SAFETY DATA SHEET

GF ACID CLEAN 3077LF

Section 1. Identification

GHS product identifier	: GF ACID CLEAN 3077LF			
Product code	: 01038.0002, 01038.0009, 01038.0016			
SDS #	: GAL00016			
Other means of identification	: Not available.			
Product type	: Liquid.			
Relevant identified uses o	f the substance or mixture and uses advised against			
Identified uses	: Acid Cleaner			
Supplier/Manufacturer	: DuBois Chemicals, Inc.DuBois Chemicals Canada, Inc.3630 E. Kemper Rd.1155 North Service Road WestCincinnati, OH 45241 USAUnit 6Phone: 1-800-438-2647Oakville, Ontario, L6M 3E3 CanadaPhone: 1-866-861-3603			
Emergency telephone number	: 1-866-923-4919 (US and Canada) 01-651-523-0314 (Int'l and Mexico)			

Section 2. Hazards identification

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Hazards not otherwise classified	: None known.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Storage	: Store locked up. Store in corrosive resistant container with a resistant inner liner.
 Response Absorb spillage to prevent material damage. IF INHALED: Remove vid and keep at rest in a position comfortable for breathing. Immediately ca CENTER or physician. IF SWALLOWED: Immediately call a POISON physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hai immediately all contaminated clothing. Rinse skin with water or shower contaminated clothing before reuse. Immediately call a POISON CENT IF IN EYES: Rinse cautiously with water for several minutes. Remove present and easy to do. Continue rinsing. Immediately call a POISON of physician. 	
Prevention	: Wear protective gloves. Recommended: Chemical-resistant gloves. Wear eye or face protection: Recommended: splash goggles. Wear protective clothing. Keep only in original container. Wash hands thoroughly after handling. Do not breathe dust or mist.
Precautionary statements	
	Causes severe skin burns and eye damage.
Hazard statements	: May be corrosive to metals.
Signal word	: Danger
<u>GHS label elements</u> Hazard pictograms	
substance or mixture	SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Classification of the	: CORROSIVE TO METALS - Category 1
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

of issue/Date of revision



Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
phosphoric acid	50 - 60	7664-38-2
citric acid	1 - 5	77-92-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Most important symp	toms/effects, acute and delayed
Potential acute healt	<u>h effects</u>
Eye contact	: Causes serious eye damage.
Inhalation	 May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Skin contact	: Causes severe burns.
Ingestion	: May cause burns to mouth, throat and stomach.
Over-exposure signs	s/symptoms
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.

Section 4. First aid measures

Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate r	nedical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
See toxicological information	ation (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Extinguishing mean		
Suitable extinguishing media	Jse an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	None known.	
Specific hazards arising from the chemical	n a fire or if heated, a pressure increase will occur and the container may burst.	
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides	
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breat apparatus (SCBA) with a full face-piece operated in positive pressure mode.	hing

Section 6. Accidental release measures

Personal precautions	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.			
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).			
Methods for cleaning up				
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.			
Large spill	: Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.			

Section 7. Handling and storage

Handling	: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
Storage	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	CAS #	ACGIH	OSHA	Mexico
phosphoric acid	7664-38-2	TWA: 1 mg/m ³ 8 hours. STEL: 3 mg/m ³ 15 minutes.	TWA: 1 mg/m ³ 8 hours.	LMPE-PPT: 1 mg/m ³ 8 hours. LMPE-CT: 3 mg/m ³ 15 minutes.
Engineering measures	local ex	perations generate dust, fun naust ventilation or other en contaminants below any re	gineering controls to keep	worker exposure to
Hygiene measures	eating, s Appropr Wash ce	ands, forearms and face the moking and using the lavat iate techniques should be u ontaminated clothing before are close to the workstatio	ory and at the end of the w sed to remove potentially c reusing. Ensure that eyev	orking period. ontaminated clothing.
Personal protection				
Respiratory	airfed re based o	assessment indicates this is spirator complying with an a n known or anticipated expo limits of the selected respir	approved standard. Respir	ator selection must be
Hands		al-resistant, impervious glov all times when handling che ıry.		
Eyes	assessn	yewear complying with an a nent indicates this is necess r dusts. Recommended: sp	sary to avoid exposure to lic	
Skin	perform	Il protective equipment for tl ed and the risks involved ar g this product.		
Environmental exposur controls	they cor cases, f	ns from ventilation or work p nply with the requirements of ume scrubbers, filters or en ecessary to reduce emissio	of environmental protection gineering modifications to t	legislation. In some
Personal protective equipment (Pictograms)	:			
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Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid.
Color	:	Clear
Odor	:	Odorless.
Odor threshold	:	Not available.
рН	:	1.5
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Closed cup: Not applicable.
Burning time	:	Not applicable.
Burning rate	:	Not applicable.
Evaporation rate	:	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	;	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	1.37
Solubility	:	Easily soluble in the following materials: cold water and hot water.
Solubility in water	:	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not available.
Elemental Phosphorus	:	Not available.
VOC content	:	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.	
Chemical stability	The product is stable.	
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	: No specific data.	
Incompatible materials	: Extremely reactive or incompatible with the following materials: metals and alkalis.	
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.	
Storage	 Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. 	

Section 11. Toxicological information

Information on toxicological	effects		
Information on the likely	1 · · · · · · · · · · · · · · · · · · ·		
routes of exposure	Dermal contact. Eye contact. Inhalation.		
Potential acute health effects	<u>2</u>		
Eye contact	Causes serious eye damage.		
Inhalation	May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.		
Skin contact	: Causes severe burns.		
Ingestion	: May cause burns to mouth, throat and stomach.		
Symptoms related to the phy	vsical, chemical and toxicological characteristics		
Eye contact	Adverse symptoms may include the following: pain watering redness		
Inhalation	: No specific data.		
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur		
Ingestion	: Adverse symptoms may include the following: stomach pains		
Delayed and immediate effect	cts and also chronic effects from short and long term exposure		
Short term exposure			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Long term exposure			
Potential immediate effects	: Not available.		
Potential delayed effects	: Not available.		
Potential chronic health eff Not available.	<u>ects</u>		
General	: No known significant effects or critical hazards.		
Carcinogenicity	: No known significant effects or critical hazards.		
Mutagenicity	: No known significant effects or critical hazards.		
Teratogenicity	: No known significant effects or critical hazards.		
Developmental effects	: No known significant effects or critical hazards.		
Fertility effects	: No known significant effects or critical hazards.		
Numerical measures of toxic			
Acute toxicity estimates			
Route	ATE value		
Oral	2343.6 mg/kg		

Section 12. Ecological information

Ecotoxicity

: Not available.

Aquatic ecotoxicity

Not available.

Section 13. Disposal considerations

Waste	dis	posa	

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : D002 [Corrosive]

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

IATA/IMDG/DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information.

Section 15. Regulatory information

U.S. Federal regulations	 TSCA 12(b) one-time export: No products were found. TSCA 12(b) annual export notification: No products were found. United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 311: Phosphoric acid CERCLA: Lagrandous substances : Describeria exist. 5000 lbs. (2270 kg):
EPA Registration Number	CERCLA: Hazardous substances.: Phosphoric acid: 5000 lbs. (2270 kg); Not available.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
<u>SARA 302/304</u>	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.
<u>SARA 311/312</u>	
Classification	: Immediate (acute) health hazard
State regulations	
Massachusetts	: The following components are listed: PHOSPHORIC ACID
New York	: The following components are listed: Phosphoric acid
New Jersey	: The following components are listed: PHOSPHORIC ACID
Pennsylvania	: The following components are listed: PHOSPHORIC ACID
<u>California Prop. 65</u>	
Not available.	
<u>Canada</u>	
<u>Canadian lists</u>	
Canadian NPRI	: The following components are listed: Phosphorus (total)
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Section 15. Regulatory information

Canada inventory	: All components are listed or exempted.
Canadian PCP/DIN Number	: Not available.
International regulations	
International lists	 Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: All components are listed or exempted. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined.

Section 16. Other information

<u>History</u>	
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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.