HAVILAND PRODUCTS COMPANY
SAFETY DATA SHEET

Section 1: Identification

Product Name: HP Acidsalt Flwet Product Code:H000786

Haviland Products Company
421 Ann Street NW
Grand Rapids, MI 49504
(616) 361-6691

Emergency Phone
CHEMTREC (800) 424-9300
CHEMTREC International (703) 527-3887

Product Use: NA
Not recommended for: NA

Section 2: Hazard(s) Identification

GHS Ratings:

Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Dermal Toxicity	Acute Tox. 4	Dermal>1000+<=2000mg/kg
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1 hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Mutagen	2	Suspected/Possible: May include heritable mutations in human germ cells, Positive evidence from tests in mammals and somatic cell tests, In vivo somatic genotoxicity supported by in vitro mutagenicity
Reproductive toxin	2	Human or animal evidence possibly with other information
Organ toxin single exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies, Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidan
Organ toxin repeated exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidanc
Aquatic toxicity	A3	Acute toxicity <= 10.0 but < 100 mg/l

GHS Hazards

H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H341	Suspected of causing genetic defects
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breathe dust/fume/gas/mist/vapors/spray
P264	Wash face, hands, and any exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment

H372	Causes damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life

P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER or doctor/physician
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P314	Get Medical advice/attention if you feel unwell
P321	Specific treatment (see first aid treatment on SDS)
P322	Specific measures (see first aid treatment on SDS)
P330	Rinse mouth
P363	Wash contaminated clothing before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiosly with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P307+P311	IF exposed: Call a POISON CENTER or doctor/physician
P308+P313	IF exposed or concerned: Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container in accordance with local/regional/national/international regulations

Danger

Section 3: Composition/Information on Ingredients

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Sodium bisulfate 7681-38-1 90 to 100%			

Sodium fluoride 7681-49-4 5 to 10%			NIOSH: 2.5 mg/m3 TWA (as F)

Section 4: First-aid Measures

Inhalation

Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To
prevent aspiration, keep head below knees.

Eye Contact

Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

Skin Contact

Remove contaminated clothing. Wash skin with soap and water. Get medical attention. Wash clothing separately and clean shoes before reuse.

Ingestion

If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section 5: Fire-fighting Measures

LEL: UEL:

Extinguishing Media

Use media suitable for the surrounding fires.

Specific Hazards Arising from the Chemical

Unknown

Special Protective Equipment and Precautions for Firefighters

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

Section 6: Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED:

Vacuum, shovel or sweep up and place in containers for disposal. Avoid contamination of water bodies during cleanup and disposal.

Section 7: Handling and Storage

HANDLING: Use only in a well ventilated area. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin,
and clothing. Ground and bond containers when transferring material. Always open containers slowly to allow any
excess pressure to vent. Follow all MSDS/label precautions even after containers are emptied because they may
retain product residues.

STORAGE: Keep away from heat, sparks, and flame. Store containers in a cool, well ventilated place. Keep container
closed when not in use. Protect from direct sunlight.

Section 8: Exposure Control/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits

Sodium bisulfate 7681-38-1			
Sodium fluoride 7681-49-4			NIOSH: 2.5 mg/m3 TWA (as F)

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

SKIN PROTECTION: Wear impervious protective gloves. Wear protective gear as needed - apron, suit, boots.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

HYGENIC PRACTICES: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors.
Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

Section 9: Physical and Chemical Properties

Appearance:	white to off white granular	**Odor:**	1.9 (1% Solution)
Vapor Pressure:	Unknown	**Odor threshold:**	Unknown
Vapor Density:	Unknown	**pH:**	Unknown
Density:	Unknown	**Melting point:**	Unknown
Freezing point:	Unknown	**Solubility:**	Soluble
Boiling range:	Unknown	**Flash point:**	Unknown
Evaporation rate:	Unknown	**Flammability:**	Unknown
Explosive Limits:	Unknown	**Specific Gravity**	Unknown
Autoignition temperature:	Unknown	**Decomposition temperature:**	Unknown
Viscosity:	Unknown	**Grams VOC less water:**	Unknown

Section 10: Stability and Reactivity

Chemical Stability:

STABLE

Incompatibile Materials

Oxidizing materials. Acids. Alkali. Dissolves readily in water to form a weak acid solution. Do not mix with liquid chlorine bleach, ammonia cleansers or similar products. Keep away from glass and aluminum.

Conditions to Avoid

Avoid conditions of moisture. Heat, sparks, flame or other sources of ignition.

Hazardous Decomposition Products

Oxides of sulfur. Hydrogen fluoride.

Hazardous Polymerization

Hazardous polymerization will not occur.

Section 11: Toxicology Information

Mixture Toxicity

Oral Toxicity LD50: 476mg/kg

Dermal Toxicity LD50: 1,897mg/kg

Component Toxicity

7681-49-4 Sodium fluoride
Oral LD50: 52 mg/kg (Rat) Dermal LD50: 175 mg/kg (Rat)

Routes of Entry:
Inhalation
Ingestion
Skin contact
Eye contact

Ingestion

Eyes **Kidneys** **Central Nervous System** **Skin** **Respiratory System**

Effects of Overexposure

Emergency Overview
Causes serious eye irritation. May cause respiratory irritation. May be harmful if swallowed.
Presents hazards from its ionizing fluorine.
Acute Health Effects
Irritating to the mucous membranes, eyes and skin. Risk of cardiac and nervous disorders.
Chronic exposure to the product can cause bone or dental fluorosis.

CAS Number	Description	% Weight	Carcinogen Rating

Section 12: Ecological Information

Component Ecotoxicity

Sodium bisulfate	48 Hr EC50 Daphnia magna: 190 mg/L
Sodium fluoride	96 Hr LC50 Lepomis macrochirus: >530 mg/L; 96 Hr LC50 Lepomis macrochirus: 830 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 38 - 68 mg/L [static]; 96 Hr LC50 Pimephales promelas: 180 mg/L [semi-static] 48 Hr EC50 Daphnia magna: 338 mg/L; 48 Hr EC50 Daphnia magna: 98 mg/L [Static] 96 Hr EC50 Pseudokirchneriella subcapitata: 272 mg/L; 72 Hr EC50 Desmodesmus subspicatus: 850 mg/L [static]

Section 13: Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14: Transportation Informations

Refer to Bill of Lading or container label for DOT or other transportation hazard classification, if any .

Section 15: Regulatory Information

CERCLA/SARA Hazardous Substances
7681-49-4 Sodium fluoride

TSCA 8(b) Inventory
7681-49-4 Sodium fluoride
7681-38-1 Sodium bisulfate

Country	Regulation	All Components Listed

Section 16: Other Information

Date Prepared: 5/14/2015

Reviewer Revision

Disclaimer

The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or 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 chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper
safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained.

Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including
the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.