# SAFETY DATA SHEET

### 1. Identification

**Product identifier** Nutrichem 20-20-20

Other means of identification

Product code 31032

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 1-800-424-9300 Virgin Islands 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 Serious eye damage/eye irritation Category 2A Carcinogenicity Category 1B Reproductive toxicity Category 2 Category 2

Hazardous to the aquatic environment, acute **Environmental hazards** 

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

**OSHA** defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. May cause

cancer. Suspected of damaging fertility or the unborn child. Toxic to aquatic life. Toxic to aquatic

life with long lasting effects.

**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. Avoid release to the environment. Wear protective gloves/protective clothing/eye

protection/face protection. Wear eye/face protection.

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

in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Rinse mouth. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Collect spillage.

Material name: Nutrichem 20-20-20

Storage Store locked up.

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

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	%
Potassium Nitrate		7757-79-1	30 - < 40*
Urea		57-13-6	20 - < 30*
Diammonium Phosphate (DAP)		7783-28-0	5 - < 10*
Mono potassium phosphate (MKP)		7778-77-0	3 - < 5*
EDTA, Disodium Copper(II) Salt		14025-15-1	< 1*
Manganese EDTA, disodium salt		15375-84-5	< 1*
Cobalt Sulfate, Monohydrate		10124-43-3	< 0.1*
Sodium Molybdate, Dihydrate		10102-40-6	< 0.1*
Other components below reportable levels	S		20 - < 30

<sup>\*</sup>Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately 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. Ingestion

Get medical advice/attention if you feel unwell. Get medical attention if symptoms occur.

Most important Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye irritation.

symptoms/effects, acute and

delayed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim Indication of immediate medical attention and special under observation. Symptoms may be delayed.

treatment needed

**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

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

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

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting

equipment/instructions

Use water spray to cool unopened containers.

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

No unusual fire or explosion hazards noted. General fire hazards

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### 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. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. 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

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Minimize dust generation and accumulation. For waste disposal, see section 13 of the SDS.

### **Environmental precautions**

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. 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. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not taste or swallow. Avoid breathing dust. Avoid contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. 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. Avoid release to the environment. Observe good industrial hygiene practices. Practice good housekeeping. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

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

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# 8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air	Contaminants (29 CFR 1910.1000)
0	T

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 Value	s		
Components	Туре	Value	Form
Cobalt Sulfate, Monohydrate (CAS 10124-43-3)	TWA	0.02 mg/m3	
Sodium Molybdate, Dihydrate (CAS 10102-40-6)	TWA	0.5 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide to Cher	nical 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.
•	TWA	1 mg/m3	Fume.

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# US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Туре	Value	Form	
Urea (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.	

### **Biological limit values**

ACGIH Bio	logical	<b>Exposure</b>	Indices
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Components	Value	Determinant	Specimen	Sampling Time	
Cobalt Sulfate, Monohydrate (CAS 10124-43-3)	15 μg/l	Cobalt	Urine	*	
,	1 μg/l	Cobalt	Blood	*	

<sup>\* -</sup> For sampling details, please see the source document.

# Appropriate engineering controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Provide eyewash station.

### Individual protection measures, such as personal protective equipment

facepiece, dust and mist filter.

Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

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

**Respiratory protection** Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels

exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece,

dust and mist filter.

1.004 g/cm3 (typical)

**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

### **Appearance**

Physical state Solid. Powder. **Form** Color Not available. Not available. Odor Not available. **Odor threshold** Salt-Out / Crystallization Temp Not available. Melting point/freezing point Not available. Not available. Initial boiling point and boiling range Flash point Not available. **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. Not available. Explosive limit - upper (%) Vapor pressure Not available. Not available. Vapor density

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Relative density

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

# 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. Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

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. Inhalation of dusts may cause respiratory irritation.

**Skin contact** Harmful in contact with skin.

**Eye contact** Causes serious eye irritation. Dust in the eyes will cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye

irritation.

Information on toxicological effects

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

Product	Species	Test Results
Nutrichem 20-20-20 (CAS	Mixture)	
Acute		
Oral		
LD50	Chicken	2478.9917 g/kg estimated
	Mouse	33152.1172 mg/kg estimated
	Rabbit	2926.0398 mg/kg estimated
	Rat	25682.5918 mg/kg estimated
Other		
LD100	Dog	52258.0664 mg/kg estimated
LD50	Mouse	87419.3516 mg/kg estimated
	Rat	58709.6758 mg/kg estimated
Components	Species	Test Results

Cobalt Sulfate, Monohydrate (CAS 10124-43-3)

Acute Oral LD50

.D50 Mouse 584 mg/kg

Rabbit 1800 mg/kg

Rat 424 mg/kg

Other

LD100 Dog 16.2 mg/kg LD50 Mouse 27.1 mg/kg

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 Components
 Species
 Test Results

 Rat
 18.2 mg/kg

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

Acute

Oral LD50

Mouse 1700 mg/kg

Potassium Nitrate (CAS 7757-79-1)

**Acute** Oral

LD50 Rabbit 1166 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.

Serious eye damage/eye

irritation

Causes serious eye irritation. Dust in the eyes will cause 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.

Carcinogenicity May cause cancer.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

**US. National Toxicology Program (NTP) Report on Carcinogens** 

Cobalt Sulfate, Monohydrate (CAS 10124-43-3)

Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

**Product** 

Not classified.

Aspiration hazard

Not available.

**Chronic effects** Prolonged inhalation may be harmful.

# 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Nutrichem 20-20-20 (0	CAS Mixture)	·	
Aquatic			
Crustacea	EC50	Daphnia	22483.9863 mg/l, 48 hours estimated
Fish	LC50	Fish	580.5023 mg/l, 96 hours estimated
Components		Species	Test Results

**Test Results** 

Cobalt Sulfate, Monohydrate (CAS 10124-43-3)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) 3.75 mg/l, 96 hours

Species

Diammonium Phosphate (DAP) (CAS 7783-28-0)

**Aquatic** 

Fish LC50 Mozambique tilapia (Tilapia 0.12 mg/l, 96 hours

mossambica)

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<sup>\*</sup> Estimates for product may be based on additional component data not shown.

**Test Results** Components **Species** 

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

Aquatic

LC50 Fish Channel catfish (Ictalurus punctatus) 838 mg/l, 96 hours

Potassium Nitrate (CAS 7757-79-1)

**Aquatic** 

LC50 Fish Bluegill (Lepomis macrochirus) 1200 mg/l, 96 hours

Acute

LC50 Fish Fish 1378 - 3000 mg/l

Sodium Molybdate, Dihydrate (CAS 10102-40-6)

Aquatic

Crustacea EC50 Tubificid worm (Tubifex tubifex) 42.48 - 65.64 mg/l, 48 hours

LC50 Fish 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

Harlequinfish, red rasbora (Rasbora

heteromorpha)

12000 mg/l, 96 hours

Mozambique tilapia (Tilapia 590 - 730 mg/l, 96 hours

mossambica)

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.

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

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

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. 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:

Contaminated packaging

Disposal instructions).

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

IMDG Regulated Marine Pollutant.

DOT

Not regulated as dangerous goods.

IATA

**UN number** 

UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Cobalt Sulfate, Monohydrate)

Transport hazard class(es)

9

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Subsidiary risk 9 Label(s) Packing group Ш Yes **Environmental hazards** 

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft Cargo aircraft only Forbidden.

Forbidden.

**IMDG** 

UN3077 **UN** number

**UN proper shipping name** 

Environmentally hazardous substances, solid, n.o.s. (Cobalt Sulfate, Monohydrate)

Transport hazard class(es)

9 Class Subsidiary risk 9 Label(s) Packing group Ш

**Environmental hazards** 

Marine pollutant Yes

**EmS** Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG Regulated Marine Pollutant. **General information** 

IATA; IMDG



# Marine pollutant



# 15. Regulatory information

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

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

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)**

Cobalt Sulfate, Monohydrate (CAS 10124-43-3) Listed. 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)

No

Hazard categories Immediate Hazard - Yes

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

### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

# SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Potassium Nitrate	7757-79-1	30 - < 40	
Monoammonium Phosphate (MAP)	7722-76-1	20 - < 30	
Diammonium Phosphate (DAP)	7783-28-0	5 - < 10	

### Other federal regulations

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

Cobalt Sulfate, Monohydrate (CAS 10124-43-3) 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**

Potassium Nitrate (CAS 7757-79-1)

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

Cobalt Sulfate, Monohydrate (CAS 10124-43-3)

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

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

Potassium Nitrate (CAS 7757-79-1)

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

Potassium Nitrate (CAS 7757-79-1)

### **US. Rhode Island RTK**

Cobalt Sulfate, Monohydrate (CAS 10124-43-3)

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

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

Potassium Nitrate (CAS 7757-79-1)

## **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.

# US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Cobalt Sulfate, Monohydrate (CAS 10124-43-3) Listed: May 20, 2005

### **International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
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

Country(s) or region Inventory name On inventory (yes/no)\*

New Zealand New Zealand Inventory Yes

Philippines Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

\*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

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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.

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