Safety Data Sheet

Issuing Date 16-Jan-2020 **Revision Date** 16-Jan-2020 **Revision Number** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name HYDREX™ EMC-44 Oven & Wave Solder Cleaner

Other means of identification
Product Code EMC44

Recommended use of the chemical and restrictions on use
Recommended Use Technical cleaning agent.

Details of the supplier of the safety data sheet
Manufacturer Address Vantage Specialties, Inc.
3938 Porett Drive
Gurnee, IL 60031 USA
847-244-3410

Emergency Telephone Number
Emergency Telephone Number CHEMTREC International: +1-703-527-3887
CHEMTREC US: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Label Elements

EMERGENCY OVERVIEW

WARNING

Hazard statements
Causes skin irritation
Causes serious eye irritation

Color Light yellow **Physical State** Liquid **Odor** Mild

Precautionary Statements - Prevention
Wear protective gloves/eye protection/face protection
Do not breathe vapors/spray

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
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Potassium hydroxide	1310-58-3	0.1 - 1
Sodium silicate	1344-09-8	0.1 - 1

4. FIRST AID MEASURES

FIRST AID MEASURES

Eye contact 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, consult a physician.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation occurs.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Ingestion IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms Irritation or pain in contact with skin or eyes.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media None known.

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment. Avoid contact with the skin and the eyes.

Environmental precautions

Environmental precautions Prevent release to surface water.

Methods and material for containment and cleaning up

Methods for Containment Dike to collect large liquid spills.

Methods for Cleaning Up Absorb with inert material and transfer to containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Wear personal protective equipment. Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	n/a	n/a	Ceiling: 2 mg/m³

Appropriate engineering controls

Engineering Measures Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields, Goggles, Face-shield.

Skin and Body Protection Wear chemical resistant gloves. Long sleeved clothing.

Respiratory Protection Wear suitable personal respiratory protection in case of exposure to mist, spray, or aerosol.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid
Appearance Clear **Odor** Mild
Color Light yellow

Property	Values	Remarks • Method
pH	11	-
Melting point / freezing point		Not determined
Boiling point / boiling range	>100 °C	
Flash Point	>100 °C	based on components
Evaporation Rate	< 1	(BUAC = 1)
Flammability (solid, gas)		Not determined
Flammability Limit in Air		Not determined
Upper flammability limit		
Lower Flammability Limit		
Vapor pressure		Not determined
Vapor Density	> 1	(air = 1)
Specific Gravity	1.04	@ 25°C
Water Solubility	Soluble	

Solubility in other solvents		Not determined
Partition coefficient		Not determined
Autoignition Temperature		Not determined
Decomposition temperature		Not determined
Kinematic viscosity		Not determined
Dynamic viscosity		Not determined
Explosive Properties	None	
Oxidizing Properties	None	

Other Information

10. STABILITY AND REACTIVITY

Reactivity Not reactive

Remarks

Chemical stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Hazardous Reactions None under normal processing.

Conditions to Avoid Extremes of temperature and direct sunlight.

Incompatible materials Strong acids. Strong oxidizing agents.

Hazardous Decomposition Products

None identified.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Irritating to mucous membranes.

Eye contact Severely irritating to eyes.

Skin contact Irritating to skin.

Ingestion Ingestion may cause stomach discomfort.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium hydroxide 1310-58-3	= 214 mg/kg (Rat)	-	-
Sodium silicate 1344-09-8	= 1960 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Contains no listed human carcinogens at greater than 0.1%.

Reproductive Toxicity No known hazard.

Developmental Toxicity No known hazard.

Teratogenic No known hazard.

Numerical measures of toxicity-Product Information

ATEmix (oral) > 2,000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity
This product has not been evaluated for ecotoxicity.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Potassium hydroxide 1310-58-3		LC50= 80 mg/L Gambusia affinis 96 h		
Sodium silicate 1344-09-8		LC50 301 - 478 mg/L Lepomis macrochirus 96 h LC50= 3185 mg/L Brachydanio rerio 96 h		

Persistence and degradability
Not expected to be persistent in the aquatic environment.

Bioaccumulation/Accumulation
No data available

Mobility
Will likely be mobile in the environment due to its water solubility.

Chemical Name	Partition coefficient
Potassium hydroxide 1310-58-3	= 0.65 = 0.83

Other Adverse Effects May be harmful if a significant amount is released to surface water.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Dispose of in accordance with applicable regulations.

Contaminated Packaging Dispose of in accordance with applicable regulations.

Chemical Name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	Toxic; Corrosive

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG / IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

Legend

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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide 1310-58-3	1000 lb			X

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium hydroxide 1310-58-3	X	X	X

16. OTHER INFORMATION

NFPA	**Health Hazard** 2	**Flammability** 1	**Instability** 0	**Physical and Chemical Hazards** n/a
HMIS	**Health Hazard** 2	**Flammability** 1	**Physical hazards** 0	**Personal Precautions** B

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Revision Note
Reason for Revision Initial Issue

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.

End of Safety Data Sheet