

Safety Data Sheet

Issue Date 07-Jun-2016

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Version 1.0

1. IDENTIFICATION

Product Identifier

Product Name Astound

Other Means of Identification

Product Code NIC1000-5CL/ NIC1000-1CL

Recommended Use of the Chemical and Restrictions on Use

Recommended Use All temperature dish machine detergent. For industrial use.

Details of the Supplier of the Safety Data Sheet

Nichols
1391 Judson Rd.
Norton Shores, MI 49456

Emergency Telephone Number

Company Phone Number Phone: 1-800-442-0213
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Colorless

Physical State Liquid

Odor None

Classification

Acute toxicity – oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1
Aquatic toxicity – Acute	Category 2

Signal Word

Danger



Hazard Statements

Harmful if swallowed.
Causes severe skin burns and eye damage.
May be corrosive to metals.
Toxic to aquatic life.

Precautionary Statements - Prevention

Do not eat, drink or smoke when using this product.
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.
Avoid release to the environment.

Precautionary Statements - Response

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/physician.
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. Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
IN CASE OF SPILL: Absorb spillage to prevent material damage.
SPECIFIC TREATMENT: Remove from exposure and treat symptoms.

Precautionary Statements - Storage

Store locked up.
Store in corrosive container with a resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	60-100
Potassium Hydroxide	1310-58-3	10-30
Sodium Tripolyphosphate	7758-29-4	5-10
Sodium Hypochlorite	7681-52-9	1-5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret

4. FIRST-AID MEASURES**First Aid Measures**

General Advice	Immediately call a POISON CENTER or doctor/physician.
Eye Contact	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/physician. Contact lenses should be discarded.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or POISON CENTER immediately.
Ingestion	IF SWALLOWED: call a POISON CENTER or physician immediately. Never give anything by mouth to an unconscious person. Rinse mouth. Drink plenty of water. Do NOT induce vomiting.

Most Important Symptoms and Effects

Symptoms	Causes severe skin burns and eye damage.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to Physician	May aggravate pre-existing skin disorders. Any lung condition may be aggravated.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water spray (fog). Carbon dioxide (CO2). Dry chemical. Foam.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable.

Hazardous Combustion Products

Normal products of combustion.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Use personal protection recommended in Section 8.
Environmental Precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13, Disposal Considerations, for additional information.

Methods and Material for Containment and Cleaning Up

Methods for Containment	Prevent further leakage or spillage if safe to do so. For large spills, dike far ahead of liquid spill for later disposal.
Methods for Clean-Up	Contain and collect with an inert absorbent and place into an appropriate container for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. For Industrial or professional use only.
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Conditions for Safe Storage, including any Incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep from freezing. Protect from excessive heat. Keep out of the reach of children.
Incompatible Materials	Acids. Oxidizing agents. Iron. Rust. Copper. Cobalt. Nickel. Nitrogen compounds. Urea. Organic materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Sodium Tripolyphosphate 7758-29-4	10mg/m ³ (Inhalable) 8hr TWA 3mg/m ³ (Respirable) 8hr TWA	15mg/m ³ (Total Dust) 8hr TWA 5mg/m ³ (Respirable) 8hr TWA	-

Appropriate Engineering Controls

Engineering Controls	Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.
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Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Wear goggles or chemical safety glasses. For Industrial or professional use only.
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Skin and Body Protection	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure.
Respiratory Protection	No respiratory protection is necessary during normal use conditions. In the case of insufficient ventilation or if exposure limits are exceeded, use a suitable NIOSH/MSHA respiratory device.
General Hygiene Considerations	Wash contaminated clothing before reuse. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid	Odor	None
Appearance	Clear	Odor Threshold	Not determined
Color	Colorless		
Property	Values	Remarks • Method	
pH	12.0-12.5		
Melting Point/Freezing Point	~ 0 °C / 32 °F		
Boiling Point/Boiling Range	~ 100 °C / 212 °F		
Flash Point	None	Tag Closed Cup	
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid-not applicable		
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Specific Gravity	1.23		
Water Solubility	Completely soluble	@ 25 °C (77 °F)	
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	None known		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Elevated temperatures. Keep from freezing. Reacts with incompatible materials.

Incompatible Materials

Acids. Oxidizing agents. Iron. Rust. Copper. Cobalt. Nickel. Nitrogen compounds. Urea. Organic materials.

Hazardous Decomposition Products

Oxygen when exposed to copper, nickel, cobalt, iron or iron compounds. Chlorine gas when exposed to acid.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure**Product Information**

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Hydroxide 1310-58-3	= 214 mg/kg (Rat)	-	-
Sodium Tripolyphosphate 7758-29-4	= 5400 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Sodium Hypochlorite 7681-52-9	= 8200 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	-

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium Hypochlorite 7681-52-9		Group 3		

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Chronic Toxicity Chronic exposure may cause liver, kidney and/or blood disorders.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Potassium Hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-	-
Sodium Tripolyphosphate 7758-29-4	-	>100mg/L (96hr) Rainbow Trout	-	>100mg/L (48hr) Daphnia magna
Sodium Hypochlorite 7681-52-9	0.095: 24 h Skeletonema costatum mg/L EC50	0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static	-	2.1: 96 h Daphnia magna mg/L EC50 0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Chemical Name	Partition Coefficient
Potassium Hydroxide 1310-58-3	0.83

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

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

Contaminated Packaging

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

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Potassium Hydroxide 1310-58-3	Toxic Corrosive

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN3266, Corrosive Liquid, Basic, Inorganic, NOS(Containing Potassium Hydroxide), 8, PGII

IATA**IMDG****15. REGULATORY INFORMATION****International Inventories**

Canada – Domestic Substances List (DSL)

All ingredients are listed or exempt.

TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List***US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium Hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium Hypochlorite 7681-52-9	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 311/312 Hazard Categories

Acute Health Hazard

Yes

Chronic Health Hazard

Yes

Reactive Hazard

Yes

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium Hydroxide 1310-58-3	1000 lb			X
Sodium Hypochlorite 7681-52-9	100 lb			X

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium Hydroxide 1310-58-3		NJ, MA, PA	
Sodium Tripolyphosphate 7758-29-4		MA, PA	
Sodium Hypochlorite 7681-52-9		NJ, MA, PA	

AZ – Arizona Ambient Air Quality Guidelines
 CT – Connecticut Hazardous Air Pollutants
 CA – California Director's List of Hazardous Substances
 CAP65 – California Prop 65
 FL – Florida Substances List
 ID – Idaho Non-Carcinogen Toxic Air Pollutants

IL – Illinois Toxic Air Contaminant- Carcinogenic
 MA – Massachusetts Right to Know List
 MN – Minnesota Hazardous Substances List
 NJ – New Jersey Right to Know List
 PA – Pennsylvania Right to Know List
 RI – Rhode Island Hazardous Substances List

16. OTHER INFORMATION**NFPA****Health Hazards****Flammability****Instability****Special Hazards****HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

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Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet