SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier used on the label: RDG Raw Element Part 1

Other means of Identification: 8964

Recommended use of the chemical and restrictions on use: For professional use only.

Company Name: Bruske Products Address: 7447 Duvan Drive, Tinley Park, IL., 60477 Phone: 708-532-3800 Fax: 708-532-3977 Contact: Steve Schafer Company Web Site: www.bruskeproducts.com SDS 24 Hour Service Provider: Chemtel SDS 24 Hour Service Phone: 800-255-3924 SECTION 2 - HAZARDS IDENTIFICATION

Classification of the chemical:

Corrosive to Metals 1 Skin Corrosion/Irritation 1 Eye Damage/Irritation 1 Acute Toxicity Oral 4

Label elements:

Signal Word: Danger

Hazard statement(s)

May be corrosive to metals Harmful if swallowed Causes severe skin burns and eye damage

Precautionary statement(s)

Keep only in original container Do not breathe dust/fume/gas/mist/vapours/spray Wash exposed areas thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Wash contaminated clothing before reuse Absorb spillage to prevent material damage. Store locked up Store in a corrosive resistant container Dispose of contents/container in accordance with local regulation

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If

skin irritation occurs get medical advice/attention. Wash contaminated clothing before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor/physician.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

Hazard pictogram(s)



Other hazards not otherwise classified: None Known

Unknown Acute Toxicity: 0 %

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name, Common Name & Synonyms:	CAS #	Concentration %	
POTASSIUM HYDROXIDE	1310-58-3	30-60	
Sodium Silicate (40%)	1344-09-8	30-60	
Ethylenediaminetetraacetic Acid	60-00-4	10-30	
Triethanolamine (84-86%) / Water (14-16%) / N,N-	102-71-6 (84-86%) / 7732-18-5 (14-		
Diethanolamine (<0.43%)	16%) / 111-42-2 (<0.43%)	0.1-1	

** If the chemical name/CAS # is "proprietary" and/or the weight % is shown as a range, this information had been withheld as a trade secret.

SECTION 4 - FIRST-AID MEASURES

Description of first aid measures:

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor/physician.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

Most Important symptoms and effects, both acute and delayed: Causes severe skin burns and serious eye damage. Harmful if swallowed.

Indication of any immediate medical attention and special treatment needed: Treat symptomatically

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media:

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

Unsuitable extinguishing media: Not determined

Special hazards arising from the substance or mixture: None known

Flammability classification: Not flammable

Hazardous combustion products: Carbon oxides, oxides of phosphorus other unidentified organic compounds.

Special protective equipment and precautions for firefighters:

Protective equipment for fire-fighters: Firelighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Dike for water control.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spilt/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

Methods and material for containment and cleaning up: Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. Ventilate the area. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

Special spill response procedures: In case of a transportation accident, contact Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International). If a spill/release in the US in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Use protective equipment recommended in section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

Conditions for safe storage: Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep out of reach of children.

Incompatible materials: Oxidizing agents. Do not mix with other chemicals or cleaners

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:					
				OSHA PEL	
Chemical Name	CAS #	TWA	STEL	PEL	STEL
POTASSIUM HYDROXIDE	1310-58-3				

Sodium Silicate (40%)	1344-09-8		
Ethylenediaminetetraacetic Acid	60-00-4		
Triethanolamine (84-86%) / Water (14- 16%) / N,N-Diethanolamine (<0.43%)	102-71-6 (84-86%) / 7732-18-5 (14-16%) /		

Exposure controls:

Ventilation and engineering measures: Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection: If airborne concentrations are above the permissible exposure limit or arc not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

Skin protection: Wear protective gloves. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective regimes.

Eye face protection: Wear eye/face protection. Wear as appropriate tightly fitting safety goggles; Safety glasses with side-shields.

Other protective equipment: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations: Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid

Odor: None

Odor threshold: No applicable information available

pH: ~14.0

Melting/Freezing point: No applicable information available

Initial boiling point and boiling range: No applicable information available

Flash point: No applicable information available

Flashpoint (Method): No applicable information available

Evaporation rate (BuAe = 1): Similar to water

Flammability (solid, gas): Not flammable

Lower flammable limit (% by vol.): Not Flammable Upper flammable limit (% by vol.): Not Flammable Vapor pressure: No applicable information available Vapor density: No applicable information available Relative density: 11.82 lb/Gal Solubility in water: No applicable information available Other solubility(ies): No applicable information available Partition coefficient: No applicable information available Auto ignition temperature: No applicable information available Decomposition temperature: No applicable information available Viscosity: Water thin

Other physical/chemical comments: No applicable information available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not normally reactive

Chemical stability: Stable

Possibility of hazardous reactions: No hazardous polymerization

Conditions to avoid: Keep out of reach of children. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

Incompatible materials: Acids, Fluorine, strong oxidizing or reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide

Hazardous decomposition products: None known. Refer to 'Hazardous Combustion Products' in Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry - inhalation: Avoid breathing vapors or mists

Routes of entry - skin & eye: Avoid contact with skin or eyes

Routes of entry - Ingestion: Do not taste or swallow

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Symptoms: Please see section 4 of this SDS sheet for symptoms.

Potential Chronic Health Effects:

Mutagenicity: Not expected to be mutagenic in humans.

Carcinogenicity: None of the components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects: No applicable information available

Sensitization to material: No applicable information available

Specific target organ effects: No data available to indicate product or components will have specific target organ effects.

Medical conditions aggravated by overexposure: Preexisting skin eye or respiratory disorders.

Toxicological data:

See the following table for individual ingredient acute toxicity data.

Chemical name	CAS #	LD ₅₀	LD ₅₀	LC ₅₀
		(Oral, rat)	(Dermal. Rabbit)	(4hr, Inhal., rat)
POTASSIUM HYDROXIDE	1310-58-3	1260		
Sodium Silicate (40%)	1344-09-8	1153	4640	
Ethylenediaminetetraacetic Acid	60-00-4	2001		
Triethanolamine (84-86%) / Water (14-16%) / N,N- Diethanolamine (<0.43%)	102-71-6 (84- 86%) / 7732-18- 5 (14-16%) / 111-42-2 (<0.43%)	4001	2001	

*All empty cells no applicable information available

Other important toxicological hazards: None reported.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: May be dangerous for the environment. No data is available on the product itself. Should not be released into the environment.

Persistence and degradability: No applicable information available

Bioaccumulation potential: No applicable information available.

Mobility in soil: No applicable information available.

Other Adverse Environmental effects: No applicable information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for disposal: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Methods of disposal: Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 - TRANSPORTATION INFORMATION

US 49 CFR/DOT information:

UN3266, Corrosive liquid, basic, inorganic, n.o.s. (contains Potassium Hydroxide), 8, PGII.

Special Transportation Notes: Not Classified SECTION 15 - REGULATORY INFORMATION

TSCA information: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

.Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

SECTION 16 - OTHER INFORMATION

Legend:

Legena.					
ACGIH: American Conference of Governmental Industrial Hygienists					
CAS: Chemical Abstract Services					
CERCLA: Comprehensive Environmental Response, Compensation, and	d Liability Act of 1980				
CFR: Code of Federal Regulations					
CSA: Canadian Standards Association					
DOT: Department of Transportation					
ECOTOX: U.S. EPA Ecotoxicology Database					
EINECS: European Inventory of Existing Commercial chemical Substance	S				
EPA: Environmental Protection Agency					
HSDB: Hazardous Substances Data Bank					
IARC: International Agency for Research on Cancer					
IUCLID: International Uniform Chemical Information Database	HMIS Hazard Rating				
LC: Lethal Concentration	HEALTH	3	0 – Insignificant		
LD: Lethal Dose		-	1 Cliabt		
NIOSH: National Institute of Occupational Safety and Health	FLAMMABILITY	0	1 – Slight		
NTP: National Toxicology Program	REACTIVITY	0	2 – Moderate		
OECD: Organization for Economic Co operation and Development	REACTIVITI	0	3 – High		
OSHA: Occupational Safety and Health Administration	PERSONAL	v	ũ		
PEL: Permissible exposure limit	PROTECTION	Х	4 – Extreme		
RCRA: Resource Conservation and Recovery Act					
RTECS: Registry of Toxic Effects of Chemical Substances					
SARA: Superfund Amendments and Reauthorization Act					
SDS: Safety Data Sheet Material Safety Data Sheet					
STEL: Short Term Exposure Limit					
TOG: Canadian Transportation of Dangerous Goods Act & Regulations					
TLV: Threshold Limit Values					
TWA: Time Weighted Average					
WHMIS: Workplace Hazardous Materials Identification System					

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DISCLAIMER

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of this supplier, it is assumed that users of this material have been fully trained accordingly to the mandatory requirements of GHS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of, or reliance on, any information contained within this form.

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