SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KAY DELIMER

Other means of identification : Not applicable

Recommended use : Delimer

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 9.9 %

Company : Kay Chemical Company

8300 Capital Drive

Greensboro, North Carolina USA 27409

1-800-529-5458

Emergency telephone : 1-877-231-2615 (USA/Canada), 952-853-1713 (outside USA)

Issuing date : 04/06/2015

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD

Eye irritation : Category 2A

Product AT USE DILUTION

Eye irritation : Category 2B

GHS Label element

Product AS SOLD

Hazard pictograms



Signal Word : Warning

Hazard Statements : Causes serious eye irritation.

Precautionary Statements : **Prevention:**

Wash skin thoroughly after handling.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye

irritation persists: Get medical advice/ attention.

Product AT USE DILUTION

Signal Word : Warning

Hazard Statements : Causes eye irritation.

Precautionary Statements : Prevention:

Wash skin thoroughly after handling.

Response:

917184-01 1 / 9

KAY DELIMER

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye

irritation persists: Get medical advice/ attention.

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture : Mixture

Chemical Name CAS-No. Concentration (%)

citric acid 77-92-9 60 - 100

Product AT USE DILUTION

Chemical Name CAS-No. Concentration (%)

citric acid 77-92-9 5 - 10

SECTION 4. FIRST AID MEASURES

Product AS SOLD

In case of eye contact : Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/ attention.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal

protective equipment.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and

delayed

: See Section 11 for more detailed information on health effects and

symptoms.

Product AT USE DILUTION

In case of eye contact : Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/ attention.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

917184-01 2 / 9

KAY DELIMER

Unsuitable extinguishing

media

: None known.

Specific hazards during fire

fighting

: Not flammable or combustible.

Hazardous combustion

products

: Decomposition products may include the following materials:

Carbon oxides

Nitrogen oxides (NOx)

Sulfur oxides

Oxides of phosphorus

Special protective equipment

for fire-fighters

: Use personal protective equipment.

Specific extinguishing

methods

: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire

and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD

Personal precautions, protective equipment and emergency procedures

: Ensure clean-up is conducted by trained personnel only. Refer to

protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up

: Sweep up and shovel into suitable containers for disposal.

Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up

: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD

Advice on safe handling : Avoid contact with skin and eyes. Wash hands thoroughly after

handling. Do not mix with bleach or other chlorinated products - will

cause chlorine gas.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

Product AT USE DILUTION

Advice on safe handling : Wash hands thoroughly after handling. Do not mix with bleach or other

917184-01 3 / 9

KAY DELIMER

chlorinated products - will cause chlorine gas.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Personal protective equipment

Eye protection : Due to the form and packaging of the product, no protective

equipment is needed under normal use conditions.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Wash face, hands and any exposed skin thoroughly after

handling.

Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Product AS SOLD Product AT USE DILUTION

liquid

colorless

odorless 2.0 - 2.5

Appearance : granular

Color : opaque, white

pH : 2.2, 1%

Flash point : Not applicable
Odor Threshold : No data available

Melting point/freezing point : No data available

Initial boiling point and

boiling range

Odor

: > 100 °C

: odorless

917184-01 4 / 9

KAY DELIMER

Evaporation rate : No data available Flammability (solid, gas) : No data available Upper explosion limit : No data available Lower explosion limit : No data available Vapor pressure : No data available : No data available Relative vapor density

: 1.44 - 1.64 Relative density : soluble Water solubility

Solubility in other solvents : No data available Partition coefficient: n-: No data available

octanol/water Autoignition temperature : No data available : No data available Thermal decomposition

Viscosity, kinematic : No data available Explosive properties : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available VOC : No data available

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: Do not mix with bleach or other chlorinated products - will cause

chlorine gas.

Conditions to avoid : None known.

Incompatible materials Chlorine-based bleaching agents

Oxidizing agents

Hazardous decomposition

products

: Decomposition products may include the following materials:

Carbon oxides

Nitrogen oxides (NOx)

Sulfur oxides

Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Eye contact, Skin contact

exposure

Potential Health Effects

Product AS SOLD

Eyes : Causes serious eye irritation.

Skin : Health injuries are not known or expected under normal use.

: Health injuries are not known or expected under normal use. Ingestion

917184-01 5/9

KAY DELIMER

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes : Causes eye irritation.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact : Redness, Pain, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Product AT USE DILUTION

Eye contact : Redness, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product AS SOLD

Acute oral toxicity : No data available
Acute inhalation toxicity : No data available
Acute dermal toxicity : No data available
Skin corrosion/irritation : No data available
Respiratory or skin : No data available

sensitization

Carcinogenicity : No data available
Reproductive effects : No data available
Germ cell mutagenicity : No data available
Teratogenicity : No data available
STOT-single exposure : No data available
STOT-repeated exposure : No data available
Aspiration toxicity : No data available

Ingredients

917184-01 6 / 9

KAY DELIMER

Acute oral toxicity : citric acid

LD50 Rat: 11,700 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

: No data available Toxicity to fish : No data available Toxicity to daphnia and other

aquatic invertebrates

: No data available

Ingredients

Toxicity to algae

Toxicity to fish : citric acid

96 h LC50 Fish: > 100 mg/l

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD

Disposal methods : Where possible recycling is preferred to disposal or incineration. If

> recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to

an approved waste handling site for recycling or disposal. Do not reuse empty containers. Dispose of in accordance with local, state, and

federal regulations.

Product AT USE DILUTION

Disposal methods Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

917184-01 7/9

KAY DELIMER

Land transport (DOT)

Not dangerous goods

Sea transport (IMDG/IMO)

Not dangerous goods

Product AT USE DILUTION

Not intended for transport.

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements

of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known

CAS numbers that exceed the threshold (De Minimis) reporting levels

established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

United States TSCA Inventory:

On TSCA Inventory

Canadian Domestic Substances List (DSL):

All components of this product are on the Canadian DSL.

Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances:

On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :

On the inventory, or in compliance with the inventory

Japan. ISHL - Inventory of Chemical Substances (METI) :

On the inventory, or in compliance with the inventory

Korea. Korean Existing Chemicals Inventory (KECI):

On the inventory, or in compliance with the inventory

917184-01 8 / 9

KAY DELIMER

Philippines Inventory of Chemicals and Chemical Substances (PICCS):

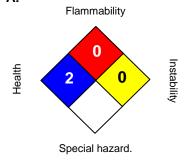
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances in China (IECSC):

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Product AS SOLD NFPA:



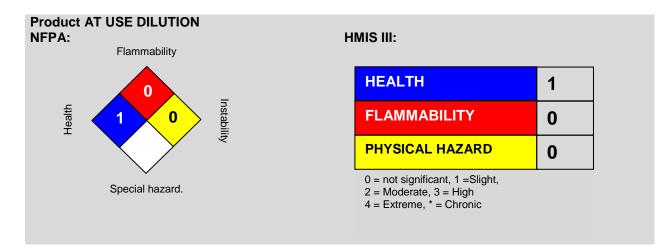
HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic



Issuing date : 04/06/2015

Version : 1.0

Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.

917184-01 9 / 9