1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	**CLEARFIX POLISH 1 – CLARITY RESTORATION – CF1**
1.2	Chemical Name:	Acrylic Polymer Solution
1.3	Synonyms:	CF1
1.4	Trade Names:	Clearfix Polish 1 – Clarity Restoration – CF1
1.5	Product Use:	Abrasive for aircraft window restoration.
1.6	Distributor's Name:	Clearfix Aerospace, Inc.
1.7	Distributor's Address:	3960 W Point Loma Blvd, Suite H369, San Diego, CA 92110 USA
1.8	Emergency Phone:	**+1 (619) 297-3678**
1.9	Business Phone / Fax:	+1 (619) 297-3678

2. HAZARDS IDENTIFICATION

2.1 Hazard Identification:

This product is classified as a HAZARDOUS SUBSTANCE and as DANGEROUS GOODS according to the classification criteria of NOHSC and ADG Code (Australia).

WARNING! CAUSES SERIOUS EYE IRRITATION. CAUSES SKIN IRRITATION.

Classification: Eye Irrit. 2A; Skin Irrit. 2

Hazard Statements (H): H315 – Causes skin irritation. H319 – Causes serious eye irritation.

Precautionary Statements (P): P264 – Wash hands and exposed skin areas with soap and warm water thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection. P302+P352 – IF ON SKIN: Wash with soap and warm water thoroughly after handling. P321 – For specific first aid treatment (see section 4 of this Safety Data Sheet). P332+P313 – If skin irritation occurs: Get medical advice/attention. P362+P364 – Take off contaminated clothing and wash it before reuse. P305+P351+P338 – IF IN EYES - Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P337+P313 – If eye irritation persists: Get medical advice/attention.

3. COMPOSITION & INGREDIENT INFORMATION

					EXPOSURE LIMITS IN AIR (mg/m³)								
					ACGIH		NOHSC			OSHA			
					ppm		ppm			ppm			
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	OTHER
WATER	7732-18-5	ZC0110000	231-791-2	60-100	NA	NA	NF	NF	NF	NA	NA	NA	
ALUMINUM SILICATE	66402-68-4	NA	266-340-9	10-30	NA	NA	NF	NF	NF	NA	NA	NA	
	Eye Dam. 1; Eye Irrit. 2; H318,H319												
PROPYLENE GLYCOL	57-55-6	TY200000	200-338-0	1-15	(10)	NA	150	474	NF	NA	NA	NA	
	Skin Irrit. 3; Eye Irrit. 2; H316, H320												
ACRYLIC POLYMER	NA	NA	NA	1-5	NA	NA	NF	NF	NF	NA	NA	NA	
ABRASIVE	1318-23-6	NA	215-284-3	1-5	NA	NA	NF	NF	NF	NA	NA	NA	
SURFACTANT	84133-50-6	NA	NA	1-5	NA	NA	NF	NF	NF	NA	NA	NA	
2-PHENOXYETHANOL	122-99-6	KM0350000	204-589-7	0.5-1.5	NA	NA	NF	NF	NF	NA	NA	NA	
	Acute Tox. 4; Eye Irrit. 2A; H302, H319												
PHENOLIC BENZOTRIAZOLE	127519-17-9	NA	NA	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	
BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL) SEBACATE	41556-26-7	NA	255-437-1	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	
SODIUM LAURYL SULFATE	151-21-3	WT1050000	205-788-1	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	
	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H315, H319												
QUARTZ SILICA	14808-60-7	VV7330000	238-787-4	0.1-1	0.25	NA	NF	0.1	NF	0.1	NA	50	

4. FIRST AID MEASURES

4.1	First Aid:	Ingestion:	If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to an unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.
		Eyes:	Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.
		Skin:	If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.
		Inhalation:	Remove victim to fresh air at once.
4.2	Effects of Exposure:	Ingestion:	Abdominal pain, stomach upset, nausea, vomiting and diarrhea.
		Eyes:	Irritating to the eyes.
		Skin:	Contact with the skin during product use is not expected to result in significant irritation. However, may cause an allergic reaction in some sensitive individuals.
		Inhalation:	Irritation to the nose, throat and other tissues of the respiratory system.
4.3	Symptoms of Overexposure:	Ingestion:	Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.
		Eyes:	Irritating to the eyes. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
		Skin:	Contact with the skin during product use is not expected to result in significant irritation. Signs/symptoms may include localized redness, itching, drying and cracking of skin. However, may cause an allergic reaction in some sensitive individuals. Allergic skin reaction (non-photo induced) signs/symptoms may include redness, swelling, blistering, and itching.
		Inhalation:	Vapors of this product may be slightly irritating to the nose, throat and other tissues of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness
4.4	Acute Health Effects:	Mild to moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.	
4.5	Chronic Health Effects:	None known.	
4.6	Target Organs:	Eyes, skin, respiratory system, central nervous system (CNS).	
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system).	

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARDS	0
PROTECTIVE EQUIPMENT	B
EYES / SKIN	

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	If involved in a fire, this product may decompose at high temperatures to form toxic gases (e.g., CO, CO_2, NO_x, aldehydes).
5.2	Extinguishing Methods:	Water Fog, CO_2, Halon (if permitted), Dry Chemical, Foam
5.3	Firefighting Procedures:	First responders should wear eye protection. Structural firefighters must wear SCBAs and full protective equipment. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product.

6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. For small spills (e.g., < 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse. For large spills (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., bentonite, vermiculite, or commercially available inorganic absorbent material). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid breathing of vapors, mists or spray. Avoid prolonged or repeated skin contact. Wash hands after handling, and before eating. Avoid breathing of dust created by sanding, grinding or machining. When polishing with product, keep moist to avoid dust.
7.2	Storage & Handling:	Keep containers sealed at all times, store in well-ventilated area. Store away from areas where product may come into contact with food or pharmaceuticals. Store away from oxidizing agents.
7.3	Special Precautions:	Open containers slowly on a stable surface. Keep container tightly closed when not in use. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Exposure Limits: ppm (mg/m^3)

	ACGIH		NOHSC			OSHA			OTHER
CHEMICAL NAME(S)	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
PROPYLENE GLYCOL	(10)	NA	150	474	NF	NA	NA	NA	
QUARTZ SILICA	0.25	NA	NF	0.1	NF	0.1	NA	50	

8.2	Ventilation & Engineering Controls:	Provide appropriate local exhaust ventilation on open containers. When using keep the product moist at all times. Use in an enclosed process area is recommended. Use in a well-ventilated area. Do not use in a confined area or areas with little or no air movement.	
8.3	Respiratory Protection:	Avoid breathing of vapors, mists or spray. No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, E.C. member states, or Australia.	
8.4	Eye Protection:	Avoid eye contact. Wear safety glasses. If necessary, refer to U.S. OSHA 29 CFR §1910.133, Canadian standards, or the European Standard EN166.	
8.5	Hand Protection:	Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material(s) are recommended: Nitrile Rubber. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the E.C. member states.	
8.6	Body Protection:	No special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the E.C. member states, or U.S. OSHA.	

9. PHYSICAL & CHECHMICAL PROPERTIES

9.1	Appearance:	Off-white liquid
9.2	Odor:	Little or no odor
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	100 °C (212 ºF)
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	17.5 mm @ 25 °C (77 °F)
9.10	Vapor Density:	1.1 (Air = 1.0)
9.11	Relative Density:	1.20
9.12	Solubility:	Moderately Soluble in Water @ 32 °F
9.13	Partition Coefficient (log P_{ow}):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	Evaporation Rate: Negligible; VOC: 0.0%

10. STABILITY & REACTIVITY

10.1	Stability:	Stable under ambient conditions when stored properly (see section 7, Storage and Handling)
10.2	Hazardous Decomposition Products:	If exposed to extremely high temperatures, the products of thermal decomposition may include irritation vapors and nitrogen and carbon oxide gases (e.g. NO_x, CO, CO_2).
10.3	Hazardous Polymerization:	Hazardous polymerization will not occur.
10.4	Conditions to Avoid:	High temperatures and incompatible substances.
10.5	Incompatible Substances:	Strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation:	YES	Absorption:	YES	Ingestion:	YES
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product and are presented below: Propylene Glycol: LD_{50} (oral, rat) = 20,000 mg/kg.					
11.3	Acute Toxicity:	See section 4.4					
11.4	Chronic Toxicity:	See section 4.6					
11.5	Suspected Carcinogen:	NA					
11.6	Reproductive Toxicity:	This product is not reported to cause reproductive toxicity in humans.					
	Mutagenicity:	This product is not reported to cause mutagenic effects in humans.					
	Embryotoxicity:	This product is not reported to cause embryotoxic effects in humans.					
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.					
	Reproductive Toxicity:	This product is not reported to cause reproductive effects in humans.					
11.7	Irritancy of Product:	See section 4.4					
11.8	Biological Exposure Indices:	NA					
11.9	Physician Recommendations:	Treat symptomatically.					

12. ECOLOGICAL INFORMATION

12.1	Environmental Stability:	Propylene Glycol: (Pimephales promelas (fathead minnow), 96h): 52,930 mg/L; Propylene Glycol: (Daphnia magna (water flea), 48h): 13,020 mg/L
12.2	Effects on Plants & Animals:	There are no specific data for this product.
12.3	Effects on Aquatic Life:	There are no specific data available for this product; however, very large releases of this product may be harmful or fatal to overexposed aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Waste disposal must be in accordance with appropriate Federal, state, and local regulations.
13.2	Special Considerations:	Reclaim product if feasible. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND):	NOT REGULATED
14.2	IATA (AIR):	NOT REGULATED
14.3	IMDG (OCN):	NOT REGULATED
14.4	TDGR (Canadian GND):	NOT REGULATED
14.5	ADR/RID (EU):	NOT REGULATED
14.6	SCT (MEXICO):	NOT REGULATED
14.7	ADGC (AUS):	NOT REGULATED

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product contains 2-Phenoxyethanol (Glycol Ethers), a substance subject to SARA Title III, section 313 reporting requirements.
15.2	SARA Threshold Planning Quantity:	There are no specific Threshold Planning Quantities for the components of this product.
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity (RQ):	NA
15.5	Other Federal Requirements:	This product does not contain any substances identified as Hazardous Air Pollutants (HAPs).
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS Class D2B (Other Toxic Effects) 
15.7	State Regulatory Information:	Propylene Glycol is found on the following state criteria lists: New Jersey Right-to-Know List (NJ), Pennsylvania Right-to-Know List (PA), and Washington Permissible Exposures List (WA). Aluminum Silicate is found on the following state criteria lists: NJ, and PA. 2-Phenoxyethanol is listed on the following state criteria list: MA, NJ and PA. No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI). California Proposition 65: **WARNING**: This product contains a chemical or chemicals, which can cause cancer, birth defects or other reproductive harm!
15.8	Other Requirements:	The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC: Irritant (Xi). Risk Phrases (R):36/38 – Irritating to eyes and skin. Safety Phrases (S): 2-26-28-36/37/39-45 – Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, was immediately with plenty of soap and water. Wear suitable protective clothing, gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label. 

16. OTHER INFORMATION

16.1	Other Information:	**WARNING! CAUSES SERIOUS EYE IRRITATION. CAUSES SKIN IRRITATION.** Wash hands and exposed skin areas with soap and warm water thoroughly after handling. Wear protective gloves/protective clothing/eye protection. IF ON SKIN: Wash with soap and warm water thoroughly after handling. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES - Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists: Get medical advice/attention. **KEEP OUT OF REACH OF CHILDREN.**
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Clearfix Aerospace's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.
16.4	Prepared for:	**Clearfix Aerospace, Inc.** 3960 W Point Loma Blvd Suite H369 San Diego, CA 92110 USA Tel: +1 (619) 297-3678 http://www.clearfixaerospace.com
16.5	Prepared by:	**ShipMate, Inc.** P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
TLV	Threshold Limit Value
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
IDLH	Immediately Dangerous to Life and Health

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A		**G**	
B		**H**	
C		**I**	
D		**J**	
E		**K**	
F		**X**	**Consult your supervisor or SOPs for special handling directions.**

OTHER STANDARD ABBREVIATIONS:

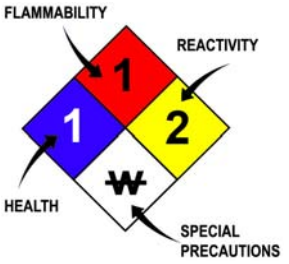
NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus
Flam.	Flammable
Liq.	Liquid
Sol.	Solid
Tox.	Toxicity
Irrit.	Irritation
Sens.	Senitization
Ox.	Oxidizing
Corr.	Corrosion
Repr.	Reproductive (Harm)
Asp.	Aspiration
Inh.	Inhalation
Dam.	Damage
STOT SE	Specific Target Organ Toxicity – Single Exposure
STOT RE	Specific Target Organ Toxicity – Repeated Exposure

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:	
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive



TOXICOLOGICAL INFORMATION:

LD_{50}	Lethal Dose (solids & liquids) which kills 50% of the exposed animals s
LC_{50}	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD_{lo}	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD_{lo}, LD_{lo}, & LD_o or TC, TC_o, LC_{lo}, & LC_o	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL_m	Median threshold limit
log K_{OW} or log K_{OC}	Coefficient of Oil/Water Distribution

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)
WGK	Wassergefährdungsklassen (German Water Hazard Class)

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

EC (67/548/EEC) INFORMATION:

C	E	F	N	O	T	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

CLP/GHS (1272/2008/EC) PICTOGRAMS:

GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environ-ment