SAFETY DATA SHEET

1. Identification

Product identifier	**Universal 1K Self Etching Primer**
Other means of identification	
Product code	RS-795
Recommended use	Primer
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	Medallion Refinish System	
Address	5751 N. Webster Street Dayton, OH 45414 United States	
Telephone	TECH SUPPORT	937-890-6547
	SALES	937-890-6547
	PHONE	800-257-6547
Website	www.medallionrefinish.com	
E-mail	info@rubber-seal.net	
Contact person	Elizabeth Wells	
Emergency phone number	MAIN OFFICE: M-F 7:45am-4:30pm	800-257-6547
	EMERGENCY 24 Hrs.	800-424-9300 ChemTrec

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 2
	Reproductive toxicity (the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	

Label elements

Signal word Danger

Hazard statement	Highly flammable liquid and vapor. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.
Supplemental information	14.18% of the mixture consists of component(s) of unknown acute oral toxicity. 57.27% of the mixture consists of component(s) of unknown acute inhalation toxicity. 44.33% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 44.33% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ethanol		64-17-5	20 - < 45
Isopropanol		67-63-0	5 - < 20
N-Butyl Alcohol		71-36-3	5 - < 20
Glycol Ether PM Acetate		108-65-6	5 - < 15
Isobutyl Alcohol		78-83-1	5 - < 15
Methanol		67-56-1	0 - < 5
Phenol		108-95-2	0 - < 5
Phosphoric Acid Regulatory		7664-38-2	0 - < 5
Toluene		108-88-3	0 - < 5
Xylene		1330-20-7	0 - < 5
Aluminum Hydroxide Regulatory		21645-51-2	0< 1
Carbon Black		1333-86-4	0< 1
Ethylbenzene		100-41-4	0< 1
Formaldehyde Regulatory		50-00-0	0< 1
Methyl Isobutyl Ketone		108-10-1	0< 1
Mineral Spirits		8052-41-3	0< 1
Silica		7631-86-9	0< 1
Titanium Dioxide		13463-67-7	0< 1
Other components below reportable levels			5 - < 10

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed
Burning pain and severe corrosive skin damage. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Coughing. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information
Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Alcohol resistant foam. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Formaldehyde Regulatory (CAS 50-00-0)	STEL	2 ppm
	TWA	0.75 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m3	
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3	
		100 ppm	
Isobutyl Alcohol (CAS 78-83-1)	PEL	300 mg/m3	
		100 ppm	
Isopropanol (CAS 67-63-0)	PEL	980 mg/m3	
		400 ppm	
Methanol (CAS 67-56-1)	PEL	260 mg/m3	
		200 ppm	
Methyl Isobutyl Ketone (CAS 108-10-1)	PEL	410 mg/m3	
		100 ppm	
Mineral Spirits (CAS 8052-41-3)	PEL	2900 mg/m3	
		500 ppm	
N-Butyl Alcohol (CAS 71-36-3)	PEL	300 mg/m3	
		100 ppm	
Phenol (CAS 108-95-2)	PEL	19 mg/m3	
		5 ppm	
Phosphoric Acid Regulatory (CAS 7664-38-2)	PEL	1 mg/m3	
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
Xylene (CAS 1330-20-7)	PEL	435 mg/m3	
		100 ppm	

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Silica (CAS 7631-86-9)	TWA	0.8 mg/m3
		20 mppcf

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminum Hydroxide Regulatory (CAS 21645-51-2)	TWA	1 mg/m3	Respirable fraction.
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm	
Formaldehyde Regulatory (CAS 50-00-0)	Ceiling	0.3 ppm	
Isobutyl Alcohol (CAS 78-83-1)	TWA	50 ppm	
Isopropanol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
Methanol (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
Methyl Isobutyl Ketone (CAS 108-10-1)	STEL	75 ppm	
	TWA	20 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Mineral Spirits (CAS 8052-41-3)	TWA	100 ppm	
N-Butyl Alcohol (CAS 71-36-3)	TWA	20 ppm	
Phenol (CAS 108-95-2)	TWA	5 ppm	
Phosphoric Acid Regulatory (CAS 7664-38-2)	STEL	3 mg/m3	
	TWA	1 mg/m3	
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Toluene (CAS 108-88-3)	TWA	20 ppm	
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TWA	0.1 mg/m3
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
Formaldehyde Regulatory (CAS 50-00-0)	Ceiling	0.1 ppm
	TWA	0.016 ppm
Isobutyl Alcohol (CAS 78-83-1)	TWA	150 mg/m3
		50 ppm
Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3
		500 ppm
	TWA	980 mg/m3
		400 ppm
Methanol (CAS 67-56-1)	STEL	325 mg/m3
		250 ppm
	TWA	260 mg/m3
		200 ppm
Methyl Isobutyl Ketone (CAS 108-10-1)	STEL	300 mg/m3
		75 ppm
	TWA	205 mg/m3
		50 ppm
Mineral Spirits (CAS 8052-41-3)	Ceiling	1800 mg/m3
	TWA	350 mg/m3
N-Butyl Alcohol (CAS 71-36-3)	Ceiling	150 mg/m3
		50 ppm
Phenol (CAS 108-95-2)	Ceiling	60 mg/m3
		15.6 ppm
	TWA	19 mg/m3
		5 ppm
Phosphoric Acid Regulatory (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3
Silica (CAS 7631-86-9)	TWA	6 mg/m3
Toluene (CAS 108-88-3)	STEL	560 mg/m3
		150 ppm
	TWA	375 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
		100 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Glycol Ether PM Acetate (CAS 108-65-6)	TWA	50 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
Isopropanol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*
Methyl Isobutyl Ketone (CAS 108-10-1)	1 mg/l	Methyl isobutyl ketone	Urine	*
Phenol (CAS 108-95-2)	250 mg/g	Phenol with hydrolysis	Creatinine in urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Glycol Ether PM Acetate (CAS 108-65-6)	Can be absorbed through the skin.
Methanol (CAS 67-56-1)	Can be absorbed through the skin.
N-Butyl Alcohol (CAS 71-36-3)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Methanol (CAS 67-56-1)	Skin designation applies.
N-Butyl Alcohol (CAS 71-36-3)	Skin designation applies.
Phenol (CAS 108-95-2)	Skin designation applies.
Toluene (CAS 108-88-3)	Skin designation applies.

US - Tennessee OELs: Skin designation

Methanol (CAS 67-56-1)	Can be absorbed through the skin.
N-Butyl Alcohol (CAS 71-36-3)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Methanol (CAS 67-56-1)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Methanol (CAS 67-56-1)	Can be absorbed through the skin.
N-Butyl Alcohol (CAS 71-36-3)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Phenol (CAS 108-95-2)	Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	Chemical respirator with organic vapor cartridge and full facepiece.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Gray
Odor	Solvent.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-173.38 °F (-114.1 °C) estimated
Initial boiling point and boiling range	173.3 °F (78.5 °C) estimated
Flash point	53.6 °F (12.0 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.2 % estimated
Flammability limit - upper (%)	12 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	50.51 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	650 °F (343.33 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.84 g/cm3 estimated
Flammability class	Flammable IB estimated
Percent volatile	84.79 w/w % By Weight 89.94 v/v % By Volume
Specific gravity	0.84 estimated
VOC (Weight %)	6.11 lb/gal (Actual VOC - With Water With Exempts) 6.13 lb/gal (Regulatory VOC - Less Water Less Exempts) 732.06 g/L (Actual VOC - With Water With Exempts)

734.08 g/L (Regulatory VOC - Less Water Less Exempts)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing agents. Alkaline metals. Halogens. Isocyanates. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Headache. May cause drowsiness and dizziness. Nausea, vomiting. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Coughing.

Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful if swallowed. Narcotic effects. May cause respiratory irritation.

Components	Species	Test Results
Aluminum Hydroxide Regulatory (CAS 21645-51-2)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Carbon Black (CAS 1333-86-4)		
Acute		
Oral		
LD50	Rat	> 8000 mg/kg
Ethanol (CAS 64-17-5)		
Acute		
Inhalation		
LC50	Mouse	39 mg/l, 4 Hours
	Rat	20000 ppm, 10 Hours
Oral		
LD50	Dog	5.5 g/kg
	Guinea pig	5.6 g/kg
	Mouse	3450 mg/kg
	Rat	6.2 g/kg
Ethylbenzene (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	17800 mg/kg
Oral		
LD50	Rat	3500 mg/kg

Components	Species	Test Results
Formaldehyde Regulatory (CAS 50-00-0)		
Acute		
Inhalation		
LC50	Mouse	0.414 mg/l, 4 Hours
		0.4 mg/l, 2 Hours
	Rat	0.82 mg/l, 0.5 Hours
		0.48 mg/l, 4 Hours
Oral		
LD50	Guinea pig	260 mg/kg
	Mouse	42 mg/kg
	Rat	100 mg/kg
Isobutyl Alcohol (CAS 78-83-1)		
Acute		
Dermal		
LD50	Rabbit	3392 mg/kg
Inhalation		
LC50	Rat	8000 ppm, 4 Hours
LD50	Guinea pig	19.9 mg/l
	Rabbit	26.25 mg/l
	Rat	19.2 mg/l
Oral		
LD50	Mouse	3500 mg/kg
	Rat	2.46 g/kg
Isopropanol (CAS 67-63-0)		
Acute		
Dermal		
LD50	Rabbit	12800 mg/kg
Oral		
LD50	Dog	4797 mg/kg
	Mouse	3600 mg/kg
	Rabbit	5.03 g/kg
	Rat	4.7 g/kg
Methanol (CAS 67-56-1)		
Acute		
Dermal		
LD50	Rabbit	15800 mg/kg
Inhalation		
LC50	Cat	85.41 mg/l, 4.5 Hours
		43.68 mg/l, 6 Hours
	Rat	64000 ppm, 4 Hours
		87.5 mg/l, 6 Hours
Oral		
LD50	Dog	8000 mg/kg
	Monkey	2 g/kg
	Mouse	7300 mg/kg
	Rabbit	14.4 g/kg
	Rat	5628 mg/kg

Components	Species	Test Results
Methyl Isobutyl Ketone (CAS 108-10-1)		
Acute		
Dermal		
LD50	Rabbit	> 16000 mg/kg
Inhalation		
LC50	Rat	8.2 mg/l, 4 Hours
Oral		
LD50	Rat	2080 mg/kg
N-Butyl Alcohol (CAS 71-36-3)		
Acute		
Dermal		
LD50	Rabbit	3400 mg/kg
Inhalation		
LC50	Rat	8000 ppm, 4 Hours
Oral		
LD50	Rat	790 mg/kg
Phenol (CAS 108-95-2)		
Acute		
Dermal		
LD50	Rabbit	850 mg/kg
	Rat	669 mg/kg
Oral		
LD50	Cat	0.1 g/kg
	Dog	0.5 g/kg
	Mouse	270 mg/kg
	Rat	317 mg/kg
Phosphoric Acid Regulatory (CAS 7664-38-2)		
Acute		
Dermal		
LD50	Rabbit	2740 mg/kg
Oral		
LD50	Rat	1530 mg/kg
Silica (CAS 7631-86-9)		
Acute		
Oral		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12124 mg/kg
		14.1 ml/kg
Inhalation		
LC50	Mouse	5320 ppm, 8 Hours
		400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours
		12200 ppm, 2 Hours
		8000 ppm, 4 Hours

Components	Species	Test Results
Oral		
LD50	Rat	2.6 g/kg
Xylene (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
Oral		
LD50	Mouse	1590 mg/kg
	Rat	3523 - 8600 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

ACGIH sensitization

Formaldehyde Regulatory (CAS 50-00-0) Sensitizer.

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon Black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Formaldehyde Regulatory (CAS 50-00-0)	1 Carcinogenic to humans.
Methyl Isobutyl Ketone (CAS 108-10-1)	2B Possibly carcinogenic to humans.
Mineral Spirits (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity to humans.
Phenol (CAS 108-95-2)	3 Not classifiable as to carcinogenicity to humans.
Silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
Titanium Dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Formaldehyde Regulatory (CAS 50-00-0) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

Formaldehyde Regulatory (CAS 50-00-0) Known To Be Human Carcinogen.

Reproductive toxicity Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure May cause respiratory irritation. May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Ethanol (CAS 64-17-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Ethylbenzene (CAS 100-41-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	7.5 - 11 mg/l, 96 hours
Formaldehyde Regulatory (CAS 50-00-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	4.3 - 7.8 mg/l, 48 hours
Fish	LC50	Striped bass (Morone saxatilis)	10.302 - 16.743 mg/l, 96 hours
Isobutyl Alcohol (CAS 78-83-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	950 - 1200 mg/l, 48 hours
Fish	LC50	Bleak (Alburnus alburnus)	1000 - 3000 mg/l, 96 hours
Isopropanol (CAS 67-63-0)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours
Methanol (CAS 67-56-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Methyl Isobutyl Ketone (CAS 108-10-1)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	492 - 593 mg/l, 96 hours
N-Butyl Alcohol (CAS 71-36-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1897 - 2072 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	100 - 500 mg/l, 96 hours
Phenol (CAS 108-95-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia obtusa)	4.7 - 6.4 mg/l, 48 hours
Fish	LC50	Asiatic knifefish (Notopterus notopterus)	8 - 8.25 mg/l, 96 hours
Titanium Dioxide (CAS 13463-67-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours
Xylene (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethanol	-0.31
Ethylbenzene	3.15
Formaldehyde Regulatory	0.35
Isobutyl Alcohol	0.76
Isopropanol	0.05
Methanol	-0.77
Methyl Isobutyl Ketone	1.31
Mineral Spirits	3.16 - 7.15
N-Butyl Alcohol	0.88
Phenol	1.46
Toluene	2.73
Xylene	3.12 - 3.2

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

The following transportation information is provided based on the manufacturer's interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking, and labeling prior to offering for transport.

DOT

UN number UN1263

UN proper shipping name Paint related material including paint thinning, drying, removing, or reducing compound

Transport hazard class(es)

Class 3

Subsidiary risk -

Label(s) 3

Packing group II

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions 149, B52, IB2, T4, TP1, TP8, TP28

Packaging exceptions 150

Packaging non bulk 173

Packaging bulk 242

IATA

UN number UN1263

UN proper shipping name Paint related material (including paint thinning or reducing compounds)

Transport hazard class(es)

Class 3

Subsidiary risk -

Packing group II

Environmental hazards No.

ERG Code 3L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1263
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

DOT

IATA; IMDG

General information DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Formaldehyde Regulatory (CAS 50-00-0)	Listed.
Isobutyl Alcohol (CAS 78-83-1)	Listed.
Isopropanol (CAS 67-63-0)	Listed.
Methanol (CAS 67-56-1)	Listed.
Methyl Isobutyl Ketone (CAS 108-10-1)	Listed.
N-Butyl Alcohol (CAS 71-36-3)	Listed.
Phenol (CAS 108-95-2)	Listed.
Phosphoric Acid Regulatory (CAS 7664-38-2)	Listed.

Toluene (CAS 108-88-3) Listed.
Xylene (CAS 1330-20-7) Listed.

SARA 304 Emergency release notification

Formaldehyde Regulatory (CAS 50-00-0) 100 LBS
Phenol (CAS 108-95-2) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Formaldehyde Regulatory (CAS 50-00-0)
Cancer
Skin sensitization
Respiratory sensitization
Eye irritation
Skin irritation
respiratory tract irritation
Acute toxicity
Flammability

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
Phenol	108-95-2	1000		500 lbs	10000 lbs
Formaldehyde Regulatory	50-00-0	100	500 lbs		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Isopropanol	67-63-0	5 - < 20
N-Butyl Alcohol	71-36-3	5 - < 20
Methanol	67-56-1	0 - < 5
Phenol	108-95-2	0 - < 5
Toluene	108-88-3	0 - < 5
Xylene	1330-20-7	0 - < 5
Ethylbenzene	100-41-4	0< 1
Formaldehyde Regulatory	50-00-0	0< 1
Methyl Isobutyl Ketone	108-10-1	0< 1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethylbenzene (CAS 100-41-4)
Formaldehyde Regulatory (CAS 50-00-0)
Methanol (CAS 67-56-1)
Methyl Isobutyl Ketone (CAS 108-10-1)
Phenol (CAS 108-95-2)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Formaldehyde Regulatory (CAS 50-00-0)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Methyl Isobutyl Ketone (CAS 108-10-1) 6715
Toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Methyl Isobutyl Ketone (CAS 108-10-1) 35 %WV
Toluene (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Methyl Isobutyl Ketone (CAS 108-10-1)	6715
Toluene (CAS 108-88-3)	594

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Carbon Black (CAS 1333-86-4)
Ethylbenzene (CAS 100-41-4)
Formaldehyde Regulatory (CAS 50-00-0)
Isopropanol (CAS 67-63-0)
Methanol (CAS 67-56-1)
Methyl Isobutyl Ketone (CAS 108-10-1)
Mineral Spirits (CAS 8052-41-3)
Phenol (CAS 108-95-2)
Phosphoric Acid Regulatory (CAS 7664-38-2)
Titanium Dioxide (CAS 13463-67-7)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

US. Massachusetts RTK - Substance List

Carbon Black (CAS 1333-86-4)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Formaldehyde Regulatory (CAS 50-00-0)
Isobutyl Alcohol (CAS 78-83-1)
Isopropanol (CAS 67-63-0)
Methanol (CAS 67-56-1)
Methyl Isobutyl Ketone (CAS 108-10-1)
Mineral Spirits (CAS 8052-41-3)
N-Butyl Alcohol (CAS 71-36-3)
Phenol (CAS 108-95-2)
Phosphoric Acid Regulatory (CAS 7664-38-2)
Silica (CAS 7631-86-9)
Titanium Dioxide (CAS 13463-67-7)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

US. New Jersey Worker and Community Right-to-Know Act

Carbon Black (CAS 1333-86-4)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Formaldehyde Regulatory (CAS 50-00-0)
Isobutyl Alcohol (CAS 78-83-1)
Isopropanol (CAS 67-63-0)
Methanol (CAS 67-56-1)
Methyl Isobutyl Ketone (CAS 108-10-1)
N-Butyl Alcohol (CAS 71-36-3)
Phenol (CAS 108-95-2)
Phosphoric Acid Regulatory (CAS 7664-38-2)
Silica (CAS 7631-86-9)
Titanium Dioxide (CAS 13463-67-7)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbon Black (CAS 1333-86-4)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Formaldehyde Regulatory (CAS 50-00-0)
Isobutyl Alcohol (CAS 78-83-1)
Isopropanol (CAS 67-63-0)
Methanol (CAS 67-56-1)
Methyl Isobutyl Ketone (CAS 108-10-1)
Mineral Spirits (CAS 8052-41-3)

N-Butyl Alcohol (CAS 71-36-3)
Phenol (CAS 108-95-2)
Phosphoric Acid Regulatory (CAS 7664-38-2)
Silica (CAS 7631-86-9)
Titanium Dioxide (CAS 13463-67-7)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

US. Rhode Island RTK

Ethylbenzene (CAS 100-41-4)
Formaldehyde Regulatory (CAS 50-00-0)
Isobutyl Alcohol (CAS 78-83-1)
Isopropanol (CAS 67-63-0)
Methanol (CAS 67-56-1)
Methyl Isobutyl Ketone (CAS 108-10-1)
N-Butyl Alcohol (CAS 71-36-3)
Phenol (CAS 108-95-2)
Phosphoric Acid Regulatory (CAS 7664-38-2)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon Black (CAS 1333-86-4)	Listed: February 21, 2003
Ethanol (CAS 64-17-5)	Listed: April 29, 2011
	Listed: July 1, 1988
Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004
Formaldehyde Regulatory (CAS 50-00-0)	Listed: January 1, 1988
Methyl Isobutyl Ketone (CAS 108-10-1)	Listed: November 4, 2011
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Ethanol (CAS 64-17-5)	Listed: October 1, 1987
Methanol (CAS 67-56-1)	Listed: March 16, 2012
Methyl Isobutyl Ketone (CAS 108-10-1)	Listed: March 28, 2014
Toluene (CAS 108-88-3)	Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Toluene (CAS 108-88-3)	Listed: August 7, 2009

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date 10-21-2015

Version # 01

Disclaimer

Medallion Refinish System cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.