SAFETY DATA SHEET

According to Federal Regulation 29 CFR 1910.1200

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product names: TRAMFLOC® 861, 861A and 861B

Type of product: Mixture

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

Identified uses: Processing aid for industrial applications.

Uses advised against: none

1.3. Details of the supplier of the safety data sheet

Company: Tramfloc, Inc.

6046 FM 2920 Rd. #615

Spring, TX 77379-2542

Telephone: 888-929-8973

Telefax: 480-383-6895

E-mail address: water@tramfloc.com

1.4 Emergency telephone number:

24-hour emergency number: 800-424-9300 CHEMTREC (CCN 20412), Outside US 703-527-3887

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to paragraph (d) of Regulation 29 CFR 1910.1200:

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1
Corrosive to metals Category 1

2.2. Label elements

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

2.3. Other hazards

GHS Label elements, including precautionary statements

Emergency overview

Physical state: liquid

Color: yellow-green

Appearance: clear to slightly hazy

Odor: organic amine

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Causes severe skin burns and eye damage

May be corrosive to metals

2.4. Precautionary statements – prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Keep only in original container

2.5. Precautionary statements – response

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with

water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Absorb spillage to prevent material damage

2.6. Precautionary statements - storage

Store locked up

Store in corrosive resistant container with a resistant inner liner

2.7. Precautionary statements - disposal

Dispose of contents/container to an approved waste disposal plant

2.8. Other information

Not applicable

2.9. Unknown acute toxicity

2% of the mixture consists of ingredient(s) of unknown toxicity

SECTION 3. Composition/information on ingredients

3.1 Substances

Component	CAS-No	weight-%	TRADE SECRET
Melamine Resin	9003-08-1	Proprietary	*
Hydrochloric Acid	7647-01-0	< 0.3 %	*
Water	7732-18-5	Proprietary	*

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret

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^{*}The exact percentage (concentration) of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact

Remove contact lenses, if worn. Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical advice immediately.

Skin contact

Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Ingestion

Do NOT induce vomiting. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.

Inhalation

Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

4.2. Most important symptoms and effects, both acute and delayed

Acute effects

Possible eye, skin, and respiratory tract irritation or burns.

Chronic effects

May aggravate exsiting skin, eye and lung conditions.

4.3. Indication of any immediate medical attention and special treatment needed.

Note to physicians

Probable mucosal damage may contraindicate the use of gastric lavage.

Other information:

None

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire. This material is not expected to burn unless heated to dryness. Dry residue may ignite. Use water fog/spray, foam, carbon dioxide, or dry chemical to extinguish fire if residue ignites.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition (as may be experienced in a fire) may produce carbon monoxide gas, hydrogen cyanide, or oxides of nitrogen and sulfur.

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5.3. Advice for fire-fighters

Cool exposed containers with water spray after extinguishing fire.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).

Explosion data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing and gloves.

6.2. Environmental precautions

Wear suitable protective clothing and gloves.

6.3. Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.

Clean up spill immediately using inert absorbent materials such as clays, sand, earth, or other commercially available dry sweeping compound. Following containment, large spills should be pumped into salvage tanks.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep container closed when not in use

Wear chemical splash goggles, gloves, and protective clothing when handling.

Wash thoroughly after handling

Take off contaminated clothing and wash before reuse

Ensure that eyewash stations and safety showers are close to the workstation location.

Keep from freezing

7.2. Conditions for safe storage, including any incompatibilities.

Keep container closed when not in use

Store the containers in a cool area.

Avoid storage temperatures below freezing, since product may stratify.

7.3. Incompatible products

Strong oxidizers. Contact with copper, copper alloys, aluminum, mild steel or iron may cause corrosion/degradation.

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SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Component	Weight %	ACGIH	OSHA PEL	NIOSH IDLH
Hydrochloric Acid 7647-01-0	< 0.3 \$	2ppm Ceiling	5 ppm Ceiling; 7 mg/m³ Ceiling	50 ppm IDLH

8.2. Exposure controls

Appropriate engineering controls:

Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

8.3 Individual protection measures, such as personal protective equipment

Eye/face Protection Wear safety glasses with side shields (or goggles). Do NOT wear contact lenses.

If splashes are likely to occur: Face shield.

Hand Protection Gloves impervious to liquid material.

Skin and body protection Full protective clothing. Rubber boots. Rubber apron.

appropriate under most conditions, unless working with product in a confined space. If significant vapors, mists or aerosols are present due to elevated temperatures/agitation/high altitudes, use NIOSH approved respirator (ANSI Z882.1980) or equivalent that is equipped with an organic vapor/mist cartridge.

Other personal protection data

After handling material and before eating, drinking or smoking, wash face and hands thoroughly with soap and water. Eyewash fountains and safety showers must be easily accessible.

Hygiene measures Take off contaminated clothing and wash before reuse.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state liquid

Color yellow-green

Appearance clear to slightly hazy

Odor organic amine

Odor threshold no information available

pH 1.0 - 2.0

Melting / freezing point 0 °C / 32 °F

Boiling point / boiling range 100°C / 212°F @760 mm Hg

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Flash point > 93°C / 200° F
Evaporation rate Equal to water
Flammability (solid/gas) Not applicable
Upper flammability limit Not applicable
Lower flammability limit Not applicable

Vapor pressure No information available
Vapor density No information available

Specific gravity ~ 1.03

Solubility (water) completely; 100%

Solubility in other solvents No information available

Partition coeffecient: n-octanol/water No information water

Autoignition temperature Not applicable

No information available Decomposition temperature No information available Kinematic viscosity Dynamic viscosity No information available No information available Density Bulk density No information available No information available Explosive properties No information available Oxidizing properties Softening point No information available

Volatile organic compounds (VOCs) content

No information

No information available

Percent Volatile, wt % < 90%

9.2. Other information

Molecular weight

None.

SECTION 10. Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Stable under normal conditions of handling, use and transportation

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

None known.

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10.5. Incompatible materials

Strong oxidizers. Contact with copper, copper alloys, aluminum, mild steel or iron may cause corrosion/degradation.

10.6. Hazardous decomposition products

Thermal decomposition (as may be experienced in a fire) may poduce carbon monoxide gas, hydrogen cyanide, or oxides of nitrogren and sulfur.

SECTION 11. Toxicological information

11.1. Information on likely routes of exposure

Eye contact Based on pH, this product is expected to cause severe eye irritation, possibly

resulting in burns and eye damage.

Skin contact Prolonged and/or repeated contact with cause severe skin irritation and burns.

Ingestion May cause burns of the mouth, throat and stomach. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Inhalation Inhalation of mist or spray may irritate respiratory tract and may cause burns and

difficulty breathing.

11.2 Acute toxicity – product information

Oral LD50 No information available
Dermal LD50 No information available
Inhalation LC50 No information available

11.3 Acute toxicity – component information

Component	Weight %	Oral LD50	Dermal LD50	Inhalation LC50
Melamine Resin 9003-08-1	Proprietary	>10 g/kg (Rat)	> 10 g/kg (Rabbit)	-
Hydrochloric Acid 7647-01-0	< 0.3%	700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	3124 ppm (Rat) 1h

11.4 Information on toxicological effects

Symptoms No information available

11.5 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes burns

Serious eye damage/eye irritation Risk of serious damage to eyes

Sensitization No information available
Germ cell mutagenicity No information available

Carcinogenicity This product does not contain any components in concentrations greater

than or equal to 0.1% that are listed as known or suspected carcinogens

by NTP, IARC, ACGIH, or OSHA

Reproduction toxicity No information available

Specific target organ toxicity – single exposure No information exposure

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Specific target organ toxicity – repeated exposure No information available

Aspiration hazard No information available

11.4 Numerical measures of toxicity – product information

2% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)

57167 mg/kg

ATEmix (dermal)

92372 mg/kg

ATEmix (inhalation – dust/mist)

167 mg/l

Other information

Conclusions are drawn from sources other than direct testing.

SECTION 12. Ecological information

12.1. Toxicity

Acute aquatic toxicity - product information

Fish No information available

Crustacea No information available

Algae/aquatic plants No information available

Acute aquatic toxicity – component information

Component	Weight %	Algae/aquatic plants	Fish	Toxicity to daphnia and other aquatic invertebrates
Hydrochloric Acid 7647-01-0	< 0.3%	-	LC50 (96 h static) = 282 mg/L (Gambusia affinis)	-

12.2. Persistence and degradability

Information on the product as supplied:

Degradation: Not readily biodegradable.

Hydrolysis: No data available.

Photolysis: No data available.

12.3. Bioaccumulative potential

Information on the product as supplied:

Not bioaccumulating.

12.4. Mobility in soil

Information on the product as supplied:

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None.

12.5. Other adverse effects

None known.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products:

Recycle, if possible. If not, dispose of the waste material in accordance with all applicable federal, state and local laws and regulations regarding health and pollution.

Contaminated packaging:

Since empty containers retain product residue, follow label warnings even after the container is emptied.

RCRA

Is the unused product a RCRA hazardous waste if discarded?

Yes

If yes, the EPA Hazardous Waste Code is:

D002 (corrosivity)

SECTION 14. Transport information

DOT Regulated

DOT Un/NA Number UN3264

Proper shipping name Corrosive liquid, acidic, inorganic, NOS (contains Hydrochloric Acid)

Hazard class 8
Packing group III
ERG number 154

ICAO/IATA Regulated

UN Number UN3264

Proper shipping name Corrosive liquid, acidic, inorganic, NOS (contains Hydrochloric Acid)

Hazard class 8
Packing group III
ERG code 8L

IMDG Regulated

UN Number UN3264

Proper shipping name Corrosive liquid, acidic, inorganic, NOS (contains Hydrochloric Acid)

Hazard class 8
Packing group III

EmS F-A; S-B

SECTION 15. Regulatory information

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

TSCA (United States)

All ingredients are on the inventory or exempt from listing

Australia (AICS)

All ingredients are on the inventory or exempt from listing

Canada (DSL)

All ingredients are on the inventory or exempt from listing

Canada (NDSL)

None of the ingredients are on the inventory.

China (IECSC)

All ingredients are on the inventory or exempt from listing

EINECS (European Inventory of Existing Chemical Substances)

Some ingredients are not on the inventory.

ELINCS (European List of Notified Chemical Substances

None of the ingredients are on the inventory.

ENCS (Japan)

All ingredients are on the inventory or exempt from listing

South Korea (KECL)

All ingredients are on the inventory or exempt from listing

Philippines (PICCS)

All ingredients are on the inventory or exempt from listing

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

AICS - Australian Inventory of Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - China Inventory of Existing Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

U.S. Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

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U.S. Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Component	CERCLA?SARA Hazardous Substance RQ	CERCLA/SARA – Section 302 Extremely Hazardous Substances TPQs	Calculated Product RQ
Hydrochloric Acid 7647-01-0	5000 lb final Rq; 2270 kg final RQ	500 lb TPQ (gas only)	-

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA – Hazardous	CWA – Reportable	CWA – Priority	CWA – Toxic
	Substances	Quantities	Pollutants	Pollutants
Hydrochloric Acid 7647-01-0	Present	5000 lb RQ	-	-

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic health hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive hazard No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	Weight %	SARA 313 – Threshold Values %
Hydrochloric Acid 7647-01-0	< 0.3%	1.0% de minimis concentration (acid, aerosols including mists, vapors, gas, fog and other airborne forms of any particle size)

The component listed in the table above is present at levels below the de minimus concentration for reporting.

U.S. State Regulations

California Proposition 65

This product may contain traces of a substance(s) known to the State of California to cause cancer.

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U.S. State Right-to-Know Regulations

Hydrochloric Acid 7647-01-0		
Massachusetts Right to Know Law Extraordinarily hazardous		
Minnesota Hazardous Substance List	Present	
New Jersey Right to Know List	Sn 1012	
Pennsylvania Right to Know List	Environmental hazard	

SECTION 16. Other information

NFPA and HMIS Ratings:

NFPA:

Health: 2

Flammability: 0

Instability: 0

HMIS:

Health: 2

Flammability: 0

Physical Hazard: 0

PPE Code: B

Key or legend to abbreviations and acronyms used in the safety data sheet:

None.

This SDS was prepared in accordance with the following:

Federal Regulation 29 CFR 1910.1200

The information contained herein is to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, Tramfloc, Inc. makes no guarantee for results obtained, and assumes no responsibility for damages incurred by use of this product. It is the responsibility of the user to comply with all federal, state, and local laws and regulations.

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