

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

SECTION 1 - IDENTIFICATION

1.1 Product Identifier

Product Name : Per-Fix™ Black for Polypropylene
Manufacturer Product Number : 7500AAA, 7500AA, 7500A, 7500B, 7205BLK

1.2 Other Means of Identification

Other Identifiers : Flaw Repair

1.3 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended Use : Touch-up coating for molded plastic parts.
Restrictions on Use : None Identified

1.4 Supplier Details

	Manufacturer Details	Supplier Details
Company Name	Chem-Pak Inc	Chem-Pak Inc
Address	242 Corning Way, Martinsburg, WV 25405 - United States	242 Corning Way, Martinsburg, WV 25405 - United States
Phone Number	304-262-1880	304-262-1880
Fax Number	304-262-9643	304-262-9643
Email	msds@chem-pak.com	
Website	http://www.chem-pak.com	

1.5 24 hr Emergency Phone Number

Emergency Number : ChemTel: 800-255-3924 (North America)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Flam. Aerosol 1	H222	Physical Hazards	Flammable aerosols, Category 1
Skin Irrit. 2	H315	Health Hazards	Skin corrosion/irritation, Category 2
Eye Irrit. 2a	H319	Health Hazards	Serious eye damage/eye irritation, Category 2A
Carc. 2	H351	Health Hazards	Carcinogenicity, Category 2
Repr. 2	H361	Health Hazards	Reproductive toxicity, Category 2
Stot Se 3	H336	Health Hazards	Specific target organ toxicity — Single exposure, Category 3, Narcosis
Stot Re 2	H373	Health Hazards	Specific target organ toxicity — Repeated exposure, Category 2
Asp. Tox. 1	H304	Health Hazards	Aspiration hazard, Category 1
Aquatic Acute 3	H402	Environmental Hazards	Hazardous to the aquatic environment — Acute Hazard, Category 3

2.2 Label Elements

Hazard Pictograms



Signal Word

Danger

Hazard Statements

H222 : Extremely flammable aerosol.
 H304 : May be fatal if swallowed and enters airways.
 H315 : Causes skin irritation.
 H319 : Causes serious eye irritation.
 H336 : May cause drowsiness or dizziness.
 H351 : Suspected of causing cancer.



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
 Revision Date: 7/17/2019
 Supersedes Date: 8/22/2017
 Issue Date: 11/11/2016
 Version: 3.0 (EN)-CA
 Page: 2/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Precautionary Statements

- H361 : Suspected of damaging fertility or the unborn child.
- H373 : May cause damage to organs through prolonged or repeated exposure.
- H402 : Harmful to aquatic life
- P202 : Do not handle until all safety precautions have been read and understood.
- P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 : Do not spray on an open flame or other ignition source.
- P251 : Do not pierce or burn, even after use.
- P260 : Do not breathe spray.
- P264 : Wash hands thoroughly after handling.
- P271 : Use only outdoors or in a well-ventilated area.
- P273 : Avoid release to the environment.
- P280 : Wear protective gloves and eye protection.
- P301+P310 : IF SWALLOWED: Immediately call POISON CENTER.
- P302+P352 : IF ON SKIN: Wash with plenty of water.
- P304+P340 : IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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+P313 : If exposed or concerned: Get medical advice/attention
- P314 : Get medical advice/attention if you feel unwell.
- P331 : Do NOT induce vomiting.
- P332+P313 : If skin irritation occurs: Get medical advice/attention.
- P337+P313 : If eye irritation persists: Get medical advice/attention.
- P362+P364 : Take off contaminated clothing and wash it before reuse.
- P403+P233 : Store in a well-ventilated place. Keep container tightly closed.
- P405 : Store locked up.
- P410+P412 : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- P501 : Dispose of contents/container to applicable regulations

2.3 Other Hazards Which Do Not Result In Classification

Hazards Not Otherwise Classified : None Identified.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance / Mixture

Substance / Mixture : Mixture

3.2 Composition

Substance name	CAS Number	% wt*	Classification
Propane	74-98-6	10 - 30	Flam. Gas 1, H220 Press. Gas (Diss.), H280
Ethyl Acetate	141-78-6	10 - 30	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Methyl Acetate	79-20-9	10 - 30	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Xylene	1330-20-7	10 - 30	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Solvent Naphtha (Petroleum), Light Aliphatic	64742-89-8	10 - 30	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Substance name	CAS Number	% wt*	Classification
Isopropyl Acetate	108-21-4	1 - 5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Toluene	108-88-3	1 - 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Ethylbenzene	100-41-4	2.3464	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Carbon Black	1333-86-4	0.1 - 1	Carc. 2, H351
Light Aromatic Solvent Naphtha	64742-95-6	0.1 - 1	Flam. Liq. 3, H226 Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304 Aquatic Acute 3, H402

Full text of hazard classes and H-statements : see section 16

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4 - FIRST-AID MEASURES

4.1 Description of First-Aid Measures

General Measures	: Call a physician immediately.
Inhalation	: Remove person to fresh air and keep comfortable for breathing.
Skin Contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
Eye Contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	: Do not induce vomiting. Call a physician immediately.
First-Aid Responder Protection	: Wear adequate personal protective equipment based on the nature and severity of the emergency.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms of Exposure	: Eye Irritation, Nose Irritation, Throat Irritation, Dermatitis, Central Nervous System Depression, Confusion, Skin Irritation, Headache, Dizziness, Nausea, Narcosis, Upper Respiratory Tract Irritation, Drowsiness, Vomiting, Optical Nerve Damage, Cough, Blurred Vision, Chest Tightness, Mucous Membrane, Diarrhea.
Delayed Effects	: No known delayed effects.
Immediate Effects	: No known immediate effects.
Chronic Effects	: Repeated or prolonged contact may cause skin sensitization.
Target Organs	: Central Nervous System, Eyes, Liver, Nasal Cavity, Reproductive System, Respiratory System, Skin, Kidneys.

4.3 Indication of Immediate Medical Attention and Special Treatment

Notes to Physician	: Treat symptomatically.
Specific Treatments/Antidotes	: No Information Available.
Medical Conditions Aggravated	: May aggravate personnel with pre-existing disorders associated with any of the Target Organs.

SECTION 5 - FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

Extinguishing Media	: Water, carbon dioxide, dry chemical, universal aqueous film forming foam.
Unsuitable Media	: Water jet.



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
Revision Date: 7/17/2019
Supersedes Date: 8/22/2017
Issue Date: 11/11/2016
Version: 3.0 (EN)-CA
Page: 4/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

5.2 Specific Hazards Arising from the Chemical or Mixture

- Hazardous Combustion Products** : Decomposition products may include: oxides of carbon, smoke, vapours. See also Section 10.6.
- Specific Hazards During Firefighting** : Extremely flammable. Contents under pressure. In a fire or if heated, a pressure increase will occur which may result in container bursting. Vapours heavier than air may spread along the ground and travel to an ignition source.

5.3 Special Protective Actions for Fire-Fighters

- Firefighting Instructions** : Use water spray to cool fire exposed aerosol containers, as contents can rupture violently from heat developed pressure.
- Protection during Firefighting** : Firemen should wear self-contained breathing apparatus with full face-piece operated in positive pressure mode.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- For Non-Emergency Personnel** : No action should be taken involving any personnel without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill. Remove ignition sources and provide adequate ventilation only if it is safe to do so.
- For Emergency Personnel** : Use personal protection as recommended in Section 8. Observe precautions provided for non-emergency personnel above.

6.2 Environmental Precautions

- Environmental Precautions** : Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

6.3 Methods and Materials for Containment and Cleaning up

- Containment Procedures** : Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content may be contained with oil/solvent absorbent pads, socks, and/or absorbents.
- Cleanup Procedures** : Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove sources of ignition and use non-sparking equipment. Soak up material with inert absorbent and place in safety containers for proper disposal.
- Other Information** : Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned.
- Prohibited Materials** : Combustible absorbent material such as sawdust. Use of equipment that may cause sparking.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

- General Handling Precautions** : KEEP OUT OF THE REACH OF CHILDREN. Avoid prolonged or repeated skin contact. Avoid breathing of vapors. Do not incinerate (burn) containers. Always replace overcap when not in use. Avoid use around open flames or other sources of ignition. Exposure to heat or prolonged exposure to sun may cause can to burst. Use only with adequate ventilation, opening doors or windows to achieve cross-ventilation.
- Hygiene Recommendations** : Do not eat, drink or smoke when using this product. Wash hands thoroughly after use. Remove contaminated clothing and protective equipment before entering eating or smoking areas.

7.2 Conditions for Safe Storage Including Any Incompatibilities

- Storage Requirements** : Storage of individual cans should be done in an area below 55°C (120 °F), and away from heat sources. Ensure can is in a secure place to prevent knocking over and accidental rupture.
- Incompatibilities** : Segregate storage away from materials indicated in Section 10.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
 Revision Date: 7/17/2019
 Supersedes Date: 8/22/2017
 Issue Date: 11/11/2016
 Version: 3.0 (EN)-CA
 Page: 5/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Propane (74-98-6)

Canada (Alberta)	OEL TWA (ppm)	1000 ppm
Canada (British Columbia)	OEL TWA (ppm)	1000 ppm
Canada (Ontario)	OEL TWA (ppm)	1000 ppm
Canada (Quebec)	VEMP (ppm)	1000 ppm
Canada (Quebec)	VEMP (mg/m ³)	1800 mg/m ³

Xylene (1330-20-7)

Canada (Alberta)	OEL TWA (ppm)	100 ppm
Canada (Alberta)	OEL TWA (mg/m ³)	434 mg/m ³
Canada (British Columbia)	OEL TWA (ppm)	100 ppm
Canada (British Columbia)	OEL STEL (ppm)	150 ppm
Canada (Ontario)	OEL TWA (ppm)	100 ppm
Canada (Ontario)	OEL STEL (ppm)	150 ppm
USA (ACGIH)	ACGIH TWA (mg/m ³)	100 ppm
USA (ACGIH)	ACGIH Ceiling (mg/m ³)	150 ppm
Biological Exposure Index	Methylhippuric Acid in Urine (Post Shift), End of shift	1.5 g/g creatinine

Ethylbenzene (100-41-4)

Canada (Alberta)	OEL TWA (ppm)	100 ppm
Canada (Alberta)	OEL TWA (mg/m ³)	434 mg/m ³
Canada (Alberta)	OEL Ceiling (ppm)	125 ppm
Canada (Alberta)	OEL Ceiling (mg/m ³)	543 mg/m ³
Canada (British Columbia)	OEL TWA (ppm)	20 ppm
Canada (Ontario)	OEL TWA (ppm)	20 ppm
Canada (Quebec)	VECD (ppm)	125 ppm
Canada (Quebec)	VECD (mg/m ³)	543 mg/m ³
Canada (Quebec)	VEMP (ppm)	100 ppm
Canada (Quebec)	VEMP (mg/m ³)	434 mg/m ³
USA (ACGIH)	ACGIH TWA (mg/m ³)	20 ppm
Biological Exposure Index	Sum of Mandelic Acid and Phenyl Glyoxylic Acid in Urine, End of shift at end of workweek	0.7 g/g creatinine

Toluene (108-88-3)

Canada (Alberta)	OEL TWA (ppm)	50 ppm
Canada (Alberta)	OEL TWA (mg/m ³)	188 mg/m ³
Canada (British Columbia)	OEL TWA (ppm)	20 ppm
Canada (Ontario)	OEL TWA (ppm)	20 ppm
Canada (Quebec)	VEMP (ppm)	50 ppm
Canada (Quebec)	VEMP (mg/m ³)	188 mg/m ³
USA (ACGIH)	ACGIH TWA (mg/m ³)	20 ppm
USA (ACGIH)	ACGIH Ceiling (mg/m ³)	150 ppm
Biological Exposure Index	Toluene in blood, Prior to last shift of workweek	0.02 mg/l
Biological Exposure Index	Toluene in urine, End of shift	0.03 mg/l
Biological Exposure Index	o-Cresol in urine (with hydrolysis), End of shift (B)	0.3 mg/g creatinine

Ethyl Acetate (141-78-6)

Canada (Alberta)	OEL TWA (ppm)	400 ppm
Canada (Alberta)	OEL TWA (mg/m ³)	1440 mg/m ³
Canada (British Columbia)	OEL TWA (ppm)	150 ppm
Canada (Ontario)	OEL TWA (ppm)	400 ppm
Canada (Quebec)	VEMP (ppm)	400 ppm
Canada (Quebec)	VEMP (mg/m ³)	1440 mg/m ³
USA (ACGIH)	ACGIH TWA (mg/m ³)	400 ppm

Isopropyl Acetate (108-21-4)

Canada (Alberta)	OEL TWA (ppm)	100 ppm
Canada (Alberta)	OEL TWA (mg/m ³)	416 mg/m ³
Canada (Alberta)	OEL STEL (ppm)	200 ppm
Canada (Alberta)	OEL STEL (mg/m ³)	832 mg/m ³
Canada (British Columbia)	OEL TWA (ppm)	100 ppm
Canada (British Columbia)	OEL STEL (ppm)	200 ppm
Canada (Ontario)	OEL TWA (ppm)	100 ppm
Canada (Ontario)	OEL STEL (ppm)	200 ppm



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
 Revision Date: 7/17/2019
 Supersedes Date: 8/22/2017
 Issue Date: 11/11/2016
 Version: 3.0 (EN)-CA
 Page: 6/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Isopropyl Acetate (108-21-4)

Canada (Quebec)	VECD (ppm)	310 ppm
Canada (Quebec)	VECD (mg/m ³)	1290 mg/m ³
Canada (Quebec)	VEMP (ppm)	250 ppm
Canada (Quebec)	VEMP (mg/m ³)	1040 mg/m ³
USA (ACGIH)	ACGIH TWA (mg/m ³)	100 ppm
USA (ACGIH)	ACGIH Ceiling (mg/m ³)	200 ppm

Carbon Black (1333-86-4)

Canada (Alberta)	OEL TWA (mg/m ³)	3.5 mg/m ³
Canada (Quebec)	VEMP (mg/m ³)	3.5 mg/m ³
USA (ACGIH)	ACGIH TWA (ppm)	3 mg/m ³

Methyl Acetate (79-20-9)

Canada (Alberta)	OEL TWA (ppm)	200 ppm
Canada (Alberta)	OEL TWA (mg/m ³)	600 mg/m ³
Canada (Alberta)	OEL STEL (ppm)	250 ppm
Canada (Alberta)	OEL STEL (mg/m ³)	757 mg/m ³
Canada (British Columbia)	OEL TWA (ppm)	200 ppm
Canada (British Columbia)	OEL STEL (ppm)	250 ppm
Canada (Ontario)	OEL TWA (ppm)	200 ppm
Canada (Ontario)	OEL STEL (ppm)	250 ppm
Canada (Quebec)	VECD (ppm)	250 ppm
Canada (Quebec)	VECD (mg/m ³)	757 mg/m ³
Canada (Quebec)	VEMP (ppm)	200 ppm
Canada (Quebec)	VEMP (mg/m ³)	606 mg/m ³
USA (ACGIH)	ACGIH TWA (mg/m ³)	200 ppm
USA (ACGIH)	ACGIH Ceiling (mg/m ³)	250 ppm

8.2 Exposure Controls

Engineering Measures	: Use only with adequate ventilation. General ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be necessary to control air contamination below that of the lowest OEL from the table above.
Personal Protective Equipment	
Eye / Face Protection	: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact with this material could occur, chemical splash proof goggles are recommended.
Hand Protection	: Chemical-resistant gloves, tested according to EN 374.
Remarks	: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to the place of work.
Skin and Body Protection	: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing impervious to the ingredients listed in Section 2.
Respiratory Protection	: An approved respirator with an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed occupational exposure limits.
Compliance	: If needed, wear an appropriate NIOSH approved respirator.
Other Protective Equipment	: Safety showers and eye-wash stations should be available in the workplace near where the material will be used.
Environmental Exposure Controls	: Avoid release to the environment.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical Properties

Boiling Point	> 56.90 °C	Melting / Freezing Point	°C
Flash Point, Liquid	> -20.00 °C	Flash Point, Propellant	-104.40 °C
Explosive Limits	LEL: 0.70 UEL: 24.60 vol %	Autoignition Temperature, Liquid	> 190.00 °C
Flammability	Extremely Flammable Aerosol	Density	0.737 g/cm ³
Molecular Weight	Not Available	Weight	6.150 lbs/gal
Vapor Pressure	Not Available	pH	Not Available
Vapor Density	Not Available	Evaporation Rate (nBac=1)	Not Available
Viscosity	Not Available	Partition Coefficient (Log Pow)	Not Available



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
Revision Date: 7/17/2019
Supersedes Date: 8/22/2017
Issue Date: 11/11/2016
Version: 3.0 (EN)-CA
Page: 7/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Odor Threshold	Not Available	Refractive Index	Not Available
Physical State	Pressurized Product	Heat Of Combustion	13932.62 BTU/lb
Appearance / Color	Black	Water Solubility	Not Available
Odor	Paint-like	Decomposition Temperature	Not Available

9.2 Environmental Properties

Percent Volatile	90.55 % wt	VOC Regulatory	663.07 g/L (5.53 lbs/gal)
Percent VOC	75.14 % wt	VOC Actual	553.75 g/L (4.62 lbs/gal)
Percent HAP	19.41 % wt	HAP Content	143.05 g/L (1.19 lbs/gal)
Global Warming Potential	0.94 GWP	Maximum Incremental Reactivity	1.7980 g O3/g
Ozone Depletion Potential	0.00 ODP		

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

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

10.2 Chemical Stability

Chemical Stability : This product is stable.

10.3 Possibility of Hazardous Reactions

Hazardous Reactions : Under normal conditions of storage and use, hazardous reactions are not expected to occur.

10.4 Conditions to Avoid

Conditions to Avoid : Electrostatic Discharge, Other Ignition Sources, Hot Surfaces, Heat, Flames, Sparks, Strong Heating.

10.5 Incompatible Materials

Materials to Avoid : Strong Oxidizing Agents, Strong Reducing Agents, Alkali Metals, Strong Acids, Aluminum, Potassium t-Butoxide, Halogen Compounds, Bases, Calcium Hypochlorite, Acids, Magnesium, Sulfuric Acid, Perchloric Acid, Chromium Trioxide, Nitrating Agents, Chlorosulfuric Acid, Potassium Chlorate, Heavy Metals and their Salts, Phenols, Performic Acid.

10.6 Hazardous Decomposition Products

Thermal Decomposition : Oxides of carbon, Aldehydes, Methanol, Acetic Acid, Peroxybenzoic Acid, Benzoic Acid.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Propane (CAS: 74-98-6 / EC: 200-827-9)

LC50 Inhalation (Rat) 658 mg/l/4h (Lit.)

Xylene (CAS: 1330-20-7 / EC: 215-535-7)

LD50 Oral (Rat) 4300 mg/kg (RTECS)
LD50 Dermal (Rabbit) 12126 mg/kg (Sigma-Aldrich)
LC50 Inhalation (Rat) 21.7 mg/l/4h (GESTIS Substance Database)
LC50 Inhalation (Rat) 6700 ppm/4h (ChemInfo)

Ethylbenzene (CAS: 100-41-4 / EC: 202-849-4)

LD50 Oral (Rat) 4720 mg/kg (ChemInfo)
LD50 Dermal (Rabbit) 15380 mg/kg (ChemInfo)
LC50 Inhalation (Rat) 17.2 mg/l/4h (IUCLID)
LC50 Inhalation (Rat) 4000 ppm/4h (ChemInfo)

Toluene (CAS: 108-88-3 / EC: 203-625-9)

LD50 Oral (Rat) > 2000 mg/kg (Lit.)
LD50 Dermal (Rabbit) 12124 mg/kg (IUCLID)



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
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Issue Date: 11/11/2016
Version: 3.0 (EN)-CA
Page: 8/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Toluene (CAS: 108-88-3 / EC: 203-625-9)

LC50 Inhalation (Rat) > 20 mg/l/4h (Lit.)

Solvent Naphtha (Petroleum), Light Aliphatic (CAS: 64742-89-8 / EC: 265-192-2)

LD50 Oral (Rat) > 5000 mg/kg (External SDS)

LD50 Dermal (Rabbit) > 2000 mg/kg (External SDS)

LC50 Inhalation (Rat) > 20 mg/l/4h (External SDS)

Ethyl Acetate (CAS: 141-78-6 / EC: 205-500-4)

LD50 Oral (Rat) 5620 mg/kg (RTECS)

LD50 Dermal (Rabbit) > 18000 mg/kg (Sigma-Aldrich)

LC50 Inhalation (Rat) 10600 ppm/4h (ChemInfo)

Isopropyl Acetate (CAS: 108-21-4 / EC: 203-561-1)

LD50 Oral (Rat) 6750 mg/kg (RTECS)

LD50 Dermal (Rabbit) > 17490 mg/kg (Lit.)

LC50 Inhalation (Rat) 50.6 mg/l/4h (ChemInfo)

LC50 Inhalation (Rat) 17100 ppm/4h (ChemInfo)

Light Aromatic Solvent Naphtha (CAS: 64742-95-6 / EC: 265-199-0)

LD50 Oral (Rat) 8400 mg/kg (RTECS)

LD50 Dermal (Rabbit) > 3160 mg/kg (ChemInfo)

LC50 Inhalation (Rat) 3670 ppm/4h (Lit.)

Carbon Black (CAS: 1333-86-4 / EC: 215-609-9)

LD50 Oral (Rat) > 15400 mg/kg (RTECS)

LD50 Dermal (Rabbit) > 3000 mg/kg (RTECS)

LC50 Inhalation (Rat) 27 mg/l/4h (ChemInfo)

Methyl Acetate (CAS: 79-20-9 / EC: 201-185-2)

LD50 Oral (Rat) 6970 mg/kg (Lit.)

LD50 Dermal (Rabbit) > 5000 mg/kg (RTECS)

LC50 Inhalation (Rat) > 49.28 mg/l/4h (External SDS)

LC50 Inhalation (Rat) 16000 - 32000 (ChemInfo)

Routes Of Exposure : Eye Contact, Ingestion, Skin Contact, Inhalation, Skin Absorption.

Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure : See Section 4.2

Skin Corrosion/Irritation : Causes skin irritation.

Eye Damage/Irritation : Causes serious eye irritation.

Respiratory or Skin Sensitization : Not classified

Germ Cell Mutagenicity : May cause genetic defects.

Reproductive Toxicity : Suspected of damaging fertility or the unborn child.

STOT-Single Exposure : May cause drowsiness or dizziness.

STOT-Repeated Exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard : May be fatal if swallowed and enters airways.

Vaporizer : Aerosol

Carcinogen Data : The following ingredients are listed as known or suspected carcinogens:

Ethylbenzene (CAS: 100-41-4 / EC: 202-849-4)

IARC group 2B - Possibly carcinogenic to humans

ACGIH Category A3 - Confirmed animal carcinogen with unknown relevance to humans

Carbon Black (CAS: 1333-86-4 / EC: 215-609-9)

IARC group 2B - Possibly carcinogenic to humans

ACGIH Category A3 - Confirmed animal carcinogen with unknown relevance to humans

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Ecotoxicity and Ecological Properties



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
 Revision Date: 7/17/2019
 Supersedes Date: 8/22/2017
 Issue Date: 11/11/2016
 Version: 3.0 (EN)-CA
 Page: 9/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Propane (74-98-6)

Persistence and Degradability	Readily biodegradable in water. Not applicable (gas). Photodegradation in the air.
BCF Fish	9 - 25 (BCF)
Log Pow	2.28 (Calculated)
Bioaccumulative Potential	Low potential for bioaccumulation (Log Kow < 4).

Xylene (1330-20-7)

LC50 Fish	26.7 mg/l Fathead Minnow - 96h
EC50 Daphnia	75.49 mg/l Water Flea - 48hr
EC50 Other Aquatic Organisms	72 mg/l Green Algae - 14d
Persistence and Degradability	Readily biodegradable in water.
Biochemical Oxygen Demand	1.40 - 2.53 g O ₂ /g substance
Chemical Oxygen Demand	2.56 - 2.91 g O ₂ /g substance
Theoretical Oxygen Demand	3.1 g O ₂ /g substance
BCF Fish	14.1 - 24 (BCF)
Log Pow	3.217
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	3.156

Ethylbenzene (100-41-4)

LC50 Fish	4.2 mg/l Rainbow Trout - 96hr
EC50 Daphnia	2.4 mg/l Water Flea - 48hr
EC50 Other Aquatic Organisms	9.68 mg/l Bacteria - 30min
EC50 Other Aquatic Organisms	4.6 mg/l Green Algae - 72hr
Persistence and Degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for absorption in soil.
Biochemical Oxygen Demand	1.44 g O ₂ /g substance
Chemical Oxygen Demand	2.1 g O ₂ /g substance
Theoretical Oxygen Demand	3.17 g O ₂ /g substance
Biodegradation	81 % 28 Days
BCF Fish	1.18
Log Pow	3.15
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	2.4

Toluene (108-88-3)

LC50 Fish	5.8 mg/l Rainbow Trout - 96hr
LC50 Other Aquatic Organisms	10 mg/l Green Algae - 72hr
EC50 Daphnia	6 mg/l Water Flea - 48hr
Persistence and Degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for absorption in soil.
Biochemical Oxygen Demand	2.15 g O ₂ /g substance
Chemical Oxygen Demand	2.52 g O ₂ /g substance
Theoretical Oxygen Demand	3.13 g O ₂ /g substance
Biodegradation	86 % 28 Days
Log Pow	2.73 (Experimental Value)
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	2.15

Solvent Naphtha (Petroleum), Light Aliphatic (64742-89-8)

Persistence and Degradability	Expected to be readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.
Biodegradation	95 % 28 Days
Log Kow	2.1
Bioaccumulative Potential	Low potential for bioaccumulation (Log Kow < 4).

Ethyl Acetate (141-78-6)

LC50 Fish	450 - 600 mg/l Rainbow Trout - 96hr
LC50 Fish	220 - 250 mg/l Fathead Minnow - 96h
LC50 Other Aquatic Organisms	560 mg/l Water Flea - 48hr
EC50 Daphnia	2300 - 3090 mg/l Water Flea - 24hr
EC50 Other Aquatic Organisms	4300 mg/l Green Algae - 24hr
Persistence and Degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical Oxygen Demand	0.293 g O ₂ /g substance
Chemical Oxygen Demand	1.69 g O ₂ /g substance
Theoretical Oxygen Demand	1.82 g O ₂ /g substance



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
Revision Date: 7/17/2019
Supersedes Date: 8/22/2017
Issue Date: 11/11/2016
Version: 3.0 (EN)-CA
Page: 10/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

Ethyl Acetate (141-78-6)

Biodegradation	100 % 28 Days
BCF Fish	30
Log Pow	0.73
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	0.778

Isopropyl Acetate (108-21-4)

LC50 Fish	265 mg/l Golden Orfe - 96hr
EC50 Daphnia	4150 mg/l Water Flea - 24hr
Persistence and Degradability	Readily biodegradable in water.
Biochemical Oxygen Demand	0.26 g O ₂ /g substance
Chemical Oxygen Demand	1.67 g O ₂ /g substance
Theoretical Oxygen Demand	2.04 g O ₂ /g substance
BCF Fish	1.8 (BCF)
Log Pow	0.98 - 1.3
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).

Light Aromatic Solvent Naphtha (64742-95-6)

LC50 Fish	18 mg/l (LC50)
EC50 Daphnia	21 mg/l (EC50)
Persistence and Degradability	Readily biodegradable in water.
Log Pow	> 3

Carbon Black (1333-86-4)

LC50 Fish	> 1000 mg/l Zebra Fish - 96hr
EC50 Daphnia	> 5600 mg/l Water Flea - 24hr
EC50 Other Aquatic Organisms	> 10000 mg/l Green Algae - 72hr
Theoretical Oxygen Demand	Not applicable
Log Pow	1.09
Bioaccumulative Potential	Not bioaccumulative.

Methyl Acetate (79-20-9)

LC50 Fish	250 - 350 mg/l Zebra Fish - 96hr
EC50 Daphnia	1026.7 mg/l Water Flea - 48hr
EC50 Other Aquatic Organisms	> 120 mg/l Green Algae - 72hr
EC50 Other Aquatic Organisms	6100 mg/l Bacteria - 30min
Persistence and Degradability	Readily biodegradable in water. Inherently biodegradable. Highly mobile in soil.
Chemical Oxygen Demand	1511.8 mg/g
Theoretical Oxygen Demand	1510 mg/g
Biodegradation	70 % 28 Days
BCF Fish	< 1 (BCF)
Log Pow	0.18
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	0.68

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

- Waste Disposal** : Characteristics and waste stream classification can change with product use and location. It is the responsibility of the user to determine the proper storage, transportation, treatment, and/or disposal methodologies for spent materials and residues at the time of disposition. All waste must be disposed of in compliance with the respective national, federal, state, and/or local regulations.
- Waste Disposal Of Packaging** : Consult with your local landfill to determine if empty small containers can be disposed of along with regular trash pickup. For disposal of large containers (typically 10 gallons or larger), or for containers not suitable for landfill, a licensed reconditioner should be used.
- Landfill Precautions** : Not Available.
- Incineration Precautions** : ** DO NOT INCINERATE ** CONTENTS UNDER PRESSURE **.

SECTION 14 - TRANSPORTATION INFORMATION



SAFETY DATA SHEET

Part No. See Section 1.1 (Aerosol)

Print Date: 17/07/2019
 Revision Date: 7/17/2019
 Supersedes Date: 8/22/2017
 Issue Date: 11/11/2016
 Version: 3.0 (EN)-CA
 Page: 11/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

14.1 UN Number	TDG (CANADA)	IATA (AIR)	IMDG (OCEAN)
UN Number	: UN1950	UN1950	UN1950
14.2 UN Proper Shipping Name	TDG (CANADA)	IATA (AIR)	IMDG (OCEAN)
UN Proper Shipping Name	: Aerosols, Limited Quantity	Aerosols, Flammable, Limited Quantity	Aerosols, Limited Quantity
14.3 Transport Hazard Class(es)	TDG (CANADA)	IATA (AIR)	IMDG (OCEAN)
Transport Hazard Class(es)	: 2.1	2.1	2.1
Labels	: None	2.1 - Flammable gas	None
Limited Quantity	: Yes	Yes	Yes
EmS Code	: Not Applicable	Not Applicable	F-D, S-U
14.4 Packing Group	TDG (CANADA)	IATA (AIR)	IMDG (OCEAN)
Packing Group	: None	None	None
14.5 Environmental Hazards	TDG (CANADA)	IATA (AIR)	IMDG (OCEAN)
Marine Pollutant	: No	No	No
14.6 Special Precautions	Precautions : None Identified		
14.7 Transport in Bulk	Remarks : Not applicable for product as supplied		

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations Specific to the Product

- TSCA Inventory (United States) : All chemical substances in this product are either listed on the Toxic Substances Control Act (TSCA) Inventory or are in compliance with a TSCA Inventory exemption.
- DSL/NDSL Inventory (Canada) : All chemical substances in this product are listed on the Domestic Substance List (DSL), exempt or are not subject to notification.

SECTION 16 - OTHER INFORMATION

Indication of changes	Section	Changed item	Change
	1	Supersedes	Modified
	1	Revision date	Modified
	1	SDS ID	Modified
	3	Composition/information on ingredients	Modified
	9	Boiling point	Modified
	9	Flash point	Modified
	9	Melting point	Modified
	9	Relative vapour density at 20 °C	Added
	9	Auto-ignition temperature	Modified
	9	Density	Modified
Full Text of H-Statements	H Code	H Phrase	
	H222	Extremely flammable aerosol.	
	H225	Highly flammable liquid and vapour.	
	H304	May be fatal if swallowed and enters airways.	
	H315	Causes skin irritation.	
	H319	Causes serious eye irritation.	
	H332	Harmful if inhaled.	



SAFETY DATA SHEET

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Version: 3.0 (EN)-CA
Page: 12/12

Per-Fix™ Black for Polypropylene

according to the Hazardous Products Regulations (February 11, 2015)

H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H401	Toxic to aquatic life
H402	Harmful to aquatic life

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