SAFETY DATA SHEET - AF-590 Parts Washer Compound

1. Identification

Product Name: AF-590 Parts Washer Compound

Manufacturer/Supplier: RockRidge Abrasives
9000 Byron Commerce Dr. SW
Byron Center, MI 49315

Telephone/Fax Number: Phone: 716-759-6600
Fax: 716-759-6602

E-Mail: sales@rockridgeabrasives.com

Date of Revision: 11/12/2024

2. Hazard(s) Identification

Classification of the substance or mixture

Physical Hazard: Corrosive to Metals (Category 1), May be corrosive to metals

Health Hazards: Acute toxicity, Oral (Category 5) May be harmful if swallowed.
Skin Corrosion / Irritation (Category 1), Causes severe skin burns and eye damage.
Eye Damage / Irritation (Category 1), Causes serious eye damage.

GHS Label elements and precautionary statements

Pictogram: Corrosion

Signal word: **DANGER**

Prevention: Keep only in original packaging. Absorb spillage to prevent material damage. Do not breathe mists or mists. Wash thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response: 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). Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. Specific treatment: See Section 4: First Aid Measures.
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/doctor.
Call a POISON CENTER/doctor/seek immediate medical attention if you feel unwell.

Storage: Store in corrosion resistant container or container with a resistant inner liner. Store locked up.

Disposal: Dispose of contents/container in accordance with applicable regulations.

Hazards not otherwise classified or not covered by GHS.

HMIS Rating: Health hazard: 2 Chronic Health Hazard: Flammability: 0
Physical Hazard: 0
NFPA Rating: Health hazard: 2 Fire Hazard: 0 Reactivity Hazard: 0

Supplemental Information

See Section 16 for alphanumeric H-Statements and P-Statements.

3. Composition / Information on Ingredients

Component	Cas	%Wt.
Potassium Hydroxide	1310-58-3	10-15
Sodium Gluconate	527-07-1	5-10
Anionic Surfactant	Mixture	1-5

This composition consists of a combination of ingredients. The ones potentially contributing to classified hazards are reported above. The above chemistries are provided for industrial hygiene and environmental purposes not specifications.

4. First-Aid Measures

Description of first aid measures

General advice: Move out of dangerous area. Consult a physician. Show this SDS to doctor and first responders.

In case of eye contact: 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.

In case of skin contact: Wash with plenty of water. Take off all contaminated clothing and shoes. Wash contaminated clothing before reuse. Decontaminate or discard shoes. Seek immediate medical attention if you feel unwell.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Contact a POISON CENTER/doctor/seek immediate medical attention.

If swallowed: Immediately call a POISON CENTER/doctor/Seek immediate medical attention. Specific treatment is shown. Rinse mouth. Do not induce vomiting due to inhalation risk.

Most important symptoms and effects, both acute and delayed: See Sections 2 and 11.
Indication of any immediate medical attention and special treatment needed: Treat symptomatically

5. Fire-Fighting Measures

Extinguishing media:

Suitable Extinguishing Media: Use dry chemical, foam or water fog to extinguish.

Unsuitable Extinguishing Media: Do not use direct water stream to avoid spreading fire and splattering chemicals.

Special hazards arising from the substance or mixture: Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiate at sufficient concentrations).

Advice for firefighters: Wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full dace-piece operated in positive pressure mode. (MSHA/NIOSH approved or equivalent).

Further information: If employees are expected to fight fires, training and equipment information can be found in OSHA Fire Brigades Standard (29 CFR 1910.156).

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Avoid breathing fume/gas/mist/spray. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation

Environmental precautions: Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Use noncombustible absorbents for small spills. Vacuum larger spills. Use suitable and properly labeled containers. Dispose of contents/container to an approved waste disposal plant. Never return spills to original containers for re-use.

Reference to other sections-resources: For additional information, refer to Section 8: Exposure Controls and Personal Protection, Section 7: Handling, Section 12: Ecological Information, Section 13: Disposal Considerations and OSHA Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120).

7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist for liquids. Remove product from tools and equipment before reuse. For precautions see Section 2. For personal protection, see Section 8.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use: See Section 1.

8. Exposure Controls / Personal Protection

Control parameters:
Guidelines may not apply to every situation. Industrial hygiene evaluations should be completed at each work place. Exposure limits are for air levels only. When skin contact also occurs, workers may be overexposed, even though air levels are less than the limits when provided.

Component Workplace Exposure Limits:
Potassium hydroxide (1310-58-3): ACGIH: The threshold limit value (TLV) is 2 mg/m3, which should not be exceeded at any time. OSHA: The legal airborne permissible exposure limit (PEL) is 50 ppm averaged over an 8-hour work shift. NIOSH: The recommended airborne exposure limit (REL) is 5 ppm averaged over a 10-hour work shift. ACGIH: The threshold limit value (TLV) is 20 ppm averaged over an 8-hour work shift.
Sodium Gluconate (527-07-1) and Anionic Surfactant (Mixture) have no work place exposure limits.

Exposure controls
Appropriate engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Facilities storing, packaging or utilizing product should be equipped with an eyewash and a safety shower facility. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment
Safety glasses and chemical resistant gloves are recommended. Guidelines may not apply to every situation. Obtain detailed information from OSHA Personal Protective Equipment Standard (29 CFR 1910.132) and equipment suppliers.
Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection: Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good practices. Wash and dry hands. (Glove Materials: Nitrile, neoprene or natural rubber.)
Respiratory protection: Use when overexposure potential. Improper use of respirators is dangerous. Respirators should only be used with a written program as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).

Control of environmental exposure
Do not let product enter drains. Discharge into the environment must be avoided

9. Physical and Chemical Properties

Form: Liquid
Color: Clear, Colorless, Non-Viscous
Odor: Mild
Odor Threshold: N/A
Boiling Point/Range: >212ºF (>100ºC)
Flash Point: Not Combustible
Auto Ignition Temp: N/A
Flammability Limit - LEL: N/A- **UEL:** N/A
Vapor Pressure: As Water
Vapor Density: As Water
Freezing Point/Melting Point: N/A
Solubility (Water): 100%
Specific Gravity: 1.23
Evaporation Rate: (Ethyl ether = 1): N/A
Viscosity: Not Determined
pH: 14.0 (12.5 @1%)
Volatility (wt. %): 0
Physical Data is typical values based on material tested, but may vary based on composition. Values should not be accepted as guaranteed for every lot or as specifications for this product.

10. Stability and Reactivity

Reactivity: Not reactive under normal conditions.
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: When in contact with imcompatible materials.
Conditions to avoid: This product was formulated to be used in low concentrations (approximately 1-3%) on ferrous metals (iron & steel). It will be corrosive to non-ferrous metals (aluminum, zinc, galvanized steel, aluminized steel, brass, tin, and their alloys).
Incompatible materials: Contains highly alkaline ingredients including Potassium Hydroxide. Store away from acids.
Hazardous decomposition products: Does not decompose under normal conditions.
Other decomposition products: May form flammable and explosive Hydrogen gas when non-ferrous metals are left in contact with this product or its solutions. May form toxic oxides of carbon under fire conditions.

11. Toxicological Information

Information on Toxicological Effects

Component toxicity:
Potassium hydroxide (1310-58-3): Acute toxicity LD50 Oral- Rat- 333 mg/kg Inhalation: No data available Dermal: No data available No data available Skin corrosion/irritation Skin – Rabbit Result: Severe skin irritation- 24 h- Eyes Rabbit Result: Corrosive to eyes.
Anionic Surfactant (Mixture): Acute toxicity LD50 Oral- Rat- male and female- 1,200 mg/kg LC50 Inhalation- Rat- 1 h- > 3,900 mg/m3 Skin corrosion/irritation Skin – Rabbit Result: Skin irritation- 24 h (OECD Test Guideline 404) Serious eye damage/eye irritation Eyes – Rabbit Result: Risk of serious damage to eyes. (OECD Test Guideline 405) Germ cell mutagenicity: Ames test S. Typhimurium Result: negative.
Sodium Gluconate (527-07-1): No data available.

Mixture toxicity:
Inhalation – Dermal- Skin corrosion/irritation- Eye damage/eye irritation – Respiratory/skin sensitization- Germ cell mutagenicity – Reproductive toxicity- Specific target organ toxicity- single exposure- Specific target organ toxicity-repeated exposure- Aspiration hazard: All no data available - Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).

12. Ecological Information

Ecotoxicity

Component ecotoxicity:
Potassium hydroxide (1310-58-3): Toxicity to fish LC50- Gambusia affinis (Mosquito fish)- 80 mg/l- 96 h.
Anionic Surfactant (Mixture): Toxicity to fish flow-through test LC50- Pimephales promelas (fathead minnow)- 29 mg/l – 96 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates flow-through test EC50- Daphnia dubia (water flea)- 5.55 mg/l- 48 h Toxicity to algae Growth inhibition LOEC- Pseudokirchneriella subcapitata- 2.68 mg/l- 6 d static test EC50- Desmodesmus subspicatus (Scenedesmus subspicatus)- > 120 mg/l- 72 h
Sodium Gluconate (527-07-1): No data.

Mixture ecotoxicity: Toxicity to Fish- Persistence and Biodegradability- Bioaccumulative Potential- Mobility in Soil: No data available for mixture.

13. Disposal Considerations

Waste treatment methods
See Section 15 for ingredients listed under current RCRA regulations (40 CFR 261.31, 32 and 33), Comprehensive Environmental Response, Compensation (CERCLA) Table 302.4, 40 CFR part 302, and SARA TITLE III: (Superfund Amendments and Reauthorization Act) Sections 301-313.

Product: Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied

14. Transport Information

DOT: CHEMICAL FAMILY: Alkaline Cleaner- PROPER SHIPPING NAME: Corrosive Liquid n.o.s. (Contains Potassium Hydroxide)- D.O.T HAZARD CLASSIFICATION: Corrosive Material- PACKAGING GROUP: PG III- CHEMICAL FORMULA: n.a. proprietary mixture- DOT HAZARDOUS SUBSTANCE? Yes- USA RQ: 1000 lbs.- UN NUMBER: UN1760- CAS REGISTRY No.: n.a. proprietary mixture

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information

Federal
TSCA: Components of this product are listed or exempt from the TSCA Inventory.
CERCLA: Contains 10-15 % by weight of Potassium Hydroxide which is listed in table 302.4 of 40 CFR 302 as a hazardous substance and of which has a reportable quantity (RQ) of 1000 lbs. Releases to air, land or water which exceed RQ must be reported to the National Response Center, 800-424-8802.
RCRA: None of the ingredients are currently listed as a substance or a source waste under current RCRA regulations.
SARA TITLE III: (Superfund Amendments and Reauthorization Act)
Section302 Components: None are subject to the reporting requirements of Section 302.
Section 313 Components: SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313: Sodium nitrite CAS-No. 7632-00-0 Revision Date 2007-07-01 7632-00-0 Sodium nitrite 1.0%

States
State Right to Know Components: MA, PA and NJ: Potassium Hydroxide (1310-58-3) – PA & NJ: Sodium Gluconate (527-07-1)
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canada
DSL: This product, or its components, are listed on or are exempt from the Canadian Domestic Substances List.
WHMIS: Potassium Hydroxide: E – Corrosive- Sodium Gluconate- Anionic Surfactant:

16. Other Information

Full alphanumeric H-Statements and P-Statements.
H290 May be corrosive to metals.
H303 May be harmful if swallowed
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
P234 Keep only in original packaging.
P260 Do not breathe mists or sprays.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment: See Section 4: First Aid Measures.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P405 Store locked up.
P406 Store in corrosion resistant container or container with a resistant inner liner.
P501 Dispose of contents/container in accordance with applicable regulations.

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