

POSCO Inc.
310 Ballardvale Street
Wilmington, MA 01887

HEALTH		2
FLAMMABILITY		1
REACTIVITY		0
PPE		B



1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: PSAGEG

Product Name: PLATE STOR-A-G-E

Manufacturer Information

Company Name: Printers Oil Supply Company Inc.

Phone Number: (978)658-5290

Emergency Contact: Chemtrec (800)424-9300

Web site address: www.poscoinc.com

Email address: customerservice@poscoinc.com

2. HAZARDS IDENTIFICATION

GHS Classification	Placard	Key word	GHS hazard phrase
Skin Corrosion/Irritation, Category 3	none	Warning	Causes mild skin irritation
Carcinogenicity, Category 2	Health hazard	Warning	Suspected of causing cancer
Germ Cell Mutagenicity, Category 2	Health hazard	Warning	Suspected of causing genetic defects
Aspiration Toxicity, Category 2	Health hazard	Warning	May be harmful if swallowed and enters airways.

GHS Hazard Phrases

Causes mild skin irritation.

Suspected of causing cancer.

Suspected of causing genetic defects.

May be harmful if swallowed and enters airways.

GHS Precaution Phrases

In case of inadequate ventilation wear respiratory protection.

Use personal protective equipment as required.

Avoid release to the environment.

Do not get in eyes, on skin, or on clothing.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

GHS Response Phrases

If skin irritation occurs, get medical advice/attention.

IF exposed or concerned: Get medical attention/advice.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

GHS Storage and Disposal Phrases

Store locked up.

Potential Health Effects (Acute and Chronic)

Prolonged or repeated eye contact may cause conjunctivitis. Workers chronically exposed to sulfuric acid mists may show various lesions of the skin, tracheobronchitis, stomatitis, conjunctivitis, or gastritis.

Skin sensitization to acetic acid is rare, but has occurred.

Prolonged or repeated inhalation may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis.

Occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to humans. Acetic acid can cause occupational asthma. One case of a delayed asthmatic response to glacial acetic acid has been reported in a person with bronchial asthma.

Inhalation

Causes respiratory tract irritation. May cause narcotic effects in high concentration. May cause drowsiness, unconsciousness, and central nervous system depression. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. Has been reported as a possible etiological agent in the development of aplastic anemia. Irritation may lead to chemical pneumonitis and pulmonary edema. Inhalation overexposure may lead to central nervous system depression, producing effects such as dizziness, headache, confusion, incoordination, nausea, weakness, and loss of consciousness. Reversible liver and kidney damage has been reported in cases of severe xylene exposure. Industrial fatalities due to gross inhalation exposure have been described. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Exposure may impair lung function and cause mucostasis (reduced mucous clearance). Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Exposure may lead to bronchitis, pharyngitis, and dental erosion. May be absorbed through the lungs.

Skin Contact

May cause skin irritation. Exposure may cause dermatitis and sensitization. May cause cyanosis of the extremities. Xylene contact causes defatting of the skin with irritation, dryness, and cracking. Blistering may occur, particularly if exposure to concentrated xylene is prolonged and the exposed area of skin is occluded. o-Xylene liquid or vapor can be absorbed through the skin, but not as readily as when inhaled or ingested. Skin absorption has been reported to be slow and significant harmful effects are not expected by this route. There is one case report of a person developing an allergic skin reaction (contact urticaria) following exposure to xylene (unspecified composition) vapor. The person subsequently tested positive in a patch test. No information was provided regarding previous history of allergies. The severity of injury depends on the concentration of the solution and the duration of exposure. Contact with the skin may cause blackening and hyperkeratosis of the skin of the hands.

Eye Contact

Splashes of xylene in human eyes generally cause transient superficial injury. The liquid is probably a mild irritant, based on animal information for mixed xylene isomers.

Ingestion

Aspiration hazard. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. Harmful or fatal if swallowed. Ingestion of large amounts may cause central nervous system depression. May cause irritation of the digestive tract. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause severe and

PLATE STOR-A-G-E

permanent damage to the digestive tract. Harmful if swallowed. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause polyuria, oliguria (excretion of a diminished amount of urine in relation to the fluid intake) and anuria (complete suppression of urination). Rapidly absorbed from the gastrointestinal tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Chemical Name)	CAS #	Concentration	Formula
1. Stoddard solvent	8052-41-3	<20 %	C8H15BrO2
2. m-Xylene	108-38-3	<20 %	C8H10
3. Sulfuric acid	7664-93-9	<20 %	H2SO4
4. Ethanol, 2-Amino-	141-43-5	<20 %	H2NCH2CH2OH
5. Acetic acid	64-19-7	<20 %	C2H4O2
6. Benzene, Trimethyl-	25551-13-7	<20 %	C9H12

4. FIRST AID MEASURES

Emergency and First Aid Procedures

In Case of Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. Possible aspiration hazard.

In Case of Skin Contact

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical aid if irritation develops and persists.

In Case of Eye Contact

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

In Case of Ingestion

Never give anything by mouth to an unconscious person. Possible aspiration hazard. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs naturally, have victim lean forward. If victim is fully conscious, give a cupful of water. Rinse mouth with water.

Note to Physician

Treat symptomatically and supportively. Monitor arterial blood gases, chest x-ray, and pulmonary function tests if respiratory tract irritation or respiratory depression is evident. Treat dermal irritation or burns with standard topical therapy. Effects may be delayed. Do NOT use sodium bicarbonate in an attempt to neutralize the acid. Consult a physician. Show this safety data sheet to the doctor in attendance. Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance.

Signs and Symptoms Of Exposure

No data available.

5. FIRE FIGHTING MEASURES

Flash Pt: > 200.00 F (93.3 C) Method Used: Estimate

Explosive Limits: LEL: 1.0 UEL: 6.0

Autoignition Pt: No data available.

Fire Fighting Instructions

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn. Possible aspiration hazard. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back.

Use water spray to keep fire-exposed containers cool. Vapors can spread along the ground and collect in low or confined areas. This liquid floats on water and may travel to a source of ignition and spread fire. Runoff from fire control or dilution water may cause pollution. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air.

Flammable Properties and Hazards

No data available.

Suitable Extinguishing Media

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Water may be ineffective. This material is lighter than water and insoluble in water. The fire could easily be spread by the use of water in an area where the water cannot be contained. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out. Use extinguishing media appropriate to surrounding fire conditions.

Unsuitable Extinguishing Media

No data available.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately. Remove all sources of ignition. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces. U.S. regulations require reporting spills and releases to soil, water and air in excess of reportable quantities. If possible, try to contain floating material.

Personal precautions.

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Do not let product enter drains.

Methods for cleaning up.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Wash area with soap and water. Control runoff and isolate discharged material for proper disposal.

7. HANDLING AND STORAGE

Hazard Label Information:

In case of inadequate inhalation ventilation wear respiratory protection. Use personal protective equipment as required. Avoid release into the environment. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Precautions To Be Taken in Handling

Wash thoroughly after handling. Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Avoid breathing dust, mist, or vapor. Do not get in eyes, on skin, or on clothing.

Precautions To Be Taken in Storing

Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep from contact with oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TWA	Other Limits
1. Stoddard solvent	8052-41-3	PEL: 500 ppm	TLV: 100 ppm	No data.
2. m-Xylene	108-38-3	PEL: 100 ppm	TLV: 100 ppm STEL: 150 ppm	No data.
3. Sulfuric acid	7664-93-9	PEL: 1 mg/m3	TLV: (1 mg/m3) STEL: (3 mg/m3)	No data.
4. Ethanol, 2-Amino-	141-43-5	PEL: 3 ppm	TLV: 3 ppm STEL: 6 ppm	No data.
5. Acetic acid	64-19-7	PEL: 10 ppm	TLV: 10 ppm STEL: 15 ppm	No data.
6. Benzene, Trimethyl-	25551-13-7	No data.	TLV: 25 ppm	No data.

Protective Equipment Summary - Hazard Label Information:

Eye wash station in work area Safety Glasses and Protective Gloves Wash and dry hands.

Respiratory Equipment (Specify Type)

Respirator protection is not normally required. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Eye Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves

Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing

Wear appropriate protective clothing to prevent skin exposure. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Engineering Controls (Ventilation etc.)

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Work/Hygienic/Maintenance Practices

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid
Melting Point:	No data.
Boiling Point:	> 212.00 F (100.0 C)
Autoignition Pt:	No data.
Flash Pt:	> 200.00 F (93.3 C) Method Used: Estimate
Explosive Limits:	LEL: 1.0 UEL: 6.0
Specific Gravity (Water = 1):	1.02
Vapor Pressure (vs. Air or mm Hg):	<3.0
Vapor Density (vs. Air = 1):	>air
Evaporation Rate:	>.1 (BuAC=1)
Solubility in Water:	>80%
Percent Volatile:	> 80.0 % by volume.
VOC / Volume:	1.8100 LB/GA
pH:	2.8
Appearance and Odor	Tan emulsion. Mild vinegar-like odor.

10. STABILITY AND REACTIVITY

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability	Incompatible materials, ignition sources, High temperatures, Excess heat, Exposure to moisture. freezing temperatures, oxides of sulfur; oxides of carbon; oxides of nitrogen; Ammonia.
Incompatibility - Materials To Avoid	Strong oxidizing agents, Nitric acid, Reducing agents, Bases, acrylonitrile, chlorates, Finely powdered metals, nitrates, perchlorates, permanganates, epichlorohydrin, aniline, carbides, fulminates, picrates, Organic materials, iron, Copper, chlorine trifluoride, acetaldehyde, chlorosulfonic acid, oleum, bromine pentafluoride, Perchloric acid, potassium tert-butoxide, ethyleneimine, 2-aminoethanol, ethylene diamine, phosphorus trichloride, phosphorus isocyanate.
Hazardous Decomposition Or Byproducts	Carbon monoxide, irritating and toxic fumes and gases, oxides of sulfur, Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx).
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information	Epidemiology: No data available. Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: Epidemiological studies involving petroleum refinery workers indicate persons with routine exposure to petroleum or one of its constituents may be at an increased risk to the development of benign neoplasms, digestive tract cancer, and skin cancer.
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Teratogenicity: No information available. No information found.

Carcinogenicity/Other Information

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 8052-41-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 108-38-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7664-93-9: ACGIH: A2 - Suspected Human Carcinogen.

California: carcinogen, initial date 3/14/03 (listed as Strong inorganic acid mists containing sulfur. NTP: Known carcinogen (listed as Strong inorganic acid mists containing s).

CAS# 64-19-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Stoddard solvent	8052-41-3	n.a.	n.a.	n.a.	n.a.
2. m-Xylene	108-38-3	n.a.	n.a.	A4	n.a.
3. Sulfuric acid	7664-93-9	Known	n.a.	A2	n.a.
4. Ethanol, 2-Amino-	141-43-5	n.a.	n.a.	n.a.	n.a.
5. Acetic acid	64-19-7	n.a.	n.a.	n.a.	n.a.
6. Benzene, Trimethyl-	25551-13-7	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information

Environmental: In air, xylenes degrade by reacting with photochemically produced hydroxyl radicals. In soil it will volatilize and leach into groundwater. Little bioconcentration is expected.

Physical: ATMOSPHERIC FATE: According to a model of gas/particle partitioning of semivolatile organic compounds in the atmosphere, xylene, which has an experimental vapor pressure of 7.99 mm Hg at 25 deg C, will exist solely as a vapor in the ambient atmosphere. Vapor-phase xylene is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the atmospheric lifetime of xylene is about 14-26 hours. Ambient levels of xylene are detected in the atmosphere due to large emissions of this compound.

Ecotoxicity: Evaporation from dry surfaces is likely to occur. When spilled on soil, the liquid will spread on the surface and penetrate into the soil at a rate dependent on the soil type and its water content. Acetic acid shows no potential for biological accumulation or food chain contamination.

If released to the atmosphere, it is degraded in the vapor-phase by reaction with photochemically produced hydroxyl radicals (estimated typical half-life of 26.7 days). It occurs in atmospheric particulate matter in acetate form and physical removal from air can occur via wet and dry deposition.

Physical: Natural waters will neutralize dilute solutions to acetate salts.

Other: No information available.

Results of PBT and vPvB assessment

No data available.

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.

Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed. Product.

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name

Not Regulated by DOT.

15. REGULATORY INFORMATION

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Stoddard solvent	8052-41-3	No	No	No	No
2. m-Xylene	108-38-3	No	Yes 1000 LB	Yes	No
3. Sulfuric acid	7664-93-9	Yes 1000 LB	Yes 1000 LB	Yes	No
4. Ethanol, 2-Amino-	141-43-5	No	No	No	No
5. Acetic acid	64-19-7	No	Yes 5000 LB	No	No
6. Benzene, Trimethyl-	25551-13-7	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	MA Oil/HazMat
1. Stoddard solvent	8052-41-3	No
2. m-Xylene	108-38-3	Yes
3. Sulfuric acid	7664-93-9	Yes
4. Ethanol, 2-Amino-	141-43-5	Yes
5. Acetic acid	64-19-7	Yes
6. Benzene, Trimethyl-	25551-13-7	No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302:	EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304:	EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Sec.313:	EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
Sec.110:	EPA SARA 110 Superfund Site Priority Contaminant List

Other Important Lists:

International Regulatory Lists:



WARNING: This product can expose you to chemicals including toluene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- ☒ Yes ☐ No Acute (immediate) Health Hazard
☒ Yes ☐ No Chronic (delayed) Health Hazard
☒ Yes ☐ No Fire Hazard
☒ Yes ☐ No Sudden Release of Pressure Hazard
☐ Yes ☒ No Reactive Hazard

16. OTHER INFORMATION

Company Policy or Disclaimer

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

Information contained herein is believed to be accurate as of the issue date. However, no Warranty of Merchantability, Fitness for any purpose, or any other warranty is expressed or to be implied regarding the accuracy or completeness of this information, or the product, or hazards relating to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk for his use thereof.

N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required