# SAFETY DATA SHEET

M5420 - ANSI - EN





# SODIUM METASILICATE ANHYDROUS

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

# SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification: Occidental Chemical Corporation

5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151

24 Hour Emergency Telephone

Number:

1-800-733-3665 or 1-972-404-3228 (USA); CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1

703-527-3887; CHEMTREC Contract No: CCN16186

To Request an SDS: MSDS@oxy.com or 1-972-404-3245

**Customer Service:** 1-800-752-5151 or 1-972-404-3700

Product Identifier: SODIUM METASILICATE ANHYDROUS

**Trade Name:** Special Grade S-25; Sodium Metasilicate Anhydrous Fines; S-25

Synonyms: Anhydrous Metasilicate, Sodium Metasilicate Anhydrous, Anhydrous Sodium

Metasilicate

Product Use: Cleaner, detergents / soaps, drilling fluids

Uses Advised Against: None identified

# **SECTION 2. HAZARDS IDENTIFICATION**

SDS No.: M5420

SDS Revision Date: 30-Jun-2016

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### **EMERGENCY OVERVIEW:**

Color: White to faintly colored

Physical State: Solid

**Appearance:** Granular, Powder

Odor: Odorless

Signal Word: <u>DANGER</u>

**MAJOR HEALTH HAZARDS:** CORROSIVE. CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT IRRITATION.

**PHYSICAL HAZARDS:** May be corrosive to metals when wet. Spilled solutions of sodium metasilicate may pose a slipping hazard.

**PRECAUTIONARY STATEMENTS:** Keep only in original container. Wear protective gloves, protective clothing, eye, and face protection. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Store in corrosive resistant and NON-ALUMINUM container with a resistant inner liner (NOTE: flammable hydrogen gas may be generated if aluminum container and/or aluminum fittings are used with dissolved material).

**ADDITIONAL HAZARD INFORMATION:** Toxicity may be delayed, and may not be readily visible. Significant exposures must be referred for medical attention immediately. There is no specific antidote. This material is not a crystalline silica, and it does not cause pulmonary silicosis.

#### **GHS CLASSIFICATION:**

GHS: PHYSICAL HAZARDS:	Corrosive to Metals		
GHS: CONTACT HAZARD - SKIN:	Category 1B - Causes severe skin burns and eye damage		
GHS: CONTACT HAZARD - EYE:	Category 1 - Causes serious eye damage		
GHS: ACUTE TOXICITY - INHALATION:	No data available		
	Not classified		
GHS: ACUTE TOXICITY - ORAL:	Category 4 - Harmful if swallowed		
GHS: ACUTE TOXICITY - DERMAL:	No data available		
	Not classified		
GHS: TARGET ORGAN TOXICITY (SINGLE	Category 3 - May cause respiratory tract irritation		
EXPOSURE):			
GHS: CARCINOGENICITY:	Not classified as a carcinogen per GHS criteria		
	This product is not classified as a carcinogen by NTP,		
	IARC or OSHA		

UNKNOWN ACUTE TOXICITY: Not applicable. This product was tested as a whole. This information only pertains to

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

untested mixtures.

GHS SYMBOL: Corrosive, Exclamation mark





GHS SIGNAL WORD: DANGER

#### **GHS HAZARD STATEMENTS:**

#### GHS - Physical Hazard Statement(s)

May be corrosive to metals

# **GHS - Health Hazard Statement(s)**

- · Causes severe skin burns and eye damage
- · Causes serious eye damage
- · Harmful if swallowed
- May cause respiratory irritation

#### GHS - Precautionary Statement(s) - Prevention

- Do not breathe dusts or mists
- Wear protective gloves, protective clothing, eye, and face protection
- · Wash thoroughly after handling
- · Do not eat, drink or smoke when using this product
- Keep only in original container
- · Use only outdoors or in a well-ventilated area

#### GHS - Precautionary Statement(s) - Response

- 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 or doctor/physician
- IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- Call a POISON CENTER or doctor/physician if you feel unwell
- Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)
- · Absorb spillage to prevent material damage

# GHS - Precautionary Statement(s) - Storage

- · Store locked up
- Store in a well-ventilated place. Keep container tightly closed
- Store in corrosive resistant container with a resistant inner liner (NOTE: flammable hydrogen gas may be generated if aluminum container and/or aluminum fittings are used with dissolved material)

## GHS - Precautionary Statement(s) - Disposal

• Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

**Hazards Not Otherwise Classified (HNOC)** 

None identified

See Section 11: TOXICOLOGICAL INFORMATION

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Anhydrous Metasilicate, Sodium Metasilicate Anhydrous, Anhydrous Sodium Metasilicate

Component	Percent [%]	CAS Number
Sodium Metasilicate	95 - 99	6834-92-0
Water	0 - 2	7732-18-5
Sodium Carbonate	0 - 3	497-19-8

# **SECTION 4. FIRST AID MEASURES**

**INHALATION:** If inhalation of this material occurs and adverse effects result, move person to fresh air and keep comfortable for breathing. Call a Poison Center or seek medical attention if you feel unwell.

**SKIN CONTACT:** Immediately brush off excess chemical and flush contaminated areas with plenty of water. Immediately remove all contaminated clothing, jewelry, and shoes. Rinse skin with large amounts of water/shower. Immediately contact a poison center, physician, or get medical attention. SPECIFIC TREATMENT: Wash with lots of water. Discard contaminated leather goods.

**EYE CONTACT:** If in eyes, immediately rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

**INGESTION:** If swallowed: Rinse mouth. Do NOT induce vomiting. Contact a Poison Center, or a doctor/physician, or get medical attention if you feel unwell.

#### Most Important Symptoms/Effects (Acute and Delayed):

Acute Symptoms/Effects: Listed below.

**Inhalation (Breathing):** Respiratory System Effects: Inhalation exposure may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. Severe and permanent scarring may occur. The pulmonary edema may develop several hours after a severe acute exposure.

**Skin:** Skin Corrosion. Skin exposure may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns.

**Eye:** Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye. The full extent of the injury may not be immediately apparent.

**Ingestion (Swallowing):** Gastrointestinal System Effects: Exposure by ingestion may cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

# **Delayed Symptoms/Effects:**

- Repeated and prolonged skin contact may cause a dermatitis

Interaction with Other Chemicals Which Enhance Toxicity: None known.

**Medical Conditions Aggravated by Exposure:** May aggravate preexisting conditions such as:. Eye disorders that decrease tear production or have reduced integrity. Skin disorders that compromise the integrity of the skin such as: psoriasis, rashes, eczema, skin infections. Pulmonary disorders that compromise the integrity of the lungs such as asthma.

**Protection of First-Aiders:** Avoid contact with skin and eyes. Do not breathe dust. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. At minimum, treating personnel should utilize PPE sufficient for prevention of bloodborne pathogen transmission.

**Notes to Physician:** Treat as a corrosive substance. Treat symptoms with supportive care. There is no specific antidote. The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. It may take 48-72 hours to assess the extent of an ocular burn. Probable mucosal damage may contraindicate the use of gastric lavage.

# **SECTION 5. FIRE-FIGHTING MEASURES**

Fire Hazard: Negligible fire hazard.

Extinguishing Media: Use media appropriate for surrounding fire

**Fire Fighting:** Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Sensitivity to Mechanical

Not sensitive.

Impact:

Sensitivity to Static Discharge: Not sensitive.

Lower Flammability Level (air): Not flammable

Upper Flammability Level (air): Not flammable

Flash point: Not flammable

Auto-ignition Temperature: No information available

**GHS: PHYSICAL HAZARDS:** 

- Corrosive to Metals

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions:**

Do not get in eyes, on skin or on clothing. Avoid breathing dust. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Wet material may pose a slipping hazard. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

#### Methods and Materials for Containment and Cleaning Up:

Shovel dry material into suitable container. Vacuum any remaining material into a suitable container. Flush spill area with water, if appropriate. Liquid material may be removed with a vacuum truck. Wet material is slippery under foot.

#### **Environmental Precautions:**

This material is alkaline and may raise the pH of surface waters with low buffering capacity. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

SECTION 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling:**

Do not get in eyes, on skin, or on clothing. Avoid creation of dust. Avoid breathing dust. Do not eat, drink or smoke in areas where this material is used. Wash thoroughly after handling. Wet material may pose a slipping hazard. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS.

# Safe Storage Conditions:

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store dissolved material in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet).

## Incompatibilities/ Materials to Avoid:

Can generate heat when mixed with acids, When wet avoid prolonged contact with alkali sensitive metals such as: aluminum, brass, bronze, copper, lead, tin, zinc because flammable hydrogen gas can be generated

## **GHS: PHYSICAL HAZARDS:**

- Corrosive to Metals

# **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Regulatory Exposure Limit(s):** None. This product does not contain any components that have non-regulatory occupational exposure limits (OEL's).

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): Listed below for the product components that have non-regulatory

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

#### occupational exposure limits (OEL's).

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).
- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Component	OXY REL	OXY REL	OXY REL
	8 hr TWA	STEL	Ceiling
Sodium Metasilicate 6834-92-0 ( 95 - 99 )			3 mg/m <sup>3</sup>

**ENGINEERING CONTROLS:** Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

#### PERSONAL PROTECTIVE EQUIPMENT:

**Eye Protection:** Wear safety glasses with side-shields. If eye contact is likely, wear chemical resistant safety goggles. Wear chemical safety goggles and/or a face-shield to protect against skin and eye contact when appropriate. When wet mixing, wear safety goggles with a face-shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin and Body Protection:** Wear protective clothing to minimize skin contact. When potential for contact with wet material exists, wear Tychem® or similar chemical protective suit. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®.

**Hand Protection:** Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

## **Protective Material Types:**

Butyl rubber, Natural rubber, Neoprene, Nitrile, Tychem®, Tyvek®

**Respiratory Protection:** A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Solid

**Appearance:** Granular, Powder **Color:** White to faintly colored

Odor: Odorless

Odor Threshold [ppm]: No data available.

Molecular Formula: Na2SiO3

**Decomposition Temperature:** No information available

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

Freezing Point/Range: Not applicable to solids.

Melting Point/Range: 1,990 °F
Vapor Pressure: Not applicable
Vapor Density (air=1): Not applicable
Relative Density/Specific Gravity Not applicable

(water=1):

Bulk Density: 54 - 70 lbs/ft3 (loose)

Water Solubility: 16% @ 20 °C

pH: 12.7 (1% agueous solution)

Volatility: Not applicable
Evaporation Rate (ether=1): Not applicable
Partition Coefficient No data available

(n-octanol/water):

Flammability (solid, gas):

Lower Flammability Level (air):

Upper Flammability Level (air):

Not flammable

Not flammable

Not flammable

**Auto-ignition Temperature:** No information available

Viscosity: Not applicable

# **SECTION 10. STABILITY AND REACTIVITY**

\_\_\_\_\_

Reactivity: Not reactive under normal temperatures and pressures.

**Chemical Stability:** Stable at normal temperatures and pressures.

**Possibility of Hazardous Reactions:** Contact with acids will cause evolution of heat. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces. When wet, may react with alkali sensitive metals to form flammable hydrogen gas.

Conditions to Avoid: (e.g., static discharge, shock, or vibration) -. None known.

**Incompatibilities/ Materials to Avoid:** Can generate heat when mixed with acids, When wet avoid prolonged contact with alkali sensitive metals such as: aluminum, brass, bronze, copper, lead, tin, zinc because flammable hydrogen gas can be generated

Hazardous Decomposition Products: None known

Hazardous Polymerization: Will not occur.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

IRRITATION DATA: As listed below

Standard Draize (Skin):

SODIUM METASILICATE: 250 mg/24 hour(s) skin-human severe; 250 mg/24 hour(s) skin-rabbit severe; 250 mg/24

hour(s) skin-guinea pig moderate

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

#### **TOXICITY DATA:**

#### PRODUCT TOXICITY DATA: S - 25, SODIUM METASILICATE ANHYDROUS

**Note:** The test material for the toxicological studies was sodium metasilicate.

LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
1280 mg/kg (Rat)	No data available	No data available

#### **COMPONENT TOXICITY DATA:**

Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

#### **POTENTIAL HEALTH EFFECTS:**

**Eye contact:** Causes serious eye damage. May cause severe irritation, pain and corneal burns

(possibly leading to blindness). The full extent of the injury may not be immediately

apparent.

**Skin contact:** Causes severe skin burns. May cause redness, irritation, burning sensation,

swelling, blister formation, first, second, or third degree burns.

**Inhalation:** May cause irritation of the respiratory tract with coughing, choking, pain and

possibly burns of the mucous membranes. Upon contact with moist mucous membranes, sodium metasilicate is highly alkaline and may cause corrosive

damage.

**Ingestion:** Harmful if swallowed. May cause immediate pain and severe burns of the upper

and lower gastrointestinal tract with vomiting, nausea, and diarrhea.

**Chronic Effects:** Repeated or prolonged skin contact may result in dermatitis.

#### SIGNS AND SYMPTOMS OF EXPOSURE:

Solutions of sodium metasilicate are alkaline. Exposure to alkaline solutions may result in irritation to any contacted tissue, including possible burns, depending on the concentration, duration, and nature of the exposure. This material is not a crystalline silica, and it does not cause pulmonary silicosis.

**Inhalation (Breathing):** Respiratory System Effects: Inhalation exposure may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. Severe and permanent scarring may occur. The pulmonary edema may develop several hours after a severe acute exposure.

**Skin:** Skin Corrosion. Skin exposure may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns.

**Eye:** Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye. The full extent of the injury may not be immediately apparent.

**Ingestion (Swallowing):** Gastrointestinal System Effects: Exposure by ingestion may cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

Interaction with Other Chemicals Which Enhance Toxicity: None known.

#### **GHS HEALTH HAZARDS:**

GHS: CONTACT HAZARD - EYE: Category 1 - Causes serious eye damage

Skin Absorbent / Dermal Route? No.

#### **GHS: CARCINOGENICITY:**

Not classified as a carcinogen per GHS criteria. This product is not classified as a carcinogen by NTP, IARC or OSHA.

#### **SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):**

Category 3 - Respiratory tract irritation

#### **MUTAGENIC DATA:**

Not classified as a mutagen per GHS criteria. In assays using Bacillus subtilis strains without metabolic activation, sodium metasilicate (0.005-0.5 M) was not genotoxic.

# **SECTION 12. ECOLOGICAL INFORMATION**

#### **ECOTOXICITY DATA:**

#### **Aquatic Toxicity:**

This material has exhibited moderate toxicity to aquatic organisms.

#### FATE AND TRANSPORT:

**BIODEGRADATION:** This material is inorganic and not subject to biodegradation.

**PERSISTENCE:** This material is believed to persist in the environment.

BIOCONCENTRATION: This material is not expected to bioconcentrate in organisms.

ADDITIONAL ECOLOGICAL INFORMATION: This material has exhibited slight toxicity to terrestrial organisms.

# **SECTION 13. DISPOSAL CONSIDERATIONS**

#### Waste from material:

Reuse or recycle if possible. May be subject to disposal regulations. Dispose in accordance with all applicable regulations.

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

**Container Management:** 

Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

# SECTION 14. TRANSPORT INFORMATION

#### LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

UN NUMBER: UN3262

PROPER SHIPPING NAME: Corrosive solid, basic, inorganic, n.o.s. (SODIUM METASILICATE)

HAZARD CLASS/ DIVISION: 8
PACKING GROUP: ||
LABELING REQUIREMENTS: 8

#### **CANADIAN TRANSPORTATION OF DANGEROUS GOODS:**

UN NUMBER: UN3262

SHIPPING NAME: Corrosive solid, basic, inorganic, n.o.s. (SODIUM METASILICATE)

CLASS OR DIVISION: 8
PACKING/RISK GROUP: ||
LABELING REQUIREMENTS: 8

## MARITIME TRANSPORT (IMO / IMDG) Regulated

UN NUMBER: UN3262

PROPER SHIPPING NAME: Corrosive solid, basic, inorganic, n.o.s. (SODIUM METASILICATE)

HAZARD CLASS / DIVISION: 8
Packing Group: ||
LABELING REQUIREMENTS: 8

# **SECTION 15. REGULATORY INFORMATION**

#### **U.S. REGULATIONS**

#### **OSHA REGULATORY STATUS:**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

Not regulated.

#### SARA EHS Chemical (40 CFR 355.30)

Not regulated

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

## EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Acute Health Hazard

#### **EPCRA SECTION 313 (40 CFR 372.65):**

Not regulated

#### OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

Not regulated

**FDA:** Sodium Silicates have Generally Recognized as Safe (GRAS) status under specific FDA regulations. Refer to 21 Code of Federal Regulations (CFR) 173, 175, 176, 177, 182, and 184, which is accessible on the FDA's website. This product is not produced under all current Good Manufacturing Practices (cGMP) requirements as defined by the Food and Drug Administration (FDA).

#### **NATIONAL INVENTORY STATUS**

TSCA 12(b): This product is not subject to export notification.

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

#### STATE REGULATIONS

#### **California Proposition 65:**

This product and its ingredients are not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact OxyChem Customer Relations.

# **CANADIAN REGULATIONS**

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

Component	Canadian Chemical Inventory:	 WHMIS - Classifications of Substances:
Sodium Carbonate	Listed	D2B,E
Sodium Metasilicate	Listed	E

# **SECTION 16. OTHER INFORMATION**

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 30-Jun-2016

Health Rating: 3 Flammability: 0 Reactivity Rating: 0

**Reason for Revision:** 

SDS No.: M5420 SDS Revision Date: 30-Jun-2016

Exposure Level has changed. SEE SECTION 8

#### **IMPORTANT:**

The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESSED OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and OxyChem assumes no liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State, local or foreign laws

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

**End of Safety Data Sheet**