SAFETY DATA SHEET

1. Identification

Product Name: PS-2P / KK #345
Product Code: B13280
SDS Date: 8/26/2019
Use: Industrial. This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

Chemisphere Corporation
2101 Clifton Ave
St. Louis, MO 63139

General Information: 314-644-1300
CHEMTREC: 800-424-9300

2. Hazard(s) identification

GHSClassification

Flammable liquids (Category 3) H226,
Serious eye damage (Category 1) H318,
Skin corrosion (Category 1A) H314
Specific target organ toxicity - repeated exposure
Inhalation (Category 2) Central nervous system H373,
Specific target organ toxicity - repeated exposure
Oral (Category 2) Liver, Blood H373,
Specific target organ toxicity - single exposure (Category 3) Respiratory system Central nervous system H335 H336,
Carcinogenicity (Category 1B) H350,
Germ cell mutagenicity (Category 1B) H340,
Reproductive toxicity (Category 2) H361

Pictogram

Signalword Danger

HazardStatement

Flammable liquid and vapor.
Causes serious eye damage.
Causes severe skin burns and eye damage.
May cause damage to organs through prolonged or repeated exposure.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause cancer.
May cause genetic defects.
Suspected of damaging fertility or the unborn child.

Precautionary

Do not breathe mist/vapors/spray. Do not handle until all safety precautions have been read and understood. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces-no smoking. Keep container tightly closed. Obtain special instructions before use. Take precautionary measure against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Get medical advice/attention if you feel unwell. If exposed or concerned: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin (or hair): Take off immediately all contaminated clothing and wash before use. Rinse skin with water shower. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor. In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified: Not available

3. Composition/information on ingredients

Name	CAS	Concentration
Acetic Acid	64-19-7	1-20
Methylene Chloride	75-09-2	50-100
Toluene	108-88-3	1-20
Formic Acid	64-18-6	1-20

4. First-aid measures

General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If Inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In Case of Skin Contact	Wash off with soap and plenty of water. Consult a physician.
In Case of Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If Swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indications of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures

Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special Hazards	Carbon oxides, Hydrogen chloride gas
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

Further Information No data available

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

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

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. Handling and storage

Safe Handling Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Safe Storage Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully
resealed and kept upright to prevent leakage.

8. Exposure controls/personal protection

Name			CAS
Acetic Acid			64-19-7
OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
10 ppm	No data available	10 ppm	15 ppm
Methylene Chloride			75-09-2
OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
25 ppm	125 ppm	50 ppm	Not Available
Toluene			108-88-3
OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
100 ppm	150 ppm	20 ppm	Not Available
Formic Acid			64-18-6
OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
5 ppm	Not Available	5 ppm	10 ppm

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

Eye/Face Protection Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection Handle with fluorinated rubber gloves. Gloves must be inspected prior to use. Use proper

	glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. Physical and chemical properties

Appearance	Methylene Chloride	Liquid
Odor	Methylene Chloride	No data available
Odor Threshold	Methylene Chloride	No data available
pH	Methylene Chloride	No data available
Melting/Freezing Point	Methylene Chloride	-97.0 °C (-142.6 °F)
Initial Boiling Point/Range	Methylene Chloride	40.0 °C (104.0 °F)
Flash Point	Methylene Chloride	No data available
Evaporation Rate	Methylene Chloride	0.71
Flammability	Methylene Chloride	No data available
Upper Explosion Limit	Methylene Chloride	19%
Lower Explosion Limit	Methylene Chloride	12%
Vapor Pressure	Methylene Chloride	470.9 hPa (353.2 mmHg) at 20.0 °C (68.0 °F)
Vapor Density	Methylene Chloride	2.93 - (Air = 1.0)
Relative Density	Methylene Chloride	1.32 g/cm3
Water Solubility	Methylene Chloride	slightly soluble
Partition Coefficient	Methylene Chloride	log Pow: 1.25
Auto Ignition Temperature	Methylene Chloride	556.1 °C (1,033.0 °F) 662.0 °C (1,223.6 °F)
Decomposition Temperature	Methylene Chloride	No data available

Viscosity	Methylene Chloride	No data available

10. Stability and reactivity

Reactivity No data available

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions No data available

Conditions to Avoid Heat, flames and sparks. Exposure to sunlight.

Incompatible materials Alkali metals, Aluminum, Strong oxidizing agents, Bases, Amines, Magnesium, Strong acids and strong bases, Vinyl compounds

Hazardous Decomposition Products No data available

11. Toxicological information

Name	**CAS**
Acetic Acid	64-19-7

LD50 Oral - Rat - 3,310 mg/kg

LC50 Inhalation - Mouse - 1 h - 5620 ppm

LD50 Dermal - Rabbit - 1,112 mg/kg

Skin corrosion/irritation Result: Causes severe burns.

Serious eye damage/eye irritation Result: Corrosive to eyes

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity Not identified as probable, possible or confirmed human carcinogen by IARC, NTP, ACGIH, or OSHA

Reproductive No data available

Additional information Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Ingestion or inhalation of concentrated acetic acid causes damage to tissues of the respiratory and digestive tracts. Symptoms include: hematemesis, bloody diarrhea, edema and/or perforation of the esophagus and pylorus, pancreatitis, hematuria, anuria, uremia, albuminuria, hemolysis, convulsions, bronchitis, pulmonary edema, pneumonia, cardiovascular collapse, shock, and death. Direct contact or exposure to high concentrations of vapor with skin or eyes can cause: erythema, blisters, tissue destruction with slow healing, skin blackening, hyperkeratosis, fissures, corneal erosion, opacification, iritis, conjunctivitis, and possible blindness.,

Name	CAS
Methylene Chloride	75-09-2

LD50 Oral - Rat - > 2,000 mg/kg

LC50 Inhalation - Rat - 52,000 mg/m3

LD50 Dermal - Rat - > 2,000 mg/kg

Skin corrosion/irritation Result: Irritating to skin. - 24 h

Serious eye damage/eye irritation Result: Irritating to eyes. - 24 h

Respiratory or skin sensitization No data available

Germ cell mutagenicity Rat
DNA damage

Carcinogenicity IARC: 2B - Group 2B: Possibly carcinogenic to humans (Methylene chloride)
NTP: Reasonably anticipated to be a human carcinogen (Methylene chloride)
OSHA: OSHA specifically regulated carcinogen (Methylene chloride)

Reproductive No data available

Additional information Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood., Acts as a simple asphyxiant by displacing air., anesthetic effects, Difficulty in breathing, Headache, Dizziness, Prolonged or repeated contact with skin may cause:, defatting, Dermatitis, Contact with eyes can cause:, Redness, Blurred vision, Provokes tears., Effects due to ingestion may include:, Gastrointestinal discomfort, Central nervous system depression, Paresthesia., Drowsiness, Convulsions, Conjunctivitis., Pulmonary edema. Effects may be delayed., Irregular breathing., Stomach/intestinal disorders, Nausea, Vomiting, Increased liver enzymes., Weakness, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material., Abdominal pain

Name	CAS
Toluene	108-88-3

LD50 Oral - Rat - > 5,580 mg/kg

LC50 Inhalation - Rat - 4 h - 12,500 - 28,800 mg/m3

LD50 Dermal - Rabbit - 12,196 mg/kg

Skin corrosion/irritation Result: Skin irritation - 24 h

Serious eye damage/eye irritation Result: No eye irritation

Respiratory or skin sensitization No data available

Germ cell mutagenicity Rat - Liver, DNA damage

Carcinogenicity IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Toluene)

Reproductive Experiments have shown reproductive toxicity effects in male and female laboratory animals.

Additional information Lung irritation, chest pain, pulmonary edema, Inhalation studies on toluene have demonstrated the development of
inflammatory and ulcerous lesions of the penis, prepuce, and scrotum in animals., Central nervous system

Name	CAS
Formic Acid	64-18-6

LD50 Oral - Rat - 730 mg/kg

LC50 Inhalation - Rat - 4 h - 7.4 mg/l

Dermal: No data available

Skin corrosion/irritation Result: Severe skin irritation

Serious eye damage/eye irritation Result: Severe eye irritation

Respiratory or skin sensitization Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity No data available

Carcinogenicity Not identified as probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA

Reproductive No data available

Additional information Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

12. Ecological information

Name	CAS	Toxicity
Acetic Acid	64-19-7	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1,000 mg/l - 96 h Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - > 300.82 mg/l - 48 h
Methylene Chloride	75-09-2	LC50 - Pimephales promelas (fathead minnow) - 193.00 mg/l - 96 h NOEC - Cyprinodon variegatus (sheepshead minnow) - 130 mg/l - 96 h EC50 - Daphnia magna (Water flea) - 1,682.00 mg/l - 48 h
Toluene	108-88-3	LC50 - Oncorhynchus mykiss (rainbow trout) - 7.63 mg/l - 96 h, NOEC - Pimephales promelas (fathead minnow) - 5.44 mg/l - 7 d, EC50 - Daphnia magna (Water flea) - 8.00 mg/l - 24 h, Immobilization EC50 - Daphnia magna (Water flea) - 6 mg/l - 48 h, EC50 - Chlorella vulgaris (Fresh water algae) - 245.00 mg/l - 24 h, EC50 - Pseudokirchneriella subcapitata (green algae) - 10.00 mg/l - 24 h
Formic Acid	64-18-6	LC50 - Leuciscus idus (Golden orfe) - 46 - 100 mg/l - 96 h, EC50 - Daphnia magna (Water flea) - 34.2 mg/l - 48 h, Pseudomonas putida - 46.7 mg/l - 17 h

13. Disposal considerations

Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

Proper Shipping Name	Corrosive Liquids, Toxic, n.o.s., (Formic Acid, Dichloromethane)
Hazard Class	8, (6.1)
Identification Number	UN2922
Packing Group	II
Label	Corrosive, Toxic

15. Regulatory information

Name	CAS
Acetic Acid	64-19-7
SARA 302/304	No components were identified
SARA 313	No components were identified
CERCLA	RQ = 5,000 lbs
SARA 311/312	No components were identified
PROP 65	No components were identified

Name	CAS
Methylene Chloride	75-09-2
SARA 302/304	No components were identified
SARA 313	313
CERCLA SARA	RQ=1000 lbs
311/312 PROP 65	Acute Health Hazard, Chronic Health Hazard Cancer Hazard
TSCA	This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA 3(13)) for consumer paint or coating removal.

Name	CAS
Toluene	108-88-3
SARA 302/304	No components were identified
SARA 313	313
CERCLA	RQ=1,000 lbs
SARA 311/312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
PROP 65	Developmental Hazard

Name	CAS
Formic Acid	64-18-6
SARA 302/304	No components were identified
SARA 313	313
CERCLA	RQ=5,000 lbs
SARA 311/312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
PROP 65	No components were identified

16. Other information, including date of preparation or last revision

SDS Date: 8/26/2019

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof. Chemisphere, however, makes no representation as to the completeness or accuracy thereof, and information is supplied upon the express condition that the persons receiving the information will be required to make their own determination as to its suitability for their purposes prior to use. In no event will Chemisphere be responsible for any damages of any nature whatsoever resulting from the use of, reliance upon, or the misuse of this information. User assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE, ARE MADE BY CHEMISPHERE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS. The information as supplied herein is simply to be informative and intended solely to alert the user of the substance which is the subject matter of this SDS. The ultimate compliance with federal, state or local regulations concerning the use of this compound, or compliance with respect to product liability, rests solely upon the purchaser thereof. This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.