SAFETY DATA SHEET



ACID GEL

Section 1. Identification

Product identifier : ACID GEL
Product code : 07-10090
Other means of : Not available.

identification

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Industrial applications: Industrial cleaners.

Only use this product as directed. Read label before using.

Supplier's details : Sani-Marc Inc.

42 rue de l'Artisan Victoriaville, Qc G6P 7E3 1-819-758-1541

Emergency telephone number (with hours of operation) : 1-800-361-7691 (8am to 5pm Monday to Thursday) (8am to 4pm Friday)

Section 2. Hazard identification

Classification of the substance or mixture

: ACUTE TOXICITY (inhalation) - Category 3 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1

Health Hazards Not Otherwise Classified - Category 1

GHS label elements

Hazard pictograms





Signal word : Danger

Hazard statements : H314 - Causes severe skin burns and eye damage.

H331 - Toxic if inhaled.

Causes severe digestive tract burns.

Precautionary statements

Prevention : P280 - Wear protective gloves: < 1 hour (breakthrough time): Chemical-resistant,

impervious gloves . Wear protective clothing: Recommended: safety apron. Wear eye or face protection: Recommended: Safety Glasses.

P271 - Use only outdoors or in a well-ventilated area.

P261 - Avoid breathing vapor.

P264 - Wash thoroughly after handling.

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Section 2. Hazard identification

Response

: P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor

P363 - Wash contaminated clothing before reuse.

P305 + P351 + P338, P310 - 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 or doctor.

Storage : P405 - Store locked up or keep under supervision.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Supplemental label elements

: Do not taste or swallow. Wash thoroughly after handling.

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 2.1%

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

Ingredient name	% (w/w)	CAS number
sulphuric acid	10 - 30	7664-93-9
Nitric acid	7 - 13	7697-37-2
methanesulphonic acid	1 - 5	75-75-2

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

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

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

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact

: In case of contact with eyes, flush with fresh water. Check for and remove any contact lenses. Continue rinsing. If irritation persists, get medical attention. Chemical burns must be treated promptly by a physician. Get medical attention if blistering occurs or redness persists.

Inhalation

: Move 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. Get medical attention. If necessary, call a poison center or physician. Maintain an open airway.

Skin contact

: Rinse with water. Wash contaminated skin with soap and water. Remove contaminated clothing and wash it before reuse. Chemical burns must be treated promptly by a physician. Get medical attention if blistering occurs or redness persists.

Ingestion

: Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention. Chemical burns must be treated promptly by a physician.

Most important symptoms/effects, acute and delayed

Potential acute health effects

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Section 4. First-aid measures

Eye contact : May cause eye burn

Inhalation: Toxic if inhaled. Inhalation of vapors or mist may cause respiratory tract irritation.

Skin contact : May cause skin burns

Ingestion: Severely corrosive to the digestive tract. Causes severe burns. May cause burns to

mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

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 medical 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.

Protection of first-aiders

No action should be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing them, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

media

Suitable extinguishing

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: In 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 nitrogen oxides sulfur oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action should be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action should 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.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Eye/face protection

: Continued or severe exposures might required to wear a face shield or chemical splash goggles. It is minimally suggested to wear safety glasses while using or handling this product.

Hand protection **Body protection** Other skin protection : It is suggested to wear chemical-reisitant gloves while using or handling this product.

: It is suggested to wear safety apron while using or handling this product.

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: No specific protective equipment required under normal use conditions.

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 and materials for containment and 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. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. 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

Precautions for safe handling

Protective measures

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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See Section 8 for additional information on hygiene measures.

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Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. 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. Keep out of reach of children. Store away from incompatible materials;

Reactive or incompatible with alkali.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
sulphuric acid Nitric acid	CA Ontario Provincial (Canada, 6/2019). TWA: 0.2 mg/m³ 8 hours. Form: Thoracic particulate matter. CA Alberta Provincial (Canada, 6/2018). 15 min OEL: 3 mg/m³ 15 minutes. 8 hrs OEL: 1 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m³ 15 minutes. TWA: 0.2 mg/m³ 8 hours. CA Quebec Provincial (Canada, 6/2022). TWAEV: 0.2 mg/m³ 8 hours. Form: thoracic dust CA British Columbia Provincial (Canada, 6/2022). Notes: Refers to sulfuric acid contained in strong inorganic acid mists. Note: This OEL has been suspended. See OHS Guideline 5.84-11. TWA: 0.2 mg/m³ 8 hours. Form: thoracic CA Alberta Provincial (Canada, 6/2018). 15 min OEL: 4 ppm 15 minutes. 15 min OEL: 10 mg/m³ 15 minutes. 8 hrs OEL: 2 ppm 8 hours. CA British Columbia Provincial (Canada, 6/2022). TWA: 2 ppm 8 hours. STEL: 4 ppm 15 minutes. CA Ontario Provincial (Canada, 6/2019). TWA: 2 ppm 8 hours. STEL: 4 ppm 15 minutes. CA Quebec Provincial (Canada, 6/2022). TWAEV: 2 ppm 8 hours. STEL: 4 ppm 15 minutes. CA Quebec Provincial (Canada, 6/2022). TWAEV: 2 ppm 8 hours. STEV: 4 ppm 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 4 ppm 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 4 ppm 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013).

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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Section 8. Exposure controls/personal protection

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Eye/face protection

: Continued or severe exposures might required to wear a face shield or chemical splash goggles. It is minimally suggested to wear safety glasses while using or handling this product.

Skin protection

Hand protection

: It is suggested to wear chemical-reisitant gloves while using or handling this product.

Body protection
Other skin protection

: It is suggested to wear safety apron while using or handling this product.

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Respiratory protection

: No specific protective equipment required under normal use conditions.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Limpid gel]

Color : Colorless.
Odor : Acid

Odor threshold : Not available.

pH : 2

Melting point/freezing point Boiling point, initial boiling point, and boiling range Not available.Not available.

Flash point

[Product does not sustain combustion.]

		Closed cup			Open cup		
Ingredient name	°C	°F	Method	°C	°F	Method	
citric acid	100	212					
methanesulphonic acid	189	372.2					
Not available.	-				-		

Evaporation rate
Flammability
Lower and upper explosion
limit/flammability limit

Not available.Not available.

Vapor pressure

	Vapo	r Pressui	re at 20°C	20°C Vapor pressure at 5		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
nitric acid	48.0039	6.4				
water	17.5	2.3				
methanesulphonic acid	0.00036	0.000048	OECD 104			
citric acid	0.000000017	0.0000000023				
sulphuric acid	0	0				

Relative vapor density

Not available.

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Section 9. Physical and chemical properties

Relative density : 1.2

Solubility : Not available.

Solubility in water : Not available.

Partition coefficient: n- : Not applicable.

octanol/water

Auto-ignition temperature

Ingredient name°C°FMethodmethanesulphonic acid535995DIN 51794citric acid10101850

Decomposition temperature: Not available.Viscosity: Not available.Flow time (ISO 2431): Not available.

Particle characteristics

Median particle size : Not applicable.

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

: May cause an exothermic reaction in presence of alkali.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with alkali.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sulphuric acid	LD50 Oral	Rat	2140 mg/kg	-
Nitric acid	LC50 Inhalation Vapor	Rat	130 mg/m ³	4 hours
methanesulphonic acid	LD50 Oral	Rat	649 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sulphuric acid	Eyes - Severe irritant	Rabbit	_	250 ug	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes 5 mg	-
methanesulphonic acid	Eyes - Severe irritant	Rabbit	-	0.1 MI	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

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Section 11. Toxicological information

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Routes of entry anticipated: Dermal, Eyes. Routes of entry not anticipated: Oral, Inhalation.

Potential acute health effects

Eye contact : May cause eye burn

Inhalation : Toxic if inhaled. Inhalation of vapors or mist may cause respiratory tract irritation.

Skin contact : May cause skin burns

Ingestion: Severely corrosive to the digestive tract. Causes severe burns. May cause burns to

mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

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 effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : N

effects

: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

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Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
ACID GEL	28346.4	48044.7	N/A	2.8	N/A
sulphuric acid	2140	N/A	N/A	0.5	N/A
Nitric acid	N/A	N/A	N/A	3	N/A
methanesulphonic acid	649	1100	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
sulphuric acid	Acute LC50 42500 μg/l Marine water	Crustaceans - Pandalus montagui - Adult	48 hours
Nitric acid	Acute LC50 36 ul/L Marine water Acute LC50 180000 μg/l Marine water	Fish - Agonus cataphractus Crustaceans - Carcinus maenas - Adult	96 hours 48 hours
	Acute LC50 72 ppm Fresh water	Fish - <i>Gambusia affinis</i> - Adult	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Nitric acid	-0.21	-	Low
methanesulphonic acid	-2.38	-	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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Section 14. Transport information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
TDG Classification	UN1760	Corrosive liquid, n.o.s. (sulphuric acid, nitric acid)	8	II	No.

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous

Goods Regulations: 2.40-2.42 (Class 8).

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according : Not available.

to IMO instruments

Section 15. Regulatory information

Canadian lists

Canadian NPRI : The following components are listed: sulphuric acid; nitric acid

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Canada : All components are listed or exempted.

United States : Not determined.

Section 16. Other information

History

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Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN CORROSION - Category 1	On basis of test data
SERIOUS EYE DAMAGE - Category 1	On basis of test data
Health Hazards Not Otherwise Classified - Category 1	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.

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