Printing date 03.02.2010 Revision: 03.02.2010

1 Identification of substance:

· Product details: 9006.0137

· Trade name: RATIONAL Klarspüler für CleanJet® Reinigungssystem (Blue Rinsing Agent)

· Application of the substance / the preparation: Clear rinsing agent / Wetting agent

· Manufacturer / Supplier:

Rational AG Iglinger Straße 62 D-86899 Landsberg



Tel.: ++49-(0)8191 - 32 70 Fax: ++49-(0)8191 - 21735

- · E-mail address of the competent person responsible for the Safety Data Sheet: sdb@csb-online.de
- · Informing department: Qualitätsmanagement
- · Emergency Contact Information: in North America contact Info Trac 1-800-535-5035 Internationale contact Tel.: +49-(0)89-19240
- · Hazard designation: void
- · Information pertaining to particular dangers for man and environment void
- · Classification system

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Chemical characterization

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

· Dangerous components.				
CAS: 5949-29-1	Citric acid, monohydrate	Xi; R 36		< 2.5%
EINECS: 201-069-1		×		
CAS: 67-63-0	Propan-2-ol	Xi,	F; R 11-36-67	< 2.5%
EINECS: 200-661-7		×)	
Index number: 603-117-00-0				
· Additional information For	the wording of the listed risk phrases refer	to sectio	n 16.	

- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of symptoms.
- · After skin contact: The product is not skin irritating.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

· After swallowing: In case of persistent symptoms consult doctor.

· Suitable extinguishing agents

Carbon dioxide (CO_2), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.

- · For safety reasons unsuitable extinguishing agents none
- · Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire:

Carbon monoxide (CO) and Carbon dioxide (CO2)

· Protective equipment: Wear self-contained breathing apparatus.

(Contd. on page 2)

Printing date 03.02.2010 Revision: 03.02.2010

Trade name: RATIONAL Klarspüler für CleanJet® Reinigungssystem (Blue Rinsing Agent)

(Contd. of page 1)

 \cdot Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· Person-related safety precautions:

Avoid contact with eyes.

Do not breathe vapours.

- · Measures for environmental protection: Do not allow to enter drainage system, surface or ground water.
- · Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable containers.

Dispose of the material collected according to regulations.

7 Handling and storage

- · Handling
- · Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Avoid breathing vapours.

Avoid contact with eyes.

Avoid long or repeated skin contact.

· Information about protection against explosions and fires:

The product forms flammable fumes when heated.

- · Storage
- · Requirements to be met by storerooms and containers:

Store in the original container.

Observe all local and national regulations for storage of water polluting products.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Protect from frost.

8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Components with critical values that require monitoring at the workplace:

67-63-0 Propan-2-ol

WEL (Great Britain) Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm

- · Additional information: The lists that were valid during the compilation were used as basis.
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

Wash hands during breaks and at the end of the work.

- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands:

Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

Check the permeability prior to each renewed use of the glove.

(Contd. on page 3)

Printing date 03.02.2010 Revision: 03.02.2010

Trade name: RATIONAL Klarspüler für CleanJet® Reinigungssystem (Blue Rinsing Agent)

(Contd. of page 2)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses recommended during refilling.

9 Physical and chemical properties.

91 nysical and chemical properties.				
· General Information				
Form:	liquid			
Colour:	light blue			
Smell:	characteristic			
· Change in condition Melting point/Melting range: Boiling point/Boiling range:				
· Flash point:	not applicable			
· Self-inflammability:	Product is not selfigniting.			
· Danger of explosion:	Product is not explosive.			
· Density at 20°C	$0.95 - 1.05 \text{ g/cm}^3$			
· Solubility in / Miscibility with Water:	fully miscible			
· pH-value (10 g/l) at 20°C:	3.0 - 4.0			

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Materials to be avoided: Strong oxidizing agents
- · Dangerous products of decomposition: Carbon monoxide (CO) and Carbon dioxide (CO₂)

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Weak irritating effect
- · Sensitization: No sensitizing effect known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Printing date 03.02.2010 Revision: 03.02.2010

Trade name: RATIONAL Klarspüler für CleanJet® Reinigungssystem (Blue Rinsing Agent)

(Contd. of page 3)

12 Ecological information:

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) N° 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

13 Disposal considerations

- · Product:
- · Recommendation

Disposal must be made according to official regulations.

Smaller quantities can be disposed with household garbage.

· European waste catalogue:

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleaning agent: Water, if necessary with cleaning agent.

14 Transport information

- · Land transport ADR/RID (cross-border):
- · ADR/RID Class:
- · Maritime transport IMDG-Code:
- · IMDG Class:
- · Marine pollutant: NO
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -
- · Transport/Additional information: Not dangerous according to the above specifications.

15 Regulatory information

· Designation according to EC guidelines:

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version. Observe all safety regulations when handling chemicals.

· Special designation of certain preparations:

Safety data sheet available for professional user on request.

· Ingredients according to Regulation (EC) No 648/2004:					
non-ionic surfactants	< 5%				
BENZISOTHIAZOLINONE					

- · National regulations
- · Decree to be applied in case of technical fault: -

(Contd. on page 5)

Printing date 03.02.2010 Revision: 03.02.2010

Trade name: RATIONAL Klarspüler für CleanJet® Reinigungssystem

(Contd. of page 4)

· Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant R-phrases:

11 Highly flammable.

36 Irritating to eyes.

67 Vapours may cause drowsiness and dizziness.

· Department issuing MSDS:

C.S.B. GmbH Phone: +49 - 2151 - 652086-0 Parkstraße 29 Fax: +49 - 2151 - 652086-9

D-47829 Krefeld Germany

- GF