SAFETY DATA SHEET

1. Identification

Product identifier UCC-10,000

Other means of identification

Product Number 4002619

Recommended use Circulation Cleaner Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Thatcher Company Company name **Address** 1905 Fortune Road Salt Lake City, UT 84104

United States

General Assistance 8-5 Telephone

E-mail Not available.

Chemtrec (CCN 22106) (800) 424-9300 **Emergency phone number**

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

> Acute toxicity, dermal Category 4 Acute toxicity, inhalation Category 4 Skin corrosion/irritation Category 1A Serious eye damage/eye irritation Category 1 Hazardous to the aquatic environment, acute Category 2

(801) 972-4587

Environmental hazards

Hazardous to the aquatic environment, Category 2

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. **Hazard statement**

Causes serious eye damage. Harmful if inhaled. Toxic to aquatic life. Toxic to aquatic life with

long lasting effects.

Precautionary statement

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

product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear

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

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/shower. 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. Continue rinsing. Immediately call a poison center/doctor. Take off contaminated clothing and wash before reuse. Collect spillage.

Store locked up.

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

Hazard(s) not otherwise

Storage

classified (HNOC)

None known.

Material name: UCC-10,000 SDS US 91.82% of the mixture consists of component(s) of unknown acute oral toxicity. 72.29% of the mixture consists of component(s) of unknown acute dermal toxicity. 90.87% of the mixture consists of component(s) of unknown acute inhalation toxicity. 97.27% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 97.27% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Sodium carbonate		497-19-8	40 - < 50
Sodium hydroxide		1310-73-2	20 - < 30
Sodium Metasilicate-Penta		10213-79-3	5 - < 10
Sodium Dichlororisocyanurate		51580-86-0	1 - < 3
Other components below reportable le	evels		20 - < 30

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

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or

poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control

center immediately.

blindness could result.

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If Ingestion

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

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

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

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may

include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

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

the chemical

General information

Specific hazards arising from Not applicable.

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods General fire hazards Wear suitable protective equipment.

Use water spray to cool unopened containers.

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

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. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. 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. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Material name: UCC-10,000 SDS US 2/8

Methods and materials for containment and cleaning up

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). 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. Absorb in vermiculite, dry sand or earth and place into containers. Collect dust using a vacuum cleaner equipped with HEPA filter.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

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

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for A Components	Туре	Value	
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3	
US. ACGIH Threshold Limit Value	es		
Components	Туре	Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	

Biological limit values

Appropriate engineering controls

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

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. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear appropriate chemical resistant clothing.

exceeding the exposure limits. Dust & vapor respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Material name: UCC-10,000

General hygiene considerations

Keep away from food and drink. 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

White to yellow solid **Appearance**

Solid. Physical state Powder. **Form**

Color White to yellow Odor Not available. **Odor threshold** Not available. Not available. Ηq Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Not available. Flash point Not available. **Evaporation rate** 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. Vapor pressure Not available. Vapor density Not available. Not available. Relative density

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

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

Other information

2.38 g/cm3 estimated Density

Explosive properties Not explosive. Oxidizing properties Not oxidizing. Specific gravity 2.38 estimated

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 Hazardous polymerization does not occur.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong acids.

Hazardous decomposition

products

reactions

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

4002619 Version #: 01 Issue date: 05-20-2015

Inhalation Harmful if inhaled.

Material name: UCC-10,000

SDS US

Skin contact Causes severe skin burns. Harmful in contact with skin.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Dusts may irritate the respiratory tract, skin and eyes. Symptoms may include stinging, tearing, redness, swelling,

and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed.

Components Species Test Results

Sodium carbonate (CAS 497-19-8)

Acute Inhalation

LC50 Guinea pig 0.8 mg/l, 2 Hours

Mouse 1.2 mg/l, 2 Hours

Rat 2.3 mg/l, 2 Hours

Oral

LD50 Rat 4090 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

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

Germ cell mutagenicityNo 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.

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

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Sodium carbonate (CA	AS 497-19-8)		
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	156.6 - 298.9 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	300 mg/l, 96 hours
Sodium Dichlororisocy	/anurate (CAS 5158	30-86-0)	
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.15 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.29 mg/l, 96 hours

Material name: UCC-10,000 SDS US

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

Components Species Test Results

Sodium hydroxide (CAS 1310-73-2)

Aquatic

Crustacea EC50 Water flea (Ceriodaphnia dubia) 34.59 - 47.13 mg/l, 48 hours

Fish LC50 Western mosquitofish (Gambusia affinis) 125 mg/l, 96 hours

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

Bioaccumulative potential No data available.

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

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN number UN3262

UN proper shipping name Transport hazard class(es) Corrosive solid, basic, inorganic, n.o.s. (Sodium Hydroxide RQ = 4002 LBS)

Class 8
Subsidiary risk Label(s) 8
Packing group |

Environmental hazards

Marine pollutant Yes

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

Special provisions IB7, IP1, T6, TP33

Packaging exceptions None
Packaging non bulk 211
Packaging bulk 242

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

Not applicable.

DOT



Material name: UCC-10,000 SDS US

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

Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated 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.

One or more components are not listed on TSCA.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium hydroxide (CAS 1310-73-2)

Listed.

SARA 304 Emergency release notification

Not regulated.

US. 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 - No 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)

Not regulated.

Other federal regulations

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

No

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)

US state regulations

US - New Jersey RTK - Substances: Listed substance

Sodium Dichlororisocyanurate (CAS 51580-86-0)

Sodium hydroxide (CAS 1310-73-2)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

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US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Sodium hydroxide (CAS 1310-73-2)

US. Massachusetts RTK - Substance List

Sodium Dichlororisocyanurate (CAS 51580-86-0)

Sodium hydroxide (CAS 1310-73-2)

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

Not regulated.

Material name: UCC-10,000 SDS US

US. Pennsylvania RTK - Hazardous Substances

Sodium Dichlororisocyanurate (CAS 51580-86-0)

Sodium hydroxide (CAS 1310-73-2)

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

Sodium Dichlororisocyanurate (CAS 51580-86-0)

Sodium hydroxide (CAS 1310-73-2)

US. Rhode Island RTK

Sodium hydroxide (CAS 1310-73-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Australian Inventory of Chemical Substances (AICS)

International Inventories

Australia

Canada

Country(s) or region

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)	No
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

^{*}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).

Toxic Substances Control Act (TSCA) Inventory

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

Inventory name

Domestic Substances List (DSL)

Issue date 05-20-2015

Version # 01

United States & Puerto Rico

NFPA ratings Health: 3

Flammability: 0 Instability: 0

NFPA ratings



Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Material name: UCC-10,000 SDS US

On inventory (yes/no)*

No

No

No