Safety Data Sheet

Issue Date 2024-11-15 **Revision Date** 2024-11-15 **Version** 1

1. Identification of the substance/preparation and of the company/undertaking

Product Name Rave
UN/ID No. NA1760
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Mechanical Warewashing Detergent
Uses advised against No informaiton available

Supplier Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number

1-800-424-9300

2. Hazards identification

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Category 1 Sub-category A
Serious Eye Damage/Irritation Category 1
Corrosive to Metals Category 1

Label Elements

Signal word: **Danger**

Hazard Statements
Causes severe skin burns and eye damage.
May be corrosive to metals.

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep only in original container.

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician. Specific treatment (see Section 4 on the SDS).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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 victim to fresh air and keep comfortable for breathing.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
Absorb spillage to prevent material damage.

Precautionary Statements - Storage
Store locked up.
Store in a corrosive resistant container.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)
Other Information
May be harmful if swallowed.

3. Composition/information on ingredients

Chemical Name	CAS Number	% by Weight
Potassium hydroxide, KOH	1310-58-3	5 - 10
Sodium Hydroxide	1310-73-2	3 - 10
TSRN8301		3- 10

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

General advice
Get medical attention.

Eye contact
Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

Skin Contact
Flush with water for 15 minutes. If irritation persists after rinsing, get medical attention. Remove contaminated clothing and wash before reuse.

Inhalation
Remove victim to fresh air. If breathing difficulty occurs or persists, get medical attention.

Ingestion
Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

Self-protection of the first aider
Avoid contact with product. Wear appropriate personal protective equipment.

Most important symptoms and effects, both acute and delayed

Symptoms
Causes severe irritation and/or burns.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. Fire-fighting measures

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

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

Specific hazards arising from the chemical
If the stock solution container breaks, the solution should be handled with care as it is corrosive. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Contact with metals may evolve flammable hydrogen gas.

Hazardous combustion products
No information available.

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. Use water spray to cool fire exposed containers. Move containers from fire area if you can do it without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment.

Environmental precautions
See Section 12 for additional ecological information.

Methods for containment
Completely contain spilled material with dikes or sand bags, etc.

Methods for cleaning up
Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

7. Handling and storage

Precautions for safe handling

Advice on safe handling
Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/ equipment. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.

Incompatible materials
Flammable liquids. Acids, halogenated compounds, and prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

8. Exposure controls/personal protection

Control parameters

Exposure Guideline

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide, KOH 1310-58-3	Ceiling: 2 mg/m3	(vacated) Ceiling: 2 mg/m3	Ceiling: 2 mg/m3
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m 3	TWA: 2 mg/m 3 (vacated) Ceiling: 2 mg/m 3	IDLH: 10 mg/m 3 Ceiling: 2 mg/m 3

Appropriate engineering controls

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear protective splash proof safety goggles. Additional full face protection is recommended if splashing is a possibility.

Skin and body protection
Not required for normal use. If contact is likely, wear protective gloves. If contact is likely, wear protective clothing appropriate to use conditions.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
Wash contaminated clothing before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Color	Clear, blue
Odor	None
Odor threshold	No information available
pH	>13
Melting point/freezing point	No information available
Boiling point / boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability upper limit in air	No information available
Flammability lower limit in air	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.150 - 1.170
Water solubility	Soluble in water
Partition coefficient	No information available

Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available

10. Stability and reactivity

Reactivity
No information available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Mixing with acid or incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas.

Incompatible materials
Flammable liquids. Acids, halogenated compounds, and prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

Hazardous Decomposition Products
Oxides of phosphorus, sodium, and potassium.

11. Toxicological information

Information on likely routes of exposure

Product Information	No information available
Inhalation	May cause respiratory irritation.
Eye contact	Causes severe eye damage.
Skin Contact	Causes skin burns.
Ingestion	May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium hydroxide, KOH 1310-58-3	214 mg/kg rat	No data available	No data available
Sodium Hydroxide 1310-73-2	-	= 1350 mg/kg (Rabbit)	-
TSRN8301	2444 mg/kg	>4640 mg/m3	

Information on toxicological effects

Symptoms Causes severe irritation and/or burns.

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

Sensitization	No information available
Germ cell mutagenicity	No information available
Carcinogenicity	No information available

Chemical Name	ACGIH	IARC	NTP	OSHA

Reproductive toxicity	No information available
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Aspiration hazard	No information available

Numerical measures of toxicity - Product Information

ATEmix (oral) 4058 mg/kg
ATEmix (dermal) 96926 mg/kg

12. Ecological information

Ecotoxicity
9% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Potassium hydroxide, KOH 1310-58-3		LC50 (Gambusia affinis): 80 mg/L 96h static	--
Sodium Hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-

Persistence and degradability No information available
Bioaccumulation No information available

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

Other adverse effects No information available

13. Disposal considerations

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
Potassium hydroxide, KOH 1310-58-3	Toxic Corrosive
Sodium Hydroxide 1310-73-2	Toxic, Corrosive

14. Transport information

DOT Regulated
UN/ID No. NA1760
Proper shipping name Compounds, Cleaning Liquid
Hazardous ingredients (potassium hydroxide/sodium hydroxide)
Hazard class 8
Packing group II

15. Regulatory information

US Federal Regulations

SARA 311/312 Hazards

Skin Corrosion/Irritation
Serious Eye Damage/Irritation
Corrosive to Metals

CWA (Clean Water Act)

This product contains substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	Reportable Quantities	Toxic Pollutants	Priority Pollutants	Hazardous Substances
Potassium hydroxide, KOH 1310-58-3	1000 lb	--	--	X
Sodium Hydroxide 1310-73-2	1000 lb	-	-	X

CERCLA

This material, as supplied, contains 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	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium hydroxide, KOH 1310-58-3	1000 lb	--	RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium Hydroxide 1310-73-2	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	**Health hazards**	3	**Flammability**	0	**Instability**	1	**Physical and Chemical Properties**		
HMIS	**Health hazards**	3	**Flammability**	0	**Physical hazards**	1	**Personal protection**	X	

Prepared By lmt
Issue Date 2024-11-15
Revision Date 2024-11-15
Revision Note 2024-11-15 New formula

Disclaimer

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.

End of Safety Data Sheet