

Per-Fix™ Polypropylene

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1 - IDENTIFICATION

1.1 Product Identifier

Product Name : Per-Fix™ Polypropylene
Manufacturer Product Number : 7205AAA, 7205AA, 7205A, 7205B, 7205C

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	msds@chem-pak.com
Website	http://www.chem-pak.com	http://www.chem-pak.com

1.5 24 hr Emergency Phone Number

Emergency Number : 800-255-3924
Chem-Tel

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Flam. Aerosol 1	H222	Physical Hazards	Flammable aerosol Category 1
Press. Gas (Diss.)	H280	Physical Hazards	Gases under pressure Dissolved gas
Skin Irrit. 2	H315	Health Hazards	Skin corrosion/irritation Category 2
Eye Irrit. 2a	H319	Health Hazards	Serious eye damage/eye irritation Category 2A
Muta. 1b	H340	Health Hazards	Germ cell mutagenicity Category 1B
Carc. 1b	H350	Health Hazards	Carcinogenicity Category 1B
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



GHS02



GHS04



GHS07



GHS08

Signal Word

Danger

Hazard Statements

H222 : Extremely flammable aerosol
H280 : Contains gas under pressure; may explode if heated

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H304 : May be fatal if swallowed and enters airways
H315 : Causes skin irritation
H319 : Causes serious eye irritation
H336 : May cause drowsiness or dizziness
H340 : May cause genetic defects
H350 : May cause cancer
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

Precautionary Statements

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 : Pressurized container: 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 : Store in a well-ventilated place.
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.

2.4 Unknown acute toxicity

24% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
25.05% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
2.15% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance / Mixture

Substance / Mixture : Mixture

3.2 Composition

Substance name	CAS Number	% wt*	Classification
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

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Substance name	CAS Number	% wt*	Classification
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
Propane	74-98-6	10 - 30	Flam. Gas 1, H220 Press. Gas (Diss.), H280
N-Butane	106-97-8	5 - 10	Flam. Gas 1, H220 Press. Gas (Diss.), H280
Solvent Naphtha (Petroleum), Light Aliphatic	64742-89-8	5 - 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304
Isopropyl Acetate	108-21-4	5 - 10	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Isobutane	75-28-5	5 - 10	Flam. Gas 1, H220 Press. Gas (Diss.), H280
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
Ethyl Benzene	100-41-4	1.78	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
2-(2-Butoxyethoxy)Ethanol	112-34-5	1 - 5	Eye Irrit. 2A, H319
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, Confusion, Skin Irritation, Headache, Dizziness, Nausea, Narcosis, Drowsiness, Vomiting, Optical Nerve Damage, Cough, Chest Tightness, Mucous Membrane, Diarrhea.
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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.

5.2 Specific Hazards Arising from the Chemical or Mixture

Hazardous Combustion Products	: Decomposition products may include: oxides of carbon, smoke, vapors. See also Section 10.6.
Specific Hazards During Firefighting	: Extremely flammable. In a fire or if heated, a pressure increase will occur which may result in container bursting. Vapors 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.
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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



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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.
- 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.
- NFPA 30B Classification** : This product is classified as a Level 3 Aerosol per NFPA 30B

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

N-Butane (106-97-8)

ACGIH	ACGIH TWA (mg/m ³)	1000 ppm
OSHA	OSHA PEL (TWA) (ppm)	800 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900
NIOSH	NIOSH REL (TWA) (ppm)	800 ppm
California	California PEL (TWA) (mg/m ³)	1900 mg/m ³
California	California PEL (TWA) (ppm)	800 ppm

Propane (74-98-6)

OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
NIOSH	US IDLH (ppm)	2100 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1800 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
California	California PEL (TWA) (mg/m ³)	1800 mg/m ³
California	California PEL (TWA) (ppm)	1000 ppm

Isobutane (75-28-5)

ACGIH	ACGIH TWA (mg/m ³)	1000 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	800 ppm

Xylene (1330-20-7)

ACGIH	ACGIH TWA (mg/m ³)	100 ppm
ACGIH	ACGIH Ceiling (mg/m ³)	150 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	435 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
NIOSH	US IDLH (ppm)	900 ppm
NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
California	California PEL (TWA) (mg/m ³)	435 mg/m ³
California	California PEL (TWA) (ppm)	100 ppm
California	California PEL (STEL) (mg/m ³)	655 mg/m ³
California	California PEL (STEL) (ppm)	150 ppm
California	California PEL (Ceiling) (ppm)	300 ppm
Biological Exposure Index	Methylhippuric Acid in Urine (Post Shift), End of shift	1.5 g/g creatinine

Ethyl Benzene (100-41-4)

ACGIH	ACGIH TWA (mg/m ³)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	435 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
NIOSH	US IDLH (ppm)	800 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	435 mg/m ³



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Ethyl Benzene (100-41-4)

NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
NIOSH	NIOSH REL (STEL) (mg/m ³)	545 mg/m ³
NIOSH	NIOSH REL (STEL) (ppm)	125 ppm
California	California PEL (TWA) (mg/m ³)	22 mg/m ³
California	California PEL (TWA) (ppm)	5 ppm
California	California PEL (STEL) (mg/m ³)	130 mg/m ³
California	California PEL (STEL) (ppm)	30 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)

ACGIH	ACGIH TWA (mg/m ³)	20 ppm
ACGIH	ACGIH Ceiling (mg/m ³)	150 ppm
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm
NIOSH	US IDLH (ppm)	500 ppm
NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
California	California PEL (TWA) (mg/m ³)	37 mg/m ³
California	California PEL (TWA) (ppm)	10 ppm
California	California PEL (STEL) (mg/m ³)	560 mg/m ³
California	California PEL (STEL) (ppm)	150 ppm
California	California PEL (Ceiling) (ppm)	500 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

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

OSHA	OSHA PEL (TWA) (mg/m ³)	2000 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	500 ppm
California	California PEL (TWA) (mg/m ³)	1350 mg/m ³
California	California PEL (TWA) (ppm)	300 ppm
California	California PEL (STEL) (mg/m ³)	1800 mg/m ³
California	California PEL (STEL) (ppm)	400 ppm

Ethyl Acetate (141-78-6)

ACGIH	ACGIH TWA (mg/m ³)	400 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	1400 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	400 ppm
NIOSH	US IDLH (ppm)	2000 ppm
NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
California	California PEL (TWA) (mg/m ³)	1400 mg/m ³
California	California PEL (TWA) (ppm)	400 ppm

2-(2-Butoxyethoxy)Ethanol (112-34-5)

ACGIH	ACGIH TWA (mg/m ³)	10 ppm
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Methyl Acetate (79-20-9)

ACGIH	ACGIH TWA (mg/m ³)	200 ppm
ACGIH	ACGIH Ceiling (mg/m ³)	250 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	610 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
NIOSH	US IDLH (ppm)	3100 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	610 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	200 ppm
NIOSH	NIOSH REL (STEL) (mg/m ³)	760 mg/m ³
NIOSH	NIOSH REL (STEL) (ppm)	250 ppm
California	California PEL (TWA) (mg/m ³)	610 mg/m ³
California	California PEL (TWA) (ppm)	200 ppm
California	California PEL (STEL) (mg/m ³)	760 mg/m ³
California	California PEL (STEL) (ppm)	250 ppm



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Isopropyl Acetate (108-21-4)

ACGIH	ACGIH TWA (mg/m ³)	100 ppm
ACGIH	ACGIH Ceiling (mg/m ³)	200 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	950 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	250 ppm
NIOSH	US IDLH (ppm)	1800 ppm
California	California PEL (TWA) (mg/m ³)	950 mg/m ³
California	California PEL (TWA) (ppm)	250 ppm
California	California PEL (STEL) (mg/m ³)	1185 mg/m ³
California	California PEL (STEL) (ppm)	310 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 ASTM F903-17.
Remarks	: Breakthrough time has not been determined for this product. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to the place of work. Change gloves often.
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, compliance with OSHA standard 29 CFR 1910.134 is necessary.
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	> -98.00 °C
Flash Point, Liquid	> -20.00 °C	Flash Point, Propellant	-104.00 °C
Explosive Limits	LEL: 0.80 UEL: 24.60 vol %	Autoignition Temperature, Liquid	> 190.00 °C
Flammability	Extremely Flammable Aerosol	Density	0.759 g/cm ³
Molecular Weight	Not Available	Weight	6.334 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
Odor Threshold	Not Available	Refractive Index	Not Available
Physical State	Pressurized Product	Heat Of Combustion	13556.65 BTU/lb
Appearance / Color	Clear, Colorless	Water Solubility	Not Available
Odor	Paint-like	Decomposition Temperature	Not Available

9.2 Environmental Properties

Percent Volatile	92.62 % wt	VOC Regulatory	693.00 g/L (5.78 lbs/gal)
Percent VOC	77.28 % wt	VOC Actual	586.55 g/L (4.89 lbs/gal)
Percent HAP	20.43 % wt	HAP Content	155.06 g/L (1.29 lbs/gal)
Global Warming Potential	0.88 GWP	Maximum Incremental Reactivity	1.9230 g O3/g
Ozone Depletion Potential	0.00 ODP		

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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, 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

N-Butane (CAS: 106-97-8 / EC: 203-448-7)

LC50 Inhalation (Rat)	658 mg/l/4h (ChemInfo)
LC50 Inhalation (Rat)	276000 ppm/4h (ChemInfo)

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

LC50 Inhalation (Rat)	658 mg/l/4h (Lit.)
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Isobutane (CAS: 75-28-5 / EC: 200-857-2)

LC50 Inhalation (Rat)	368000 ppm/4h (ChemInfo)
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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)

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

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.)



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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)

2-(2-Butoxyethoxy)Ethanol (CAS: 112-34-5 / EC: 203-961-6)

LD50 Oral (Rat)	5660 mg/kg (RTECS)
LD50 Dermal (Rabbit)	4120 mg/kg (IUCLID)

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)

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)

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:

Ethyl Benzene (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

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Ecotoxicity and Ecological Properties

n-Butane (106-97-8)

Persistence and Degradability	Readily biodegradable in water.
Bioconcentration Factor	33.52
Log Pow	2.89
Bioaccumulative Potential	Low potential for bioaccumulation (Log Kow < 4).
Log Koc	1.641

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)



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Propane (74-98-6)

Bioaccumulative Potential Low potential for bioaccumulation (Log Kow < 4).

Isobutane (75-28-5)

Persistence and Degradability Readily biodegradable in water. Biodegradable in the soil. Not applicable (gas).

BCF Fish 26.62

Log Pow 2.76

Bioaccumulative Potential Low potential for bioaccumulation (BCF < 500).

Log Koc 1.545

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 O₂/g substance

Chemical Oxygen Demand 2.56 - 2.91 g O₂/g substance

Theoretical Oxygen Demand 3.1 g O₂/g substance

BCF Fish 14.1 - 24 (BCF)

Log Pow 3.217

Bioaccumulative Potential Low potential for bioaccumulation (BCF < 500).

Log Koc 3.156

Ethyl Benzene (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 O₂/g substance

Chemical Oxygen Demand 2.1 g O₂/g substance

Theoretical Oxygen Demand 3.17 g O₂/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 O₂/g substance

Chemical Oxygen Demand 2.52 g O₂/g substance

Theoretical Oxygen Demand 3.13 g O₂/g substance

Biodegradation 86 % 28 Days

Log Pow 2.73 (Experimental Value)

Bioaccumulative Potential Low potential for bioaccumulation (BCF < 500).

Log Koc 2.15

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

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).



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

2-(2-Butoxyethoxy)Ethanol (112-34-5)

LC50 Fish	1300 mg/l Bluegill Sunfish - 96h
EC50 Daphnia	> 100 mg/l Water Flea - 48hr
EC50 Other Aquatic Organisms	> 100 mg/l Green Algae - 96hr
Persistence and Degradability	Readily biodegradable in water. Biodegradable in the soil. No (test) data on mobility of the substance available. Photodegradation in the air.
Biochemical Oxygen Demand	0.25 g O ₂ /g substance
Chemical Oxygen Demand	2.08 g O ₂ /g substance
Theoretical Oxygen Demand	2.173 g O ₂ /g substance
Biodegradation	58 % 28 Days
BCF Fish	0.46 (BCF)
Log Pow	0.56 (Experimental Value)
Bioaccumulative Potential	Low potential for bioaccumulation (Log Kow < 4).
Log Koc	1

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

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).

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



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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.

: In the United States, an aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6)), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations.

Landfill Precautions

: Not Available.

Incineration Precautions

: ** DO NOT INCINERATE ** CONTENTS UNDER PRESSURE **.

SECTION 14 - TRANSPORTATION INFORMATION

14.1 UN Number DOT (USA) IATA (AIR) IMDG (OCEAN)

UN Number : UN1950 UN1950 UN1950

14.2 UN Proper Shipping Name DOT (USA) IATA (AIR) IMDG (OCEAN)

UN Proper Shipping Name : Aerosols, Limited Quantity Aerosols, Flammable, Limited Quantity Aerosols, Limited Quantity

14.3 Transport Hazard Class(es) DOT (USA) IATA (AIR) IMDG (OCEAN)

Transport Hazard Class(es) : 2 2 2

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 DOT (USA) IATA (AIR) IMDG (OCEAN)

Packing Group : None None None

14.5 Environmental Hazards DOT (USA) 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 Federal Regulations

SARA Section 313

: Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Xylene	CAS-No. 1330-20-7	10 - 30%
Ethyl Benzene	CAS-No. 100-41-4	1.78%
Toluene	CAS-No. 108-88-3	1 - 5%
1,2,4-Trimethyl Benzene	CAS-No. 95-63-6	0.1 - 1%



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Chlorobenzene	CAS-No. 108-90-7	0.01 - 0.1%
Cumene	CAS-No. 98-82-8	0.01 - 0.1%
Benzene	CAS-No. 71-43-2	< 0.0001%

TSCA Section 12(b)

: This product or mixture is not known to contain a chemical or chemicals subject to the export notification requirements of section 12(b) of the Toxic Substances Control Act (TSCA) and 40 CFR Part 707, subpart D

CERCLA Reportable Quantity

: Chemical(s) subject to reporting requirements of Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) if released to the environment at or above the reportable quantity

Xylene	CAS-No. 1330-20-7	100 lb
Ethyl Benzene	CAS-No. 100-41-4	1000 lb
Toluene	CAS-No. 108-88-3	1000 lb
Chlorobenzene	CAS-No. 108-90-7	100 lb
Ethyl Acetate	CAS-No. 141-78-6	5000 lb
Cumene	CAS-No. 98-82-8	5000 lb
Benzene	CAS-No. 71-43-2	10 lb

15.2 State Regulations

California Proposition 65

: This product contains, or may contain, substance(s) known to the State of California to cause cancer, developmental and/or reproductive harm.

Ethyl Benzene (100-41-4)	Cancer	Yes	1.78 %
Cumene (98-82-8)	Cancer	Yes	0.0729 %
Benzene (71-43-2)	Cancer	Yes	0.0 %
Toluene (108-88-3)	Developmental Toxicity	Yes	4.5884 %
Benzene (71-43-2)	Developmental Toxicity	Yes	0.0 %
Ethyl Benzene (100-41-4)	No significance risk level (NSRL)	54	
Toluene (108-88-3)	No significance risk level (NSRL)	7000	

State Right-to-Know Lists

: The following chemical(s) appear on one or more state RTK (Right to Know) lists as indicated

n-Butane (106-97-8)	U.S. - New Jersey - Right to Know Hazardous Substance List
Propane (74-98-6)	U.S. - New Jersey - Right to Know Hazardous Substance List
Isobutane (75-28-5)	U.S. - New Jersey - Right to Know Hazardous Substance List
Xylene (1330-20-7)	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Ethyl Benzene (100-41-4)	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Toluene (108-88-3)	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
1,2,4-Trimethyl Benzene (95-63-6)	U.S. - New Jersey - Right to Know Hazardous Substance List
Chlorobenzene (108-90-7)	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
n-Butyl Methacrylate (97-88-1)	U.S. - New Jersey - Right to Know Hazardous Substance List
Isobutyl Methacrylate (97-86-9)	U.S. - New Jersey - Right to Know Hazardous Substance List
Ethyl Acetate (141-78-6)	U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Methyl Acetate (79-20-9)	U.S. - New Jersey - Right to Know Hazardous Substance List
Benzaldehyde (100-52-7)	U.S. - New Jersey - Right to Know Hazardous Substance List
Isopropyl Acetate (108-21-4)	U.S. - New Jersey - Right to Know Hazardous Substance List
Precipitated Silica (112926-00-8)	U.S. - New Jersey - Right to Know Hazardous Substance List
Cumene (98-82-8)	U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List



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Dipropylene Glycol Monomethyl Ether (34590-94-8)

U.S. - New Jersey - Right to Know Hazardous Substance List

Benzene (71-43-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 - OTHER INFORMATION

Indication of changes

Section	Changed item	Change
1	Other means of identification	Modified
1	SDS ID	Modified
1	Revision date	Modified
1	Supersedes	Modified
2.1	GHS-US classification	Modified
2.2	Hazard statements (GHS US)	Modified
2.2	Precautionary statements (GHS US)	Modified
4	Symptoms/effects after ingestion	Modified
7.2	NFPA 30B Classification	Modified
8.2	Hand Protection	Modified
9	Specific gravity / density	Modified
9	Auto-ignition temperature	Modified
9	Boiling point	Modified
9	Flash point	Modified
9	Melting point	Modified
9	Relative vapor density at 20 °C	Added
10	Reactivity	Modified
13	Waste Disposal of Packaging	Modified

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