SAFETY DATA SHEET

1. Identification

Product identifier Nutrichem 10-52-10

Other means of identification

Product code 31031

Recommended use Agricultural / Horticultural Use- NPK Fertilizer- Refer to product label.

Recommended restrictions Refer to product label. **Manufacturer/Importer/Supplier/Distributor information**

Manufacturer

Company name Genesis Agri-Products, Inc.
Address 2522 Old Town Rd.

Union Gap, WA 98903

United States

Telephone (509) 452-0302 **E-mail** Not available.

Emergency phone number CHEMTREC (24 hours):

USA. Canada, Puerto Rico 1-800-424-9300 Virgin Islands 1-800-424-9300 International Maritime +1 (703) 527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Acute toxicity, dermal Category 4
Reproductive toxicity Category 2

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Harmful if swallowed. Harmful in contact with skin. Suspected of damaging fertility or the unborn

child.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Wash thoroughly after handling. Do not eat, drink or smoke when using this

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

Response If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If

exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Rinse mouth. Take off contaminated clothing and wash

before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Mono potassium phosphate (MKP)		7778-77-0	30 - < 40*
Urea		57-13-6	5 - < 10*
EDTA, Disodium Copper(II) Salt		14025-15-1	< 1*
Manganese EDTA, disodium salt		15375-84-5	< 1*
Sodium Molybdate, Dihydrate		10102-40-6	< 0.1*
Other components below reportable lev	els		60 - < 70

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Wash off with soap and water. Get medical advice/attention if you feel unwell. Get medical Skin contact

attention if irritation develops and persists. Wash contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation.

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

During fire, gases hazardous to health may be formed.

Do not use water jet as an extinguisher, as this will spread the fire.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Ingestion

Specific hazards arising from

the chemical

Special protective equipment

and precautions for firefighters Fire-fighting

equipment/instructions

Specific methods General fire hazards Use water spray to cool unopened containers.

Use standard firefighting procedures and consider the hazards of other involved materials.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not taste or swallow, Avoid contact with eyes, skin, and clothing, Avoid prolonged exposure. Provide adequate ventilation. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Pregnant or breastfeeding women must not handle this product. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Wash contaminated clothing before reuse.

Store locked up. Store in original tightly closed container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
Manganese EDTA, disodium salt (CAS 15375-84-5)	Ceiling	5 mg/m3	
Sodium Molybdate, Dihydrate (CAS 10102-40-6)	PEL	5 mg/m3	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
Sodium Molybdate, Dihydrate (CAS 10102-40-6)	TWA	0.5 mg/m3	Respirable fraction.
JS. NIOSH: Pocket Guide to Chemi	ical Hazards		
Components	Туре	Value	Form
EDTA, Disodium Copper(II) Salt (CAS 14025-15-1)	TWA	1 mg/m3	Dust and mist.
Manganese EDTA, disodium salt (CAS 15375-84-5)	STEL	3 mg/m3	Fume.
disodium salt (CAS	STEL	3 mg/m3 1 mg/m3	Fume.
disodium salt (CAS 15375-84-5)	TWA	·	
disodium salt (CAS	TWA	·	

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Powder. **Appearance** Solid. Physical state

Form Solid. Powder. Not available. Color Not available. Odor **Odor threshold** Not available. Not available. Salt-Out / Crystallization Temp Not available. Melting point/freezing point Not available.

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Initial boiling point and boiling

range

Not available.

Not available. Flash point **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

0.00001 hPa estimated Vapor pressure

Vapor density Not available.

Relative density 1.607 g/cm3 (typical)

Solubility(ies)

100 % Solubility (water)

Partition coefficient Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. Not available. Viscosity

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion Harmful if swallowed.

Inhalation Prolonged inhalation may be harmful.

Skin contact Harmful in contact with skin.

Eye contact Direct contact with eyes may cause temporary irritation. Symptoms related to the Direct contact with eyes may cause temporary irritation.

physical, chemical and toxicological characteristics

Information on toxicological effects

Harmful in contact with skin. Harmful if swallowed. Not known. Acute toxicity

Product Species Test Results

Nutrichem 10-52-10 (CAS Mixture)

Acute Oral

LD50 Chicken 2458.3333 g/kg estimated

> Mouse 5286.3442 mg/kg estimated Rat 61884.0742 mg/kg estimated

Material name: Nutrichem 10-52-10 894 Version #: 01 Issue date: 10-28-2015 Components **Species Test Results**

Mono potassium phosphate (MKP) (CAS 7778-77-0)

Acute

Oral LD50

Mouse 1700 mg/kg

Urea (CAS 57-13-6)

Acute

Oral

LD50 Rat 8471 mg/kg

> Sheep 28500 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation.

Serious eye damage/eye

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Suspected of damaging fertility or the unborn child. Reproductive toxicity

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results
Nutrichem 10-52-10 (CA	AS Mixture)		
Aquatic			
Crustacea	EC50	Daphnia	74940.4141 mg/l, 48 hours estimated
Fish	LC50	Fish	9430.8193 mg/l, 96 hours estimated
Components		Species	Test Results
EDTA, Disodium Coppe	er(II) Salt (CAS 14	025-15-1)	
Aquatic			
Fish	LC50	Channel catfish (Ictalurus punctatus)	838 mg/l, 96 hours
Sodium Molybdate, Dih	ydrate (CAS 1010	2-40-6)	
Aquatic			
Crustacea	EC50	Tubificid worm (Tubifex tubifex)	42.48 - 65.64 mg/l, 48 hours
Fish	LC50	Striped bass (Morone saxatilis)	> 79.8 mg/l, 96 hours
Urea (CAS 57-13-6)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3910 mg/l, 48 hours
Fish	LC50	Carp (Leuciscus idus melanotus)	> 10000 mg/l, 48 hours
		Guppy (Poecilia reticulata)	16200 - 18300 mg/l, 96 hours

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^{*} Estimates for product may be based on additional component data not shown.

ComponentsSpeciesTest ResultsHarlequinfish, red rasbora (Rasbora heteromorpha)12000 mg/l, 96 hoursMozambique tilapia (Tilapia mossambica)590 - 730 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Urea -2.11

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

One or more components are not listed on TSCA.

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

EDTA, Disodium Copper(II) Salt (CAS 14025-15-1) Listed.

Manganese EDTA, disodium salt (CAS 15375-84-5) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

^{*} Estimates for product may be based on additional component data not shown.

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Monoammonium Phosphate (MAP)	7722-76-1	50 - < 60

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Manganese EDTA, disodium salt (CAS 15375-84-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

EDTA, Disodium Copper(II) Salt (CAS 14025-15-1) Manganese EDTA, disodium salt (CAS 15375-84-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

EDTA, Disodium Copper(II) Salt (CAS 14025-15-1) Manganese EDTA, disodium salt (CAS 15375-84-5)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 10-28-2015

Version # 01

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of Manufacturer's knowledge, information and belief at the date of its publication; however, it is provided only as a guidance for safe handling, use, processing, storage, transportation, disposal and release of the Product. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made with respect to the Product or the information provided herein, or that the Product or information herein may be used without infringing the intellectual property rights of others. The information provided in this Safety Data Sheet relates only to the specific Product designated and may not be valid if the Product is used in combination with other materials or in any other process, unless specified herein. The user assumes all risk and liability for loss, injury, damage or expense due to any use, handling, storage or disposal of the Product, and Manufacturer recommends that the user conducts its owns tests of the Product to determine suitability of the Product for user's particular use.

Material name: Nutrichem 10-52-10 SDS US