RATIONAL Special Rinse Agent for RATIONAL CleanJet Cleaning System MSDS

Section 1 – Chemical Product and Company Information

Product Name: RATIONAL Special Rinse Agent for RATIONAL CleanJet Cleaning System
Article Number: 9006.0137

Preparation Date: 1/28/2011

Product Use: Rinse Agent

RATIONAL AG
Address: Iglinger Strasse 62
D-8699 Landsberg
Germany

Revision Date:

Telephone: +49-8191-32 70
Emergency Telephone Number:

Section 2 – Composition Information

Component	CAS #	%
2-Propanol	67-63-0	1-5%

2-Propanol: OSHA Permissible Exposure Limit (PEL) – 400 ppm, OSHA Short Term Exposure Limit (STEL) – 500 ppm ; ACGIH Time Weighted Allowance (TWA) – 400 ppm, STEL – 500 ppm

WHMIS Class: Class D, Division 2, Subdivision B: Other Toxic Effects – Toxic Material

(Contd. on page 2)

Section 3 – Hazards Identification

Potential Health Effects:

Inhalation: May cause mild irritation. Repeated or excessive inhalation may cause dizziness, drowsiness and a headache.

Ingestion: May cause gastrointestinal pain, cramps, nausea, vomiting and diarrhea. Excessive ingestion may cause drowsiness and unconsciousness.

Skin Contact: May cause skin irritation which would include reddening of skin and possibly dermatitis.

Eye Contact: May cause eye irritation.

Chronic Effects. None Known

Section 4 – First Aid Measures

Inhalation: If inhaled, move to fresh air. If breathing is difficult, administer artificial respiration or oxygen as indicated. Contact a physician immediately.

Ingestion: Give small amounts of water. Do not induce vomiting. If vomiting occurs, keep head below hips to help prevent aspiration. Contact a physician immediately.

Skin: Wash affected area with soap and water. Immediately remove contaminated clothing and shoes. Launder contaminated clothing before reuse. Contact a physician if irritation develops.

Eyes: Flush with large amounts of cold water for at least 15 minutes. Do not let victim rub eyes. If irritation develops, contact a physician immediately.

(Contd. on page 3)

Section 5 – Fire Fighting Measures

Flash Point: None

Extinguisher Media: Carbon dioxide, Dry chemical, Foam, Water spray

Special Firefighting Procedures: Isolate fire area and deny unnecessary entry. Use water spray, dry chemical, foam or carbon dioxide.

Unusual Fire and Explosion Hazards: Product will not burn until water has evaporated. Residue can decompose into noxious, poisonous gas when exposed to the high temperatures of a fire. Perform only those firefighting procedures for which you have been trained. Firefighters should wear self contained breathing apparatus in the positive pressure mode with a full face piece where there is a possibility of exposure to smoke, fumes or hazardous decomposition products.

National Fire Protection Association (NFPA): Health 1 Flammability 0 Reactivity 0
Other N/A

Section 6 – Accidental Release Measures

Spill & Leak Response: Do not allow spilled material to enter sewers or streams. Add dry material to absorb (if large spill, dike to contain). Using recommended protective equipment, pick up bulk of spill and containerize for recovery or disposal. Flush area with water to remove residues.

Follow applicable Federal, Provincial and local reporting requirements.

(Contd. on page 4)

Section 7 – Handling and Storage

Handling: No special precautions necessary. Avoid container damage while handling. Practice reasonable care to avoid repeated, prolonged skin contact.

Work Practices: Read label for instructions in use of product.

Storage: Store in closed containers in a cool, dry well ventilated area. Maintain closure of bungs. Store at temperatures between 0^{o}C and 40^{o}C. May decompose if frozen below 0^{o}C. Do not reuse container. Avoid container damage while storing.

Empty Container Warning: Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, bronze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause injury or death. Do not attempt to refill containers since residue is difficult to remove. Empty drums should be completely drained, properly bunged and returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner in accordance with governmental regulations.

Section 8 – Exposure Controls/ Personal Protection

Exposure limits

2-Propanol: OSHA Permissible Exposure Limit (PEL) – 400 ppm, OSHA Short Term Exposure Limit (STEL) – 500 ppm ; ACGIH Time Weighted Allowance (TWA) – 400 ppm, STEL – 500 ppm
Respiratory Protection: Not normally required if good ventilation is maintained

Protective Gloves: Wear neoprene rubber gloves if prolonged contact may occur or for those with sensitive skin.

Eye Protection: Safety glasses with side shields or chemical goggles are required. Contact lenses should also not be worn if the product could be splashed into the eyes.

Other Protective Wear: If product use involves single, short duration exposures, then no additional protective wear for covering the skin is required. For prolonged or repeated exposures to the skin, wear impervious, protective clothing including rubber safety shoes to avoid skin contact.

(Contd. on page 5)

General Protection: Do not inhale vapors and aerosols. Avoid contact with eyes and skin.

Section 9 - Physical/Chemical Characteristics

Appearance and Odor: Clear, light blue liquid, characteristic odor
Boiling Point: N/D
Flash Point: None
Flammable Limits in air % by volume: N/A
Auto-Ignition Temp: N/A
UEL: N/A
LEL: N/A
Specific Gravity: 0.95 – 1.05 @ 20°C
Vapor Pressure @ 20°C: N/A
Vapor Density: N/A
Solubility in Water: Miscible
Freezing Point: N/D
pH, 10%: 3.0 – 4.0

Section 10 – Stability and Reactivity

Stability: Stable X Unstable

Conditions to Avoid: Contact with heat, sparks, flame and all sources of ignition

Incompatibilities: Strong oxidizing agents and strong bases

Hazardous Decomposition Products: Oxides of carbon

Hazardous Polymerization: May occur Will not occur X

(Contd. on page 6)

Section 11 – Toxicological Data

Eye Irritation: N/D
Skin Irritation: N/D
Dermal Toxicity: N/D
Oral Toxicity: N/D
Inhalation Toxicity: N/D
Repeated Dose Toxicity: N/D

Carcinogenicity:

NTP: No
IARC: No
ACGIH: No

Section 12 – Ecological Information

No further information is known

Mobility: Not established

Persistence and Degradability: Not established.

Section 13 – Disposal Considerations

Waste Disposal: All recovered material should be packaged, labeled, transported and disposed or reclaimed in conformance with Good Engineering Practices. Comply with all applicable governmental regulations. Avoid land filling of liquids.

Product can be disposed of in a licensed facility.

Section 14 – Transport Information

Canadian TDG Classification: This product is not regulated under the Canadian Transportation of Dangerous Goods Regulations for transport by road and rail

US Department of Transportation Classification

This material is not subject to DOT regulations under 49 CFR Parts 171 - 180

(Contd. on page 7)

Section 15 – Regulatory Information

WHMIS: Class D2B

US EPA Section 313 Toxic Chemical - no

DSL (Domestic Substances List)

All of the ingredients in this product are listed on the Canadian DSL

TSCA (Toxic Substance Control Act)

All of the ingredients in this product are listed on the TSCA Inventory.

Section 16 – Other Information

None