

Material Safety Data Sheet

I. GENERAL INFORMATION	
<u>TRADE NAME</u> NV Dry BASE	<u>CHEMICAL FAMILY</u> Flavors
<u>PROPER DOT SHIPPING NAME</u> None	<u>DOT HAZARD CLASSIFICATION</u> None
<u>MANUFACTURER</u> Kemin Industries, Inc.	<u>MANUFACTURER PHONE NUMBER</u> (515) 559-5100
<u>ADDRESS</u> 2100 Maury Street	<u>CITY/STATE/ZIP</u> Des Moines, Iowa 50317

DESCRIPTION: A dry base material to be used in the further manufacturing of Kemin products.

II. INGREDIENTS		
PRINCIPAL COMPONENTS	IDENTIFICATION NO.	THRESHOLD LIMIT VALUE
White Distilled Vinegar	CAS 64-19-7	10 PPM
Sodium Hydroxide	CAS 1310-73-2	2 mg/m ³
Sodium Bicarbonate	CAS 144-55-8	5 mg/m ³
Sodium Carbonate	CAS 497-19-8	N/A

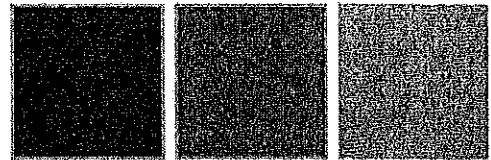
III. PHYSICAL DATA	
<u>APPEARANCE & ODOR:</u>	White to off-white free flowing powder with a slight vinegary odor.
<u>FREEZING POINT:</u>	N/A
<u>VISCOSITY:</u>	N/A
<u>VAPOR DENSITY (Air = 1):</u>	N/A
<u>EVAPORATION RATE (=1):</u>	N/A
<u>SOLUBILITY IN WATER:</u>	Good
<u>SPECIFIC GRAVITY:</u>	N/A
<u>REFRACTIVE INDEX:</u>	N/A
<u>pH (10% solution):</u>	6.5 – 7.5

IV. FIRE & EXPLOSION HAZARD DATA		
<u>FLASH POINT (TEST METHOD):</u> (°F) Tag Closed Cup ASTM D56-79		
<u>FLAMMABLE LIMITS:</u>	LEL: N/D	UEL: N/D
<u>EXTINGUISHING MEDIA:</u> Dry chemical		
<u>SPECIAL FIRE FIGHTING PROCEDURES:</u> Wear self-contained breathing apparatus and protective suit.		
<u>UNUSUAL FIRE & EXPLOSION HAZARDS:</u> N/A		

V. HEALTH HAZARD DATA	
<u>EYE CONTACT:</u>	Flush eyes with water at least 15 minutes. Consult a physician.
<u>SKIN CONTACT:</u>	Remove contaminated clothing. Wash with water for at least 15 minutes. If skin irritation develops, consult a physician.
<u>INHALATION:</u>	Handle in well ventilated area. Remove to fresh air. If breathing is difficult, give oxygen and consult a physician
<u>INGESTION:</u>	If accidentally swallowed, consult a physician immediately. If conscious, drink water. Do not induce vomiting. If vomiting occurs, keep head lower than the hips to help prevent aspiration.
<u>EMERGENCY FIRST AID:</u>	Whenever first aid is required, it should be given immediately. Prompt treatment may greatly decrease the severity of the effect.



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Product Specifications

2100 Maury Street • Des Moines, Iowa, USA 50317 • tel: 515.559.5100 • www.kemin.com

NV Dry BASE

CODE NUMBER

016978

DESCRIPTION

A dry base material to be used in the further manufacturing of Kemin products.

INGREDIENTS

White Distilled Vinegar, Sodium Hydroxide, Sodium Bicarbonate, and Sodium Carbonate.

QUALITY SPECIFICATIONS	
pH (10% solution)	6.5 – 7.5
Moisture	≤ 8%
Acetic Acid	65% - 72%
TYPICAL CHARACTERISTICS	
Color	White to off-White
Appearance	Free Flowing Powder
Odor	Slight Vinegar

INSTRUCTIONS FOR USE

For further manufacturing only. Use according to Good Manufacturing Practices.

STORAGE

Store in a cool dark place. Keep container closed when not in use.

For best results, use this product within one (1) year of the manufacturing date.



SAFETY DATA SHEET

DURAFRESH 2016 - 30500021

Section 1. Identification

GHS product identifier : DURAFRESH 2016
Chemical name : sodium hydrogen di(acetate)
Other means of identification : Acetic acid, sodium salt (2:1); Sodium diacetate; Acetic acid, sodium salt, compd. with acetic acid (1:1)
Product type : Powder.

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

Not applicable.

Supplier's details : Kerry Inc.
3400 Millington Road
Beloit, WI, 53511
Tel: 608-363-1200
KAProductSafety@kerry.com

Emergency telephone number (with hours of operation) : Chemtrec:
800-424-9300 (24 hours)

Section 2. Hazards identification

HA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : COMBUSTIBLE DUSTS

GHS label elements

Signal word : Warning
Hazard statements : May form combustible dust concentrations in air.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.
Hazards not otherwise classified : Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture : Substance
Chemical name : sodium hydrogen di(acetate)
Other means of identification : Acetic acid, sodium salt (2:1); Sodium diacetate; Acetic acid, sodium salt, compd. with acetic acid (1:1)

CAS number/other identifiers

CAS number : 126-96-5
Product code : 30500021

Section 4. First aid measures

Ingestion : No specific data.

Location 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 shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical powder.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Fine dust clouds may form explosive mixtures with air.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/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 shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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 : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : 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** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Powder.]
- Color** : White.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: 93.3°C (199.9°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : 0.0000000067 kPa (0.00000005 mm Hg) [room temperature]
- Vapor density** : Not available.
- Relative density** : Not available.
- Solubility** : Soluble in the following materials: cold water.
- Partition coefficient: n-octanol/water** : -3.72
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.

Section 11. Toxicological information

- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- In contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
irritation
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
sodium hydrogen di(acetate)	-3.72	3.162	low

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
sodium hydrogen di(acetate)	100	Yes.	No.	No.	No.	No.

State regulations

Massachusetts : This material is not listed.

New York : This material is not listed.

New Jersey : This material is not listed.

Pennsylvania : This material is not listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

Section 16. Other information

▼ Indicates information that has changed from previously issued version.

Notice to reader

○ the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.