 0.05 mg/kg
- Target: Sewage treatment plant - Value: 4000 mg/l
- Target: Water (intermittent discharge) - Value: 10 mg/l

Appropriate engineering controls:

None

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	Clear	--	--
Odour:	Sweetly Aromatic	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--

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Initial boiling point and boiling range:	258-312 F	--	--
Flash Point (°F):	70	--	--
Flash point (°C):	21	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	3.8	--	--
Relative density:	N.A.	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

**10. STABILITY AND REACTIVITY**

Reactivity

It may generate dangerous reactions (See subsections below)

Chemical stability

It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions

None

Conditions to avoid

Avoid accumulating electrostatic charge.

Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products

None.

**11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects

Toxicological information of the product:

PA-2 Primer

Acute toxicity

Not classified

Based on available data, the classification criteria are not met

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ATEmix - Inhalation (Vapours) 290.716 mg/l

Skin corrosion/irritation  
Not classified  
Based on available data, the classification criteria are not met

Serious eye damage/irritation  
The product is classified: Eye Irrit. 2A H319

Respiratory or skin sensitisation  
The product is classified: Skin Sens. 1 H317

Germ cell mutagenicity  
The product is classified: Muta. 2 H341

Carcinogenicity  
Not classified  
Based on available data, the classification criteria are not met

Reproductive toxicity  
The product is classified: Repr. 1B H360

STOT-single exposure  
The product is classified: STOT SE 1 H370

STOT-repeated exposure  
The product is classified: STOT RE 1 H372

Aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

Dibutyltin dilaurate - CAS: 77-58-7  
Acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg  
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

tetraethyl silicate; ethyl silicate - CAS: 78-10-4  
Acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat (Male, female) > 2500 mg/kg - Source: OECD 423  
Test: LD50 - Route: Oral - Species: Rat = 6270 mg/kg - Notes: RTECS  
Test: LC50 - Route: Inhalation - Species: Rat (male) = 10 mg/l - Duration: 4h - Source: OECD 403  
Test: LD50 - Route: Skin - Species: Rabbit = 5878 mg/kg - Notes: RTECS

Substance(s) listed on the NTP report on Carcinogens:  
None.

Substance(s) listed on the IARC Monographs:  
None.

Substance(s) listed as OSHA Carcinogen(s):  
None.

Substance(s) listed as NIOSH Carcinogen(s):  
None.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity  
Adopt good working practices, so that the product is not released into the environment.

PA-2 Primer  
The product is classified: Aquatic Acute 2 - H401; Aquatic Chronic 2 - H411

tetraethyl silicate; ethyl silicate - CAS: 78-10-4

a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Fish > 245 mg/l - Duration h: 96 - Notes: Reg (CE) n° 440/2008, annexe, C.1)

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Endpoint: EC50 - Species: Aquatic invertebrates > 75 mg/l - Duration h: 48 - Notes: OECD 202  
 Endpoint: EC50r - Species: Algae > 100 mg/l - Duration h: 72 - Notes: OECD 201  
 Endpoint: EC50 - Species: bacteria > 100 mg/l - Duration h: 3 - Notes: OECD 209  
 Persistence and degradability  
 tetraethyl silicate; ethyl silicate - CAS: 78-10-4  
 Biodegradability: Readily biodegradable - %: 98% - Notes: (Dir 67/548/CEE, Annexe V, C.4.A.)  
 Bioaccumulative potential  
 N.A.  
 Mobility in soil  
 N.A.  
 Other adverse effects  
 No harmful effects expected.

**13. DISPOSAL CONSIDERATIONS**

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

**14. TRANSPORT INFORMATION**



UN number

ADR-UN Number: 1263  
 DOT number: UN1263  
 IATA-UN Number: 1263  
 IMDG-UN Number: 1263

UN proper shipping name

ADR-Shipping Name: PAINT RELATED MATERIAL  
 DOT-Shipping Name: Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base or Paint related material including paint thinning, drying, removing, or reducing compound

IATA-Shipping Name: PAINT RELATED MATERIAL  
 IMDG-Shipping Name: PAINT RELATED MATERIAL

Transport hazard class(es)

ADR-Class: 3  
 DOT Hazard Class: 3  
 ADR - Hazard identification number: 33  
 IATA-Class: 3  
 IATA-Label: 3  
 IMDG-Class: 3

Packing group

ADR-Packing Group: II  
 DOT Packing group: II  
 IATA-Packing group: II  
 IMDG-Packing group: II

Environmental hazards

ADR-Environmental Pollutant: Yes  
 IMDG-Marine pollutant: Yes



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Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)  
N.A.

Special precautions

DOT Special provisions: 149, 367, B52, B131, IB2, T4, TP1, TP8, TP28  
ADR-Subsidiary hazards: -  
ADR-S.P.: 163 367 640D 650  
ADR-Transport category (Tunnel restriction code): 2 (D/E)  
IATA-Passenger Aircraft: 353  
IATA-Subsidiary hazards: -  
IATA-Cargo Aircraft: 364  
IATA-S.P.: A3 A72 A192  
IATA-ERG: 3L  
IMDG-EmS: F-E , S-E  
IMDG-Subsidiary hazards: -  
IMDG-Stowage and handling: Category B  
IMDG-Segregation: -  
Q.L.: 5L  
Q.E.: E2

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**15. REGULATORY INFORMATION**

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory: All the components of this product are listed as active on or are exempt from the TSCA Inventory..

TSCA sections for substances listed in section 3:

Dibutyltin dilaurate is listed in TSCA Section 8b  
tetraethyl silicate; ethyl silicate is listed in TSCA Section 8b, Section 8a - PAIR.

SARA - Superfund Amendments and Reauthorization Act

Section 302 Extremely Hazardous Substances: no substances listed.  
Section 304 Hazardous substances: no substances listed.  
Section 313 Toxic chemical list: no substances listed.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

No substances listed.

CAA - Clean Air Act

CAA listed substances:  
None.

CWA - Clean Water Act

CWA listed substances:  
None.

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:  
None.

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:  
tetraethyl silicate; ethyl silicate.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

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tetraethyl silicate; ethyl silicate.  
Pennsylvania Right to know  
Substance(s) listed under Pennsylvania Right to know:  
tetraethyl silicate; ethyl silicate.

The following substance(s) in this product has/have an identification by CAS number either in countries not affected by the REACH regulation or in regulations not yet updated to reflect the new naming convention for hydrocarbon solvents:

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**16. OTHER INFORMATION**

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H341 Suspected of causing genetic defects.  
H360 May damage fertility or the unborn child.  
H370 Causes damage to organs.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H226 Flammable liquid and vapour.  
H335 May cause respiratory irritation.  
H332 Harmful if inhaled.

According to TSCA section 3(2)(B)(i) : a hydrated form of a chemical substance is considered a mixture of the corresponding anhydrous form and water.

Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

This Safety Data Sheet cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
HMIS: Hazardous Materials Identification System  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.

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KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
NFPA: National Fire Protection Association  
NIOSH: National Institute for Occupational Safety and Health  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PNEC: Predicted No Effect Concentration.  
RID: Regulation Concerning the International Transport of Dangerous Goods  
by Rail.

TOTAL  
VOC'S  
(TVOC) /  
NONEXEMPT  
VOC'S  
(CVOC):  
Using  
California  
South Coast  
Air Quality  
Management  
District  
(SCAQMD)  
Rule 1143.

STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWA: Time-weighted average

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