SAFETY DATA SHEET

1. Identification

Product identifier ASCO K

Other means of identification

Product code 31058

Recommended use Agriculture - NPK Water Soluble Fertilizer

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Source to Source, a TAP family company

Address 3233 South "I" Street

Telephone Not available.

E-mail Not available.

Not available.

Emergency phone number Toll Free 866 727 4572

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Serious eye damage/eye irritation Category 2A

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if swallowed. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear

eye/face protection.

Response If swallowed: Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water

for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse

mouth. If eye irritation persists: Get medical advice/attention.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise

classified (HNOC)

Not classified.

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

Supplemental information

Hazard statement Harmful to aquatic life.

Precautionary statement

Prevention Avoid release to the environment.

54.48% of the mixture consists of component(s) of unknown acute oral toxicity. 80% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Hazardous components

Chemical name	Common name and synonyms	CAS number	%
Phosphoric acid, monopotassium salt		7778-77-0	20 - < 30*

Hazardous components			
Chemical name	Common name and synonyms	CAS number	%
Potassium Nitrate		7757-79-1	20 - < 30*
Urea		57-13-6	< 1*
Other components below reportable levels			50 - < 60

^{*}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.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Immediately flush eyes with plenty of water for at least 15 minutes. Continue rinsing. Remove Eye contact

contact lenses, if present and easy to do. If eye irritation persists: Get medical advice/attention.

Ingestion Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms/effects, acute and Irritation of eyes and mucous membranes.

delayed Indication of immediate

medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder.

Carbon dioxide (CO2).

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

In the event of fire, cool tanks with water spray.

Specific methods Cool containers exposed to flames with water until well after the fire is out.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Keep out of low areas. Keep unnecessary personnel away. Wear appropriate personal protective equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. 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

Methods and materials for containment and cleaning up

Collect spillage. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the MSDS.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

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 skin and eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Practice good housekeeping. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Guard against dust accumulation of this material. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

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

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

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

Eye/face protection Wear eye/face protection. Use tight fitting goggles if dust is generated.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Other Wear suitable protective clothing.

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

exceeding the exposure limits.

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 Crystalline. Physical state Solid. **Form** Powder.

Color Red Odor None.

Not available. Odor threshold Not available. рΗ Not available. Salt-Out / Crystallization Temp

Melting point/freezing point 487.4 °F (253 °C) estimated Initial boiling point and boiling 752 °F (400 °C) estimated

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.

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

Vapor pressure 0 hPa estimated Not available. Vapor density Not available. Relative density Solubility(ies) 150 g/l estimated

Partition coefficient

Not available.

(n-octanol/water)

Auto-ignition temperature

Not available.

Decomposition temperature Not available. Not available **Viscosity**

Material name: ASCO K SDS US

509 Version #: 01 Issue date: 04-01-2014

Other information

6 - 7 (5% Solution) pH in aqueous solution

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 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.

Prolonged inhalation may be harmful. Inhalation of dusts may cause respiratory irritation. Inhalation

Not available. Skin contact

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

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Product	Species	Test Results
ASCO K (CAS Mixture)		
Acute		
Oral		
LD50	Mouse	6854.8389 mg/kg, estimated
	Rabbit	5830 mg/kg, estimated
Components	Species	Test Results
Phosphoric acid, monopota	ssium salt (CAS 7778-77-0)	
A		

Acute Oral

LD50 Mouse 1700 mg/kg

Potassium Nitrate (CAS 7757-79-1)

Acute Oral

Rabbit 1166 mg/kg LD50

Urea (CAS 57-13-6)

Acute

Oral

LD50 Rat 8471 mg/kg Sheep 28500 mg/kg

Not available.

Skin corrosion/irritation Not available.

Serious eye damage/eye

irritation

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

Respiratory sensitization Not available.

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

mutagenic or genotoxic.

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

Reproductive toxicity Not available. Specific target organ toxicity -Not available.

single exposure

Skin sensitization

Material name: ASCO K SDS US

509 Version #: 01 Issue date: 04-01-2014

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

Specific target organ toxicity -

repeated exposure

Not available.

Aspiration hazard

Not available.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life.

Product		Species	Test Results
ASCO K (CAS Mixture	1		Toot Noodito
Fish	, LC50	Fish	1225.6323 mg/l, 96 hours, estimated
Components	2000	Species	Test Results
Potassium Nitrate (CA	S 7757-79-1)		Tool Noodilo
Aquatic	,		
Fish	LC50	Western mosquitofish (Gambusia affinis) 22.5 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 mossambica)	590 - 730 mg/l, 96 hours

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

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

Mobility in soil Not available.

Other adverse effects

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

-2.11

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. This material

and its container must be disposed of as hazardous waste. 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.

Hazardous waste codeThe 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 regulations This product is 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)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Nο

Hazard categories Immediate Hazard - No

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

SARA 302 Extremely

hazardous substance

SARA 311/312 Hazardous No

chemical

Other federal regulations

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

Not regulated

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

Food and Drug

Not regulated.

Administration (FDA)

US state regulations

US. Massachusetts RTK - Substance List

Potassium Nitrate (CAS 7757-79-1)

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

Potassium Nitrate (CAS 7757-79-1) 500 lbs

US. Pennsylvania RTK - Hazardous Substances

Potassium Nitrate (CAS 7757-79-1)

US. Rhode Island RTK

Potassium Nitrate (CAS 7757-79-1)

US. California Proposition 65

Not Listed.

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)	No
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	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

^{*}A "Yes" indicates this product complies 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 04-01-2014

Version # 01

Further information Not available.

Disclaimer While the info

While the information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or information set forth, or that the products, or information may be used without infringing the intellectual property rights of others. In no case shall the information provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the information furnished by our company hereunder are given gratis and we assume no obligation or liability for the information given or results obtained, all such being given and accepted at your risk.