

# SAFETY DATA SHEET

Issue Date 27-Dec-2018 Revision Date 27-Dec-2018 Version 1.3

# 1. Identification

**Product identifier** 

Product Name Chloride 2 Indicator

Other means of identification

Product Code(s) 104320

Recommended use of the chemical and restrictions on use

**Recommended Use** Laboratory reagent. Determination of chloride.

Details of the supplier of the safety data sheet

**Manufacturer Address** 

Hach Company P.O.Box 389 Loveland, CO 80539 USA +1(970) 669-3050

Emergency telephone number

Emergency Telephone +1(303) 623-5716 - 24 Hour Service

# 2. Hazards identification

#### Classification

Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2A - (H319)
Skin sensitization	Category 1 - (H317)
Germ cell mutagenicity	Category 1B - (H340)
Carcinogenicity	Category 1A - (H350)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Chronic aquatic toxicity	Category 1 - (H410)

## Label elements

Signal word - Danger

#### **Hazard statements**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H340 - May cause genetic defects

H350 - May cause cancer

H410 - Very toxic to aquatic life with long lasting effects



Exclamation mark Health hazard Environment

#### **Precautionary statements**

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P362 + P364 - Take off contaminated clothing and wash it before reuse

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P272 - Contaminated work clothing should not be allowed out of the workplace

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P501 - Dispose of contents/ container to an approved waste disposal plant

P201 - Obtain special instructions before use

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P271 - Use only outdoors or in a well-ventilated area

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P273 - Avoid release to the environment

P391 - Collect spillage

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

#### Other Hazards Known

Not applicable

# 3. Composition/information on ingredients

#### Substance

Not applicable.

#### Mixture

#### **Chemical Family**

Mixture.

Chemical name	CAS No.	Synonyms	Percent Range
Sodium bicarbonate	144-55-8	No information available	50 - 60%
Chromic acid (H2CrO4),	7789-00-6	No information available	50 - 60%

dipotassium salt

### 4. First aid measures

**Description of first aid measures** 

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get

medical advice/attention.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical

attention immediately if symptoms occur.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.

**Skin contact**May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a

physician. Wash off immediately with soap and plenty of water for at least 15 minutes.

**Ingestion** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Call a physician.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

**Symptoms** Itching. Rashes. Hives. Burning sensation.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

**Hazardous combustion products** This material will not burn.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective actions for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

#### Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid breathing vapors or mists.

### Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up.

### 8. Exposure controls/personal protection

#### Control parameters

**Exposure Limits** Based on NOM-010-STPS-2014.

Chemical name	TWA	STEL	Ceiling Limit Value
Chromic acid (H2CrO4),	0.05 mg/m <sup>3</sup> 0.5 mg/m <sup>3</sup>	-	-
dipotassium salt			
7789-00-6			

#### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

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

**Eye/face protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear

safety glasses with side-shields.

**Hand protection** Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid

contact with skin, eyes or clothing.

# 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Physical state** 

Solid

Appearance powder Odorless

**Color** yellow

Odor threshold No data available

Property Values Remarks • Method

Molecular weight No data available

**pH** 8.2 5% Solution

Melting point/freezing point No data available

Boiling point / boiling range No data available

**Evaporation rate** Not applicable

Vapor pressure Not applicable

Vapor density (air = 1) Not applicable

Specific gravity (water = 1 / air = 1) 2.25

Partition Coefficient (n-octanol/water) log Kow ~ 0

**Soil Organic Carbon-Water Partition** 

Coefficient

log K₀c ~ 0

Autoignition temperature No data available

**Decomposition temperature** 100 °C / 212 °F

Dynamic viscosity Not applicable

Kinematic viscosity Not applicable

Solubility(ies)

### Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

#### Solubility in other solvents

Chemical Name	Solubility classification	<u>Solubility</u>	Solubility Temperature
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

## **Other Information**

#### **Metal Corrosivity**

Steel Corrosion RateNot applicableAluminum Corrosion RateNot applicable

### **Volatile Organic Compounds (VOC) Content**

Not applicable

Chemical name	CAS No.	CAS No. Volatile organic	
		compounds (VOC) content	
Sodium bicarbonate	144-55-8	No data available	-
Chromic acid (H2CrO4), dipotassium	7789-00-6	No data available	-
salt			

**Explosive properties** 

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point Not applicable

Flammability Limit in Air

Upper flammability limitNo data availableLower flammability limitNo data available

Oxidizing properties No data available.

Bulk density No data available

## 10. Stability and reactivity

**Reactivity** No information available.

**Chemical stability** Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

**Conditions to avoid**None known based on information supplied.

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide. Carbon dioxide. chromium. chromium trioxide.

### 11. Toxicological information

#### Information on Likely Routes of Exposure

#### **Product Information**

**Inhalation** May cause irritation of respiratory tract.

**Eye contact** Irritating to eyes. Causes serious eye irritation.

Skin contact May cause sensitization by skin contact. Repeated or prolonged skin contact may cause

allergic reactions with susceptible persons. Causes skin irritation.

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if

swallowed.

**Symptoms** 

Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

**Acute toxicity** 

Product Acute Toxicity Data Test data reported below.

### **Oral Exposure Route**

Endpoint type	<u>Toxicological</u>	Key literature references and sources for data
Rat	effects	Outside testing
LD <sub>50</sub>	Behavioral	·
	Flaccid muscle	
	tone	
	Lethargy	
	Loss of righting	
	reflex	
	Prostration	
	Endocrine	
	Abnormalities of	
	the spleen	
	Eye	
	Ptosis	
	Gastrointestinal	
	Abnormalities of	
	the gastrointestinal	
	tract	
	Mucoid diarrhea	
	Liver	
	Abnormalities of	
	the liver	
	Lungs, Thorax,	
	or Respiration	
	Abnormalities of	
	the lungs	
	Dyspnea	
	Red or brown	
	staining of the	
	nose/mouth area	
	Tachypnea	
	Nutritional and	
	Gross Metabolic	
	Wetness of the	
	anogenital area	
	Reproductive	
	Skin and	
	Appendages	
	Piloerection	
	Wetness of the	
	nose/mouth	

Inhalation (Gas) Exposure Route

### **Ingredient Acute Toxicity Data**

Test data reported below.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Rat LD₅o	4220 mg/kg	None reported	None reported	Vendor SDS

Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	Mouse LD <sub>50</sub>	180 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Sodium bicarbonate	Rat	> 4.47 mg/L	4 hours	None reported	OECD (Organization for
(50 - 60%)	LC50				Economic Co-operation and
CAS#: 144-55-8					Development) Guideline 429
					(Skin Sensitization: Local
					Lymph Node Assay)

#### Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

### **Acute Toxicity Estimations (ATE)**

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

### Skin corrosion/irritation

Classification based on data available for ingredients. Irritating to skin.

### **Product Skin Corrosion/Irritation Data**

No data available.

## Ingredient Skin Corrosion/Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Standard Draize Test	Human	30 mg	3 days	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	None reported	None reported	None reported	None reported	Skin irritant	No information available

#### Serious eye damage/eye irritation

Classification based on data available for ingredients. Irritating to eyes.

### **Product Serious Eye Damage/Eye Irritation Data**

No data available.

### Ingredient Eye Damage/Eye Irritation Data

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
						Sources for data
Sodium bicarbonate	Standard Draize	Rabbit	100 mg	0.5 minutes	Mild eye irritant	RTECS (Registry of

(50 - 60%) CAS#: 144-55-8	Test					Toxic Effects of Chemical Substances)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	None reported	None reported	None reported	None reported	Eye irritant	No information available

### Respiratory or skin sensitization

May cause sensitization by skin contact.

### **Product Sensitization Data**

No data available.

### **Ingredient Sensitization Data**

No data available.

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Based on human experience	Human	Not confirmed to be a skin sensitizer	No information available
Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Based on human experience	Human	Not confirmed to be a respiratory sensitizer	No information available

#### STOT - single exposure

May cause respiratory irritation.

### **Product Specific Target Organ Toxicity Single Exposure Data**

No data available.

# Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Infant TD∟₀	1260 mg/kg	None reported	Kidney, Ureter, or Bladder Urine volume increased Lungs, Thorax, or Respiration Other changes	RTECS (Registry of Toxic Effects of Chemical Substances)

# STOT - repeated exposure

Based on available data, the classification criteria are not met.

### **Product Specific Target Organ Toxicity Repeat Dose Data**

No data available.

# Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate	Man	20 mg/kg	5 days	Gastrointestinal	RTECS (Registry of Toxic
(50 - 60%)	$TD_Lo$			Nausea or vomiting	Effects of Chemical
CAS#: 144-55-8				Nutritional and Gross	Substances)
				Metabolic	,
				Metabolic acidosis	
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time	_	sources for data
Sodium bicarbonate	Rat	77.2 mg/L	119 davs	Blood	RTECS (Registry of Toxic

(50 - 60%) CAS#: 144-55-8	TCLo	Changes in serum composition (e.g. TP, bilirubin, cholesterol)	Effects of Chemical Substances)
		Cardiac	•
		Other changes	
		Nutritional and Gross	
		Metabolic	
		Changes in sodium	

Carcinogenicity

Classification based on data available for ingredients. Contains a known or suspected carcinogen.

### **Product Carcinogenicity Data**

No data available.

### **Ingredient Carcinogenicity Data**

No data available.

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sodium bicarbonate	144-55-8	=	-	=	=
Chromic acid (H2CrO4), dipotassium salt	7789-00-6	A1	Group 1	Known	Х

### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	A1 - Known Human Carcinogen
IARC (International Agency for Research on Cancer)	Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)	Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of	X - Present
Labor)	

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	Mouse	1600 mg/kg	62 weeks	Blood Leukemia Lungs, Thorax, or Respiration	RTECS (Registry of Toxic Effects of Chemical Substances)

### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

#### Product Germ Cell Mutagenicity invitro Data

No data available.

### Ingredient Germ Cell Mutagenicity invitro Data

No data available.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	Sister chromatid exchange	Human fibroblast	100 nmol/L	None reported	Positive test result for	

### Product Germ Cell Mutagenicity invivo Data

No data available.

# Ingredient Germ Cell Mutagenicity invivo Data

Chemical name	Test	Species	Reported	Exposure	Results	Key literature
			dose	time		references and

						sources for data
Sodium bicarbonate	Unscheduled DNA	Rat	50400 mg/kg	4 weeks	Positive test result for	RTECS (Registry
(50 - 60%)	synthesis				mutagenicity	of Toxic Effects of
CAS#: 144-55-8						Chemical
						Substances)

### Reproductive toxicity

Based on available data, the classification criteria are not met.

### **Product Reproductive Toxicity Data**

No data available.

### **Ingredient Reproductive Toxicity Data**

No data available.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

## 12. Ecological information

Very toxic to aquatic life with long lasting effects. **Ecotoxicity** 

Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

**Product Ecological Data** 

**Aquatic Acute Toxicity** 

No data available.

**Aquatic Chronic Toxicity** 

No data available.

#### **Ingredient Ecological Data**

### **Aquatic Acute Toxicity**

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	96 hours	Lepomis macrochirus	LC <sub>50</sub>	7100 mg/L	PEEN (Pan European Ecological Network)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	96 hours	Pimephales promelas	LC50	40 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	48 Hours	Daphnia magna	EC <sub>50</sub>	4100 mg/L	PEEN (Pan European Ecological Network)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	48 Hours	Daphnia magna	EC <sub>50</sub>	15 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Chromic acid (H2CrO4).	72 Hours	Nitzschia sp.	EC50	0.26 mg/L	GESTIS (Information System on Hazardous Substances of the

\_\_\_\_

dipotassium salt			German Social Accident
(50 - 60%)			Insurance)
CAS#: 7789-00-6			

### **Aquatic Chronic Toxicity**

No data available.

#### Persistence and degradability

#### **Product Biodegradability Data**

No data available.

#### **Bioaccumulation**

#### **Product Bioaccumulation Data**

No data available.

Partition Coefficient (n-octanol/water) log Kow ~ 0

**Mobility** 

Soil Organic Carbon-Water Partition Coefficient log K₀c ~ 0

### Other adverse effects

Contains a substance with an endocrine-disrupting potential. Environmental exposure.

# 13. Disposal considerations

#### Waste treatment methods

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. Transportation information

MEX

products

UN/ID no UN3288

**Proper shipping name** Toxic solid, inorganic, n.o.s.

Hazard Class 6.1
Packing Group

**Description** UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H2CrO4), dipotassium salt), 6.1, III

**Note:** No special precautions necessary.

**TDG** 

UN/ID no UN3288

**Proper shipping name** Toxic solid, inorganic, n.o.s.

Hazard Class 6.1
Packing Group

Description UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H2CrO4), dipotassium salt), 6.1, III

U.S. DOT

UN/ID no UN3288

**Proper shipping name** Toxic solid, inorganic, n.o.s.

Hazard Class 6.1 Packing Group III

Special Provisions IB8, IP3, T1, TP33

**Description** UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H2CrO4), dipotassium salt), 6.1, III

**Emergency Response Guide** 

Number

151

ICAO (air)

UN/ID no UN3288

**Proper shipping name** Toxic solid, inorganic, n.o.s.

Hazard Class 6.1
Packing Group III
Special Provisions A3, A5

**Description** UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H2CrO4), dipotassium salt), 6.1, III

IATA

UN/ID no UN3288

**Proper shipping name** Toxic solid, inorganic, n.o.s.

Hazard Class 6.1
Packing Group III
ERG Code 6L
Special precautions for user A3,A5

**IMDG** 

UN/ID no UN3288

Proper shipping name Toxic solid, inorganic, n.o.s.

Hazard Class 6.1
Packing Group III
EmS-No F-A, S-A
Special precautions for user 223, 274

Marine pollutant This material meets the definition of a marine pollutant

RID Not regulated

**ADR** 

UN/ID no UN3288

Proper shipping name Toxic Solid, Inorganic, N.O.S.

Hazard Class 6.1 Packing Group III

ADN Not regulated

#### **Additional information**

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

### 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Complies.
DSL/NDSL Complies.
EINECS/ELINCS Complies.
ENCS Complies.
IECSC Complies.

KECLComplies.PICCSComplies.AICSComplies.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### 16. Other information

NFPA Health hazards 2 Flammability 0 Instability 0 Physical and chemical properties -

HMIS Health hazards 2 \* Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value SKN\* Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Prepared By Hach Product Compliance Department.

Issue Date 27-Dec-2018

Revision Date 27-Dec-2018

Revision Note None

NOM-018-STPS-2015

The information is believed to be accurate, but it is not exhaustive and must be used only as guidance. It is based on the current state of knowledge of the chemical substance or mixture and is applicable to the appropriate safety precautions for the product.

#### Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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**End of Safety Data Sheet**