

# Safety Data Sheet

Product Trade Name: **DIVERSCALE 299**

ID: H247

## \*\*\* Section 1 - Chemical Product and Company Identification \*\*\*

Product Trade Name: **DIVERSCALE 299**

### Manufacturer Information

#### Heatbath Corporation

P.O. Box 51048  
Indian Orchard, MA 01151-5048

Contact Phone: (413) 452-2000  
8:00 AM - 5:00 PM

CHEMTREC Emergency Phone: (800) 424-9300  
24 Hours

CHEMTREC International: (703) 527-3887

**Recommended Use:** Scale and oxide conditioner for carbon and alloy steel

**Restrictions on Use:** See Incompatibility, Section 10

## \*\*\* Section 2 - Hazards Identification \*\*\*

**OSHA Hazard Communication Standard:** Considered a Hazardous Substance by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Classified as Dangerous Goods for transport purposes.

**Hazard Classification:** Acute Aquatic Hazard Category 1 | Acute Toxicity (Oral) Category 4 | Chronic Aquatic Hazard Category 1 | Metal Corrosion Category 1 | Oxidizing Liquid Category 3 | Serious Eye Damage Category 1 | Skin Corrosion/Irritation Category 1A

### Labeling:



**Signal Word:** DANGER!

**Hazard Statements:** May intensify fire; oxidizer. May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**PREVENTION:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take any precaution to avoid mixing with combustibles/organic material Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Keep only in original packaging. Do not eat, drink or smoke when using this product. Avoid release to the environment.

**FIRST AID/IN CASE OF FIRE:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. 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 Specific treatment In case of fire: Use water jets for extinction. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Collect spillage. IF SWALLOWED: Call a POISON CENTER/ doctor. If you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**STORAGE:** Store locked up.

**DISPOSAL:** Dispose of contents/container in accordance with all local, regional, national and/or international regulations.

**Hazards Not Otherwise Classified:** N.A.

**Percent of Ingredients of Unknown Toxicity:** N.A.

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## \*\*\* Section 3 - Composition / Information on Ingredients \*\*\*

HAZARDOUS INGREDIENT	CAS #	PERCENT
POTASSIUM PERMANGANATE	7722-64-7	20 - 30% (T.S.)
SODIUM HYDROXIDE	1310-73-2	50 - 70% (T.S.)
SODIUM CARBONATE	497-19-8	1 - 10% (T.S.)

T.S. = Trade Secret

\*per CFR 29, Part 1910.1200; ingredients listed only if deemed hazardous and comprise 1% or greater of the composition (0.1% or greater for carcinogens).

**Component Related Regulatory Information:** This product may be regulated, have exposure limits or other information identified.

## \*\*\* Section 4 - First Aid Measures \*\*\*

If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting.

## \*\*\* Section 5 - Fire Fighting Measures \*\*\*

**Flash Point:** None.

**Upper Flammable Limit** N.A.

**Flammable Limits:** None.

**Lower Flammable Limit** N.A.

**Extinguishing Media, PPE and Guidance for FireFighter:** FOR SMALL FIRE: USE FLOODING QUANTITIES OF WATER. DO NOT use dry chemical, CO<sub>2</sub>, foam or halogenated-type extinguishers. FOR LARGE FIRE Flood fire area with water from a protected position Avoid storage with reducing agents. Alert Fire Department and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses.

**Fire and Explosion Hazards:** Will not burn but increases intensity of fire. Heating may cause expansion or decomposition leading to violent rupture of containers. Heat affected containers remain hazardous. Product contains potassium permanganate which is a strong Oxidizers. Contact with oxidizable substances can cause explosive and/or flammable reactions. Oxidizers increases flammability of combustive materials. Watch for rapid burning and be prepared to retreat to a safe distance. Corrosive/Poisonous gases/vapors can be produced in a fire involving this material.

**Decomposition Products:** Oxides of carbon, sodium oxide, potassium oxide

## \*\*\* Section 6 - Accidental Release Measures \*\*\*

**Containment and Clean up procedures must be conducted in accordance with all local, state, and federal regulations.**

**Containment and Clean-Up Procedures:** Clean up all spills immediately. No smoking, naked lights, ignition sources. Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

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## \*\*\* Section 7 - Handling and Storage \*\*\*

**Handling and Storage Procedures:** Avoid personal contact and inhalation of dust, mist or vapour. Provide adequate ventilation. Always wear protective equipment and wash off any spillage from clothing. Plastic bag NOTE: Bags should be stacked, blocked, interlocked, and limited in height so that they are stable and secure against sliding or collapse. DO NOT store near acids, or oxidizing agents Store in original containers. Keep containers securely sealed. Emptied containers of this product may contain hazardous vapors and residue. Clean thoroughly before reusing or discarding. Do not use a welding torch to cut container. Do not use for water or food storage. This product will generate heat when mixed with water. Store between 20°F and 90°F

## \*\*\* Section 8 - Exposure Controls / Personal Protection \*\*\*

### Exposure Guidelines:

**A. General Product Information:** Follow all applicable exposure limits. Keep formation of airborne mists to a minimum.

### B. Component Exposure Limits:

CAS #	HAZARDOUS INGREDIENT	OSHA PEL(mg/m3)	ACGIH TLV(mg/m3)
1310-73-2	Sodium Hydroxide	2	2
497-19-8	Sodium Carbonate	N.E.	N.E.
7722-64-7	Potassium Permanganate	5.0 (as Mn)	5.0 (as Mn)

\*OSHA-PEL and ACGIH-TLV are 8-Hour TWA unless otherwise noted.

\*per CFR 29, Part 1910.1200; ingredients listed only if deemed hazardous and comprise 1% or greater of the composition (0.1% or greater for carcinogens).

**Engineering Controls:** Set up ventilation to effectively remove and prevent buildup of any dust, vapor or mist generated from the handling of this product.

### PERSONAL PROTECTIVE EQUIPMENT

**Eyes/Face Protective Equipment:** Wear appropriate eye protection to prevent eye contact.

**Skin Protection:** Wear appropriate personal protective clothing to prevent skin contact. The worker should immediately wash the skin when it becomes contaminated. Remove wet or significantly contaminated work clothing and replace.

**Respiratory Protection:** If ventilation is not sufficient to effectively prevent buildup of dust, mists or vapors, provide appropriate NIOSH/MSHA respiratory protection.

**Personal Protective Equipment:** Provide eyewash fountains in areas where there is any possibility that workers could be exposed to the substance; this is irrespective of the recommendation involving the wearing of eye protection.

Provide facilities for quickly drenching the body within the immediate work area for emergency use where there is a possibility of exposure. Depending on the specific circumstances, a deluge shower, a sink or hose could be considered adequate.

## \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

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**Physical State:** Liquid

**Color:** Odorless, purple granular solid.

**pH:** Not Available

**Specific Gravity:** N.A.

**Evaporation Rate:** N.E.

**Solubility Water:** Completely miscible.

**Vapor Density:** N.E.

**Vapor Pressure:** Nil.

**Octanol-Water Coefficient:** N.E.

**Boiling Point:** N.E.

**Melting Point:** Not Available

**Flash Point:** Not Available

**Auto-Ignition Temperature:** N.E.

**Decomposition Temperature:** N.E.

**Flammability Limits - Low:** N.A.

**Hi:** N.A.

## \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

**Chemical Stability:** Unstable in the presence of incompatible materials. Product is considered stable.

**Conditions to Avoid:** Excessive heat and contact with combustibles or organic materials

**Incompatibility:** Strong acids, chlorinated hydrocarbons, leather, wool, metals such as aluminum, zinc, tin, brass etc. May generate heat when mixed with water.

**Decomposition Products:** See section 5

**Hazardous Polymerization:** Will not occur.

## \*\*\* Section 11 - Toxicological Information \*\*\*

**Route of Exposure:** Eye/skin contact, inhalation, ingestion.

**Acute Toxicity:**

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## A: General Product Information

**Eye Contact:** If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness.

**Skin Contact:** The material can produce severe chemical burns following direct contact with the skin. Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions. Sodium hydroxide causes burns which may take time to manifest and cause pain, thus care should be taken to avoid contamination of gloves and boots.

**Skin Absorption:** No information available for this product.

**Ingestion:** Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the esophagus and stomach may experience burning pain; vomiting and diarrhea may follow. Ingestion of sodium hydroxide may result in severe pain, burns to the mouth, throat, stomach, nausea and vomiting, swelling of the throat and subsequent perforation of the gastro-intestinal tract and suffocation but a 1% solution (pH 13.4) of sodium hydroxide in water failed to cause any damage of the stomach or gullet in rabbits.

**Inhalation:** The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane.

**Chronic Hazards:** Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

**Medical Conditions Aggravated by Exposure:** Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.

## Carcinogenicity:

### a: Component Carcinogenicity:

None.

**NTP:** No.

**IARC:** No.

**OSHA:** No.

**ACGIH:** No.

**Irritation/Corrosivity/Sensitization:** Product is corrosive to tissue. Not known to cause sensitization.

**Reproductive/Genetic/Developmental Effects:** No information available.

**Neurological Effects:** Not known to cause neurological effects.

## \* \* \* Section 12 - Ecological Information \* \* \*

## Ecotoxicity:

### A: General Product Information

No information available for this product.

### B. Component Analysis - Ecotoxicity - Aquatic Toxicity:

No information available for this product.

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**Persistence and Mobility:** No information available for this product

**Environmental:** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

**Mobility in Soil:** No information available.

## \*\*\* Section 13 - Disposal Considerations \*\*\*

Wastes must be tested using methods described in 40 CFR Part 261. It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous wastes. State and local regulations may differ from Federal disposal regulations. Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

## \*\*\* Section 14 - Transportation Information \*\*\*

**US DOT Information:** UN3085, OXIDIZING SOLID, CORROSIVE, N.O.S., (CONTAINS POTASSIUM PERMANGANATE, SODIUM HYDROXIDE), 5.1 (8), PG II

**Marine Pollutant:** Yes

**IMDG Classification:** UN3085, OXIDIZING SOLID, CORROSIVE, N.O.S. (POTASSIUM PERMANGANATE, SODIUM HYDROXIDE), 5.1 (8), PG II

**IATA Classification:** UN3085, OXIDIZING SOLID, CORROSIVE, N.O.S. (POTASSIUM PERMANGANATE, SODIUM HYDROXIDE), 5.1 (8), PG II

The data provided in this section is for information only and may not be specific for the package size or mode of transportation. See package label for further details.

## \*\*\* Section 15 - Regulatory Information \*\*\*

### US Federal Regulations

#### A: General Product Information

No additional information available.

#### B: Component Analysis

This material may contain chemicals, requiring identification under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

HAZARDOUS COMPONENT	CERCLA RQ LBS.	SECT 302 TPQ LBS.	SECT 313* TOXIC	Maximum %
Sodium Hydroxide	1000	N.A.	No	70
Potassium Permanganate	100	N.A.	(Mn) Cmpd	30

**Sara 311/312 Hazards:**

<b>Immediate (Acute)</b>	TRUE
<b>Chronic*</b>	FALSE
<b>Fire</b>	FALSE
<b>Sudden Release-of-Pressure</b>	FALSE
<b>Reactive</b>	TRUE

### State Regulations

#### A: General Product Information

No additional information available.

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## Other Regulations

### A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

### B: Component Analysis - Inventory

**\*\*\* Section 16 - Other Information \*\*\***

### Revision Date:

Rev. 1, June 1, 2015

### Key/Legend:

ACGIH = American Conference of Governmental Industrial Hygienists	NFPA = National Fire Protection Association
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act	NIOSH = National Institute for Occupational Safety and Health
EPA = Environmental Protection Agency	NTP = National Toxicology Program
HMS = Hazardous Material Identification System	OSHA = Occupational Safety and Health Administration
IARC = International Agency for Research on Cancer	SARA = Superfund Amendments and Reauthorization Act
MSHA = Mine Safety and Health Administration	TSCA = Toxic Substance Control Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Heatbath Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

This is the end of MSDS for DIVERSCALE 299.