

SAFETY DATA SHEET



RATIONAL Grill cleaner for RATIONAL CleanJet® and for manual cleaning

Section 1. Identification

Product identifier : RATIONAL Grill cleaner for RATIONAL CleanJet® and for manual cleaning

Other means of identification : Not available.

Product code : 9006.0153

Product use : Cleaner. (Alkaline.) Professional use.

Supplier's details : **Supplier:**
RATIONAL Canada Inc.
2410 Meadowpine Blvd., Suite 107
Mississauga, Ont., L5N 6S2
Canada
Tel: +1 877 728 4662

Manufacturer:
RATIONAL AG
Siegfried-Meister-Straße 1
86899 Landsberg am Lech
Germany
Tel: +49 8191 327-2563
Fax: +49 8191 327-72 2563

e-mail address of person responsible for this SDS : reinigung@rational-online.com

Emergency telephone number (with hours of operation) : +49 6132 844 63 (24h)

Section 2. Hazard identification

Classification of the substance or mixture :  CORROSIVE TO METALS - Category 1
ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements :  H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.

Precautionary statements

Prevention :  P280 - Wear protective gloves, protective clothing and eye or face protection.
P234 - Keep only in original packaging.
P260 - Do not breathe dust or mist.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.

Section 2. Hazard identification

Response	: P390 - Absorb spillage to prevent material damage. P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. 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. P363 - Wash contaminated clothing before reuse. P305 + P351 + P338 + P310 - 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 or doctor. P303 + P310 - Immediately call a POISON CENTER or doctor.
Storage	: P405 - Store locked up. P406 - Store in a corrosion resistant container with a resistant inner liner.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Keep out of reach of children.
Hazards not otherwise classified	: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.
Product code	: 9006.0153

Ingredient name	% (w/w)	CAS number
Potassium hydroxide	≥10 - ≤30	1310-58-3
Amines, C12-14-alkyldimethyl, N-oxides	≥1 - ≤5	68955-55-5
Silicic acid, potassium salt	≥1 - ≤5	1312-76-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Section 4. First-aid measures

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes severe burns.
- Ingestion** : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** :  Use dry chemical, CO2, water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** :  Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.
- Large spill** :  Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** :  Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not breathe dust or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

Section 7. Handling and storage

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a corrosion resistant container with a resistant inner liner. Store locked up. Separate from acids. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
potassium hydroxide	CA Alberta Provincial (Canada, 6/2018). C: 2 mg/m ³ CA British Columbia Provincial (Canada, 6/2022). C: 2 mg/m ³ CA Ontario Provincial (Canada, 6/2019). Ceiling Limit: 2 mg/m ³ CA Quebec Provincial (Canada, 6/2022). STEV: 2 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). CEIL: 2 mg/m ³

Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Recommended: In accordance with CSA Z94.4-11.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Color** : Red.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : >13.5
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : Not available.
- Flash point** :

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
propane-1,2-diol	99	210.2				

- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not available.
- Vapor pressure** :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
propane-1,2-diol	0.15	0.02	EU A.4			

- Relative vapor density** : Not available.
- Relative density** : Not available.
- Density** : 1.13 g/cm³
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** :

Section 9. Physical and chemical properties

Ingredient name	°C	°F	Method
propane-1,2-diol	371	699.8	

Decomposition temperature : Not available.

Viscosity : 13 Fsec

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid :  Keep away from heat, sparks and flame.

Incompatible materials : Reactive or incompatible with the following materials: metals, strong acids.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Amines, C12-14-alkyldimethyl, N-oxides	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat - Male, Female	1064 mg/kg	-
Silicic acid, potassium salt	LC50 Inhalation Vapor	Rat	>2.06 mg/l	4 hours
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat - Female	>5000 mg/kg	-

Conclusion/Summary : Harmful if swallowed. (Literature)

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
potassium hydroxide	Eyes - Visible necrosis	Rabbit	-	24 hours	21 days
Amines, C12-14-alkyldimethyl, N-oxides	Eyes - Severe irritant	Rabbit	-	-	35 days
	Skin - Irritant	Rabbit	-	24 hours	72 hours
Silicic acid, potassium salt	Eyes - Non-irritating to the eyes.	Rabbit	-	4 hours	7 days
	Skin - Mild irritant	Rabbit	-	4 hours	5 days
	Skin - Non-irritating to the	Rabbit	-	4 hours	7 days

Section 11. Toxicological information

	skin.				
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Conclusion/Summary

Skin	: Causes severe burns. (Literature)
Eyes	: Causes serious eye damage. (Literature)
Respiratory	: Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
potassium hydroxide	skin	Guinea pig	Not sensitizing
Amines, C12-14-alkyldimethyl, N-oxides	skin	Guinea pig	Not sensitizing
Silicic acid, potassium salt	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin	: Based on available data, the classification criteria are not met. (Literature)
Respiratory	: Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
potassium hydroxide	-	Experiment: In vitro Subject: Bacteria	Negative
Amines, C12-14-alkyldimethyl, N-oxides	-	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative
	OECD 487	Experiment: In vitro Subject: Mammalian-Human Cell: Somatic	Negative
Silicic acid, potassium salt	OECD 473	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative

Conclusion/Summary : Based on available data, the classification criteria are not met. (Literature)

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Amines, C12-14-alkyldimethyl, N-oxides	Negative - Oral	Rat - Male, Female	90 mg/kg NOEL	2 years; 24 hours per day

Conclusion/Summary : Based on available data, the classification criteria are not met. (Literature)

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
Amines, C12-14-alkyldimethyl, N-oxides	Negative	Negative	Negative	Rat - Male, Female	Oral: ≥37 mg/kg	24 hours per day
Silicic acid, potassium salt	Negative	Positive	Positive	Rat - Male, Female	Oral: >159 mg/ kg	2.5 years; 7 days per week

Section 11. Toxicological information

					NOAEL	
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Conclusion/Summary : Based on available data, the classification criteria are not met. (Literature)

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Amines, C12-14-alkyldimethyl, N-oxides	Negative - Oral	Rat - Female	100 mg/kg NOAEL	10 days; 7 days per week
Silicic acid, potassium salt	Negative - Oral	Mouse - Female	>200 mg/kg NOAEL	18 days; 7 days per week

Conclusion/Summary : Based on available data, the classification criteria are not met. (Literature)

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes severe burns.
Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 pain
 watering
 redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
Ingestion : Adverse symptoms may include the following:
 stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Amines, C12-14-alkyldimethyl, N-oxides	Sub-chronic NOAEL Dermal	Mouse - Male, Female	237.6 mg/kg	91 days; 5 days per week
	Sub-chronic NOAEL Oral	Rat - Male, Female	88 mg/kg	14 weeks; 7 days per week
Silicic acid, potassium salt	Sub-chronic NOAEL Oral	Rat - Male, Female	>159 mg/kg	197 days; 7 days per week
	Sub-chronic NOAEL Oral	Rat - Male, Female	227 to 237 mg/ kg	3 months; 7 days per week

Conclusion/Summary	: Based on available data, the classification criteria are not met. (Literature)
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
RATIONAL Grill cleaner for RATIONAL CleanJet® and for manual cleaning	748.7	N/A	N/A	N/A	N/A
potassium hydroxide	100	N/A	N/A	N/A	N/A
Amines, C12-14-alkyldimethyl, N-oxides	1064	2500	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Amines, C12-14-alkyldimethyl, N-oxides	EC10 80 mg/l Fresh water	Micro-organism - <i>Pseudomonas putida</i>	18 hours
	Acute EC50 0.66 mg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	72 hours
	Acute LC50 10.4 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 3.41 mg/l pH 9.0 Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Chronic NOEC 0.7 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
	Chronic NOEC 0.42 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	302 days
Silicic acid, potassium salt	Acute EC50 207 mg/l	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute LC50 >146 mg/l	Daphnia - <i>Daphnia magna</i>	24 hours
	Acute LC50 >146 mg/l	Fish - <i>Leuciscus idus</i>	48 hours

Section 12. Ecological information

Conclusion/Summary : Harmful to aquatic life with long lasting effects. (Literature)

Persistence and degradability

Conclusion/Summary : There are no data available on the mixture itself.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	TDG Classification	DOT Classification	ADR/RID	IMDG	IATA
UN number	UN1814	UN1814	UN1814	UN1814	UN1814
UN proper shipping name	POTASSIUM HYDROXIDE SOLUTION	Potassium hydroxide, solution	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION	Potassium hydroxide solution
Transport hazard class(es)	8	8	8	8	8
Label					
Packing group	II	II	II	II	II
Environmental hazards	No.	No.	No.	Marine Pollutant: No	No.

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8).
Explosive Limit and Limited Quantity Index 1
Passenger Carrying Road or Rail Index 1

Section 14. Transport information

DOT Classification	: Reportable quantity 7616.1 lbs / 3457.7 kg [808.35 gal / 3059.9 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. Limited quantity Yes. Packaging instruction Exceptions: 154. Non-bulk: 202. Bulk: 242. Quantity limitation Passenger aircraft/rail: 1 L. Cargo aircraft: 30 L. Special provisions B2, IB2, T7, TP2
ADR/RID	: Hazard identification number 80 Limited quantity 1 L Tunnel code (E)
IMDG	: Emergency schedules F-A, S-B
IATA	: Quantity limitation Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840. Special provisions A3, A803
Special precautions for user	: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

Canadian lists

Canadian NPRI	: None of the components are listed.
CEPA Toxic substances	: None of the components are listed.

VOC

Calculation method	Product as-supplied	Product ready-for-use
Without volume exclusion	22.6 g/l 2 % (w/w)	Not applicable
With volume exclusion [water excluded]	248.8 g/l	Not applicable
With volume exclusion [water not excluded]	22.6 g/l	Not applicable

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Eurasian Economic Union	: Russian Federation inventory: All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Viet Nam	: All components are listed or exempted.

Section 16. Other information

History

Date of printing	: 2023-06-29
Date of issue/Date of revision	: 2023-06-29
Date of previous issue	: 2022-08-01
Version	: 3
Key to abbreviations	: ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor DOT = Department of Transportation GHS = Globally Harmonized System of Classification and Labelling of Chemicals HPR = Hazardous Products Regulations IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail SGG = Segregation Group TDG = Transportation of Dangerous Goods UN = United Nations

Procedure used to derive the classification

Classification	Justification
 CORROSIVE TO METALS - Category 1 ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1	Expert judgment Calculation method On basis of test data On basis of test data

References : Not available.

 Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.