

Part No. See Section 1.1 (Aerosol)

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Per-Fix™ Polypropylene

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name : Per-Fix™ Polypropylene

Manufacturer Product Number : 7205AAA, 7205AA, 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	
Website :	http://www.chem-pak.com	

1.5 24 hr Emergency Phone Number

Emergency Number : ChemTel for Mexico: 800-099-0731

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classifi	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			
Repr. 2	H361	Health Hazards	Reproductive toxicity, Category 2			
Stot Se 3	Н336	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.

H361 : Suspected of damaging fertility or the unborn child.

H373 : May cause damage to organs through prolonged or repeated exposure.



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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 : 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.

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
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



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Substance name	CAS Number	% wt*	Classification
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
Ethylbenzene	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

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.

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

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



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Suitable Extinguishing Media 5.1

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

Unsuitable Media

Specific Hazards Arising from the Chemical or Mixture 5.2

Hazardous Combustion Products : Decomposition products may include: oxides of carbon, smoke, vapours. 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. Vapours heavier than air may spread along the ground and travel to an ignition source.

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

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.

Environmental Precautions

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

contamination.

Methods and Materials for Containment and Cleaning up 6.3

: Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content may be **Containment Procedures**

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

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 of individual cans should be done in an area below 55°C (120 °F), and away from heat sources. **Storage Requirements**

Ensure can is in a secure place to prevent knocking over and accidental rupture.

: Segregate storage away from materials indicated in Section 10. Incompatibilities

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION



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N-Butane (106-97-8)		1000
NOM-010-STPS-1999	LMPE-PPT (mg/m3)	1900 mg/m³
NOM-010-STPS-1999	LMPE-PPT (ppm)	800 ppm
NOM-010-STPS-2014	VLE-CT (ppm)	1000 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	1000 ppm
Propane (74-98-6)		
NOM-010-STPS-2014	VLE-CT (ppm)	1000 ppm
Isobutane (75-28-5)		
NOM-010-STPS-2014	VLE-CT (ppm)	1000 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	1000 ppm
Xylene (1330-20-7)		
NOM-010-STPS-1999	LMPE-PPT (mg/m3)	435 mg/m³
NOM-010-STPS-1999	LMPE-PPT (ppm)	100 ppm
NOM-010-STPS-1999	LMPE-CT (mg/m3)	655 mg/m³
NOM-010-STPS-1999	LMPE-CT (ppm)	150 ppm
NOM-010-STPS-2014	VLE-PPT (ppm)	150 ppm
NOM-010-STPS-2014	VLE-CT (ppm)	100 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	100 ppm
USA (ACGIH)	ACGIH Ceiling (mg/m³)	150 ppm
Biological Exposure Index	Methylhippuric Acid in Urine (Post Shift), End of shift	1.5 g/g creatinine
Ethylbenzene (100-41-4)		
NOM-010-STPS-1999	LMPE-PPT (mg/m3)	435 mg/m³
NOM-010-STPS-1999	LMPE-PPT (ppm)	100 ppm
NOM-010-STPS-1999	LMPE-CT (mg/m3)	435 mg/m³
NOM-010-STPS-1999	LMPE-CT (ppm)	125 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	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)		
NOM-010-STPS-1999	LMPE-PPT (mg/m3)	188 mg/m³
NOM-010-STPS-1999	LMPE-PPT (ppm)	50 ppm
NOM-010-STPS-2014	VLE-CT (ppm)	20 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	20 ppm
USA (ACGIH)	ACGIH Ceiling (mg/m³)	150 ppm
Biological Exposure Index	Toluene in blood, Prior to last shift of workweek	0.02 mg/l
Biological Exposure Index Biological Exposure Index	Toluene in urine, End of shift o-Cresol in urine (with hydrolysis), End of shift (B)	0.03 mg/l 0.3 mg/g creatinine
, ·	0-cresorm unite (with hydrolysis), End of singt (b)	0.5 mg/g creatinine
Ethyl Acetate (141-78-6)	(MDC DDT / / 2)	1400 (3
NOM-010-STPS-1999 NOM-010-STPS-1999	LMPE-PPT (mg/m3) LMPE-PPT (ppm)	1400 mg/m³ 400 ppm
NOM-010-STPS-2014	VLE-CT (ppm)	400 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	400 ppm
2-(2-Butoxyethoxy)Ethanol (112-		, rr
USA (ACGIH)	ACGIH TWA (mg/m³)	10 ppm
		pp
Methyl Acetate (79-20-9)	IMPE DDT /mg/m2)	610 mg/m³
NOM-010-STPS-1999	LMPE-PPT (mg/m3) LMPE-PPT (ppm)	J.
NOM-010-STPS-1999	u, ,	200 ppm 760 mg/m³
NOM-010-STPS-1999 NOM-010-STPS-1999	LMPE-CT (mg/m3) LMPE-CT (ppm)	250 ppm
NOM-010-STPS-2014	VLE-PPT (ppm)	250 ppm 250 ppm
NOM-010-STPS-2014	VLE-PPT (ppm)	200 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	200 ppm
USA (ACGIH)	ACGIH TWA (riig/rii) ACGIH Ceiling (mg/m³)	250 ppm



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Isopropyl Acetate (108-21-4)		
NOM-010-STPS-1999	LMPE-PPT (mg/m3)	950 mg/m³
NOM-010-STPS-1999	LMPE-PPT (ppm)	250 ppm
NOM-010-STPS-1999	LMPE-CT (mg/m3)	1185 mg/m³
NOM-010-STPS-1999	LMPE-CT (ppm)	310 ppm
NOM-010-STPS-2014	VLE-PPT (ppm)	200 ppm
NOM-010-STPS-2014	VLE-CT (ppm)	100 ppm
USA (ACGIH)	ACGIH TWA (mg/m³)	100 ppm
USA (ACGIH)	ACGIH Ceiling (mg/m³)	200 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

Remarks

: Chemical-resistant gloves, tested according to EN 374.

: 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
Other Protective Equipment

: If needed, wear an appropriate NIOSH approved respirator.

: 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/cm³
Molecular Weight	Not Available	Weight	6.334 lbs/gal
Vapor Pressure	Not Available	рН	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, Colourless	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		

SECTION 10 - STABILITY AND REACTIVITY



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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 Effe	cts
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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.)

Isobutane (CAS: 75-28-5 / EC: 200-857-2)

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

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)
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.)	

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)



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Solvent Naphtha (Petroleum), Light Aliphatic (CAS: 64742-89-8 / EC: 265-192-2)			
LC50 Inhalation (Rat)	> 20 mg/l/4h (External SDS)		
thyl 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	2-961-6)		
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	: See Section 4.2		
Effects from Short and Long Term Exposure			
Skin Corrosion/Irritation	: Causes skin irritation.		
4			

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

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	

SECTION 12 - ECOLOGICAL INFORMATION

12.1 **Ecotoxicity and Ecological Properties**

n-Butane (106-97-8)			
Persistence and Degradibility	Readily biodegradable in water.		
Bioconcentration Factor	33.52		
Log Pow	2.89		
Bioacculative Potential	Low potential for bioaccumulation (Log Kow < 4).		
Log Koc	1.641		
Propane (74-98-6)			
Persistence and Degradibility	Readily biodegradable in water. Not applicable (gas). Photodegradation in the air.		
BCF Fish	9 - 25 (BCF)		
Log Pow	2.28 (Calculated)		
Bioacculative Potential	Low potential for bioaccumulation (Loa Kow < 4).		



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Isobutane (75-28-5)	
Persistence and Degradibility	Readily biodegradable in water. Biodegradable in the soil. Not applicable (gas).
BCF Fish	26.62
Log Pow	2.76
Bioacculative 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 Degradibility	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 O₂/g substance
BCF Fish	14.1 - 24 (BCF)
Log Pow	3.217
Bioacculative 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 EC50 Other Aquatic Organisms	4.6 mg/l Green Algae - 72hr
Persistence and Degradibility	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	$2.1 \text{ g } O_2/\text{g substance}$ $3.17 \text{ g } O_2/\text{g substance}$
Biodegration	81 % 28 Days
BCF Fish	1.18
Log Pow	3.15
Bioacculative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	2.4
-	1-17
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 Degradibility	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	$3.13 \text{ g } O_2/g \text{ substance}$
Biodegration	86 % 28 Days
Log Pow	2.73 (Experimental Value)
Bioacculative Potential Log Koc	Low potential for bioaccumulation (BCF < 500). 2.15
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 Degradibility	Readily biodegradable in water.
Log Pow	> 3
Solvent Naphtha (Petroleum), Light Aliphatio	·
Persistence and Degradibility	Expected to be readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.
Biodegration	95 % 28 Days
Log Kow	2.1
Bioacculative 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
	,



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Ethyl Acetate (141-78-6)	
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 Degradibility	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 O₂/g substance
Theoretical Oxygen Demand	1.82 g O₂/g substance
Biodegration	100 % 28 Days
BCF Fish	30
Log Pow	0.73
Bioacculative 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
	> 100 mg/l Water Flea - 48hr
EC50 Daphnia	> 100 mg/l Water Flea - 48nr > 100 mg/l Green Algae - 96hr
EC50 Other Aquatic Organisms Persistence and Degradibility	
Persistence and Degradibility	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance
D: 1 : 10 D 1	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 O₂/g substance
Biodegration	58 % 28 Days
BCF Fish	0.46 (BCF)
Log Pow	0.56 (Experimental Value)
Bioacculative 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 Degradibility	Readily biodegradable in water. Inherently biodegradable. Highly mobile in soil.
Chemical Oxygen Demand	1511.8 mg/g
Theoretical Oxygen Demand	1510 mg/g
Biodegration	70 % 28 Days
BCF Fish	< 1 (BCF)
Log Pow	0.18
Bioacculative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	0.68
Isopropyl Acetate (108-21-4)	
	265 mall Caldan Orfo, OChr
LC50 Fish	265 mg/l Golden Orfe - 96hr
EC50 Daphnia	4150 mg/l Water Flea - 24hr
Persistence and Degradibility	Readily biodegradable in water.
Biochemical Oxygen Demand	0.26 g O₂/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
Bioacculative 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 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.



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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

UN Number UN1950 UN1950 UN1950

14.2 **UN Proper Shipping Name** NOM-002-SLT (MEXICO) IATA (AIR) **IMDG (OCEAN)**

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

NOM-002-SLT (MEXICO) **IMDG (OCEAN)** 14.3 **Transport Hazard Class(es)** IATA (AIR)

Transport Hazard Class(es) 2 2.1 - Flammable gas Labels None None



2

Limited Quantity



Not Applicable Not Applicable



14.4 **Packing Group** NOM-002-SLT (MEXICO) IATA (AIR) **IMDG (OCEAN)**

Packing Group None None None

14.5 **Environmental Hazards** IATA (AIR) IMDG (OCEAN)

Marine Pollutant No No No

14.6 **Special Precautions**

EmS Code

Precautions : None Identified

14.7 Transport in Bulk According to Annex II of Marpol and the IBC Code

: Not applicable for product as supplied Remarks

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.

INSQ Inventory (Mexico) : To the best of our knowledge, all chemical substances in this product are listed on the National Inventory of

Chemical Substances of Mexico.

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



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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	Density	Modified
9	Auto-ignition temperature	Modified
9	Boiling point	Modified
9	Flash point	Modified
9	Melting point	Modified
9	Relative vapour density at 20 °C	Added
10	Reactivity	Modified
13	Waste Disposal of Packaging	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.
H336	May cause drowsiness or dizziness.
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

Disclaimer of Liability

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