



SAFETY DATA SHEET

Name of Product:

NASI A-SHIELD

Product #: See Section 1
New Issue Date: Oct. 19, 2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NASi A-Shield
SYNONYMS: Acetic acid ammonium salt buffer solution; BA-20
PRODUCT CODES: TBD

MANUFACTURER: NACHURS ALPINE SOLUTIONS
DIVISION: Marion
ADDRESS: 421 Leader Street
Marion, OH43302, United States

PHONE: 800-622-4877 (USA)
800-265-2268 (CANADA)

EMERGENCY PHONE: United States: Chemtrec: 800-424-9300
Canada: CANUTEC: 1-613-996-6666
I TECH 877-324-4402

CHEMICAL NAME: Ammonium Acetate Buffer Solution
CHEMICAL FAMILY: Organic acid salt buffer
CHEMICAL FORMULA: C₂H₇NO₂

PRODUCT USE: Buffer

SECTION 2: HAZARDS IDENTIFICATION

GHS ELEMENTS:

Hazard Classification: Skin Corrosion (Category 1).
Eye Damage (Category 1).
Acute Toxicity Inhalation – Vapor (Category 5).
Acute Toxicity Dermal (Category 5).

Pictogram:



Signal Word: Danger

Hazard Statements: Causes severe skin burns and eye damage.
May be harmful if inhaled.
May be harmful if in contact with skin.

Precautionary Statements: Keep container tightly closed. Do not breathe vapors or mists. Use in a well ventilated area.
Wash hands thoroughly after handling. Wear protective gloves, clothing and eye protection.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin or hair: Take off immediately all contaminated clothing and rinse skin with water.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
Immediately call a poison center or doctor for advice.
Store locked up in a cool wellventilated place.
Dispose of contents in accordance with local, regional, national or international regulations.

POTENTIAL HEALTH EFFECTS

EYES: Causes severe eye damage.
SKIN: Corrosive! Causes skin burns.
INGESTION: Corrosive! Causes burns.
INHALATION: Corrosive! Causes burns.

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ACUTE HEALTH HAZARDS: Corrosive vapor, may be harmful if inhaled or in contact with moist membranes.

CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

CARCINOGENICITY:

OSHA: N/A
ACGIH: N/A
NTP: N/A
IARC: N/A
OTHER: N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	Ammonium Acetate	30-40 %	CAS# 631-61-8
	Acetic Acid	25-35%	CAS# 64-19-7
	Water	25-45%	CAS# 7732-18-5

SARA 313 REPORTABLE: N/A

OSHA PEL-TWA: N/A
OSHA PEL STEL: N/A
OSHA PEL CEILING: N/A

ACGIH TLV-TWA: 10 ppm (25 mg/m³)
ACGIH TLV STEL: 15 ppm
ACGIH TLV CEILING: N/A

SECTION 4: FIRST AID MEASURES

EYES: Flush with water immediately and thoroughly for 15 minutes. Seek immediate medical attention.
SKIN: Flush with water, thoroughly wash with soap and water. Remove contaminated clothing. Seek medical attention.
INGESTION: Do NOT induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: UPPER: Not determined.
(% BY VOLUME) LOWER: Not determined.

FLASH POINT:
F°: >212
C°: >100

METHOD USED: PMCC

AUTOIGNITION TEMPERATURE:
F°: N/A
C°: N/A

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NFPA HAZARD CLASSIFICATION:

HEALTH: 2
FLAMMABILITY: 1
REACTIVITY: 1
OTHER: 0

HMIS HAZARD CLASSIFICATION

HEALTH: 2
FLAMMABILITY: 1
REACTIVITY: 1
PROTECTION: B

EXTINGUISHING MEDIA: Water or media suitable for surrounding material.

SPECIAL FIRE FIGHTING PROCEDURES: Positive pressure self-contained breathing apparatus should be used when there is a potential for inhalation of vapors and/or fumes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Ammonia, carbon monoxide and/or carbon dioxide may be released.

HAZARDOUS DECOMPOSITION PRODUCTS: Ammonia, carbon monoxide and/or carbon dioxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Confine the spill to a diked area or sump, if possible. Prevent from entering sewers, waterways or low areas.

Isolate spill and stop the leak where safe. Contain with sand or other inert materials. Neutralize to pH 6-8. Scoop up and remove. Dispose of in accordance with regulatory authorities.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing prior to reuse. Store in suitable containers away from alkalis. Store in a cool well ventilated area. Keep container closed when not in use.

OTHER PRECAUTIONS: N/A

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

VENTILATION: Local exhaust ventilation should be used in areas without good cross ventilation.

RESPIRATORY PROTECTION: Organic vapor/acid gas respirator with a dust/mist filter.

EYE PROTECTION: Safety goggles and full face shield where splash hazard exists.

SKIN PROTECTION: Impervious rubber gloves and rubber apron.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye wash stations and safety showers should be easily accessible.

WORK HYGIENIC PRACTICES: Always use good safety and industrial hygienic practices.

EXPOSURE GUIDELINES: See section 3.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear, nearly colorless liquid.
ODOR:	Slight vinegar.
ODOR THRESHOLD:	No data available.
PHYSICAL STATE:	Liquid.
pH AS SUPPLIED:	5.45
MELTING POINT:	Unknown
FREEZING POINT:	F°: 8 C°: -13
BOILING POINT:	F°: 215 C°: 101
FLASH POINT:	>100C (>212F)
METHOD USED:	PMCC
EVAPORATION RATE:	N/A
FLAMMABLE LIMITS IN AIR:	Not flammable.
VAPOR PRESSURE (mmHg)	N/A
VAPOR DENSITY (AIR = 1)	N/A
SPECIFIC GRAVITY (H ₂ O = 1)	1.102
DENSITY, LBS/GAL:	9.18
SOLUBILITY IN WATER:	Miscible
PARTITION COEFFICIENT:	n-octanol/water – N/A
PERCENT SOLIDS BY WEIGHT:	NA
PERCENT VOLATILE:	25-35 %
VOLATILE ORGANIC COMPOUNDS (VOC):	25-35 %
MOLECULAR WEIGHT:	N/A
AUTOIGNITION TEMPERATURE:	N/A
THERMAL DECOMPOSITION:	N/A
VISCOSITY:	N/A

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SECTION 10: STABILITY AND REACTIVITY

	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	High temperatures.	
INCOMPATIBILITY (MATERIAL TO AVOID):	Strong alkalis.	
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Ammonia, oxides of nitrogen, carbon dioxide and/or carbon monoxide.	
HAZARDOUS POLYMERIZATION:	Will not occur.	
CONDITIONS TO AVOID (POLYMERIZATION):	N/A	

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:	LD50 – intraperitoneal – mouse – 2044 mg/kg (ammonium acetate)
	LD50- oral – rat- 10,677 mg/kg (acetic acid)
	LC50 – inhalation – mouse – 4h – 18,129 (acetic acid)
	LC50 - Inhalation – rat- 4h- 36.77 mg/l (acetic acid)
	LD50- dermal – rabbit – 3587 mg/kg (acetic acid)

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Do not allow into drinking water.

LC50 – cyprinuc carpio (carp) – 156 mg/L (ammonium acetate)
LC50-orcorhynchus mykiss (rainbow trout) – 96h – 3226 mg/L
EC50 – Daphnia magna (water flea) – 48h - 970 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:	Dispose in accordance with all federal, state, and local regulations.
RCRA HAZARD CLASS:	N/A

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:

PROPER SHIPPING NAME:	Ammonium Acetate Solution			
HAZARD CLASS:	N/A			
ID NUMBER:	N/A			
PACKING GROUP:	N/A			
LABEL STATEMENT:	N/A			
Health: 2	Flammability: 1	Reactivity: 1	Specific: None	

WATER TRANSPORTATION:

PROPER SHIPPING NAME:	Ammonium Acetate Solution			
HAZARD CLASS:	N/A			
ID NUMBER:	N/A			
PACKING GROUP:	N/A			
LABEL STATEMENTS:	N/A			
Health: 2	Flammability: 1	Reactivity: 1	Specific: None	

AIR TRANSPORTATION

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ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS: N/A
Health: 2 Flammability: 1 Reactivity: 1 Specific: None

OTHER AGENCIES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:
TSCA (TOXIC SUBSTANCE CONTROL ACT): Yes
CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Yes
RQ 798 gallons (Ammonium acetate CAS# 631-61-8)
RQ 3810 gallons (Acetic acid CAS# 64-19-7)
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A
311/312 HAZARD CATEGORIES: Acute Health Hazard
313 REPORTABLE INGREDIENTS: No
STATE REGULATIONS: MA, NJ, PA
INTERNATIONAL REGULATIONS:
CANADA, WHMIS Hazard Class E Corrosive Material

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION: *Technical Services*

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