

RUSFRE®RUSFRE
604 McGEACHIE DRIVE
MILTON, ONTARIO, L9T 3Y5**PRODUCT: RF 1050-Q CLEANER & REDUCER QUART****SECTION 01: IDENTIFICATION**

Initial supplier identifier..... RUSFRE
604 McGeachie Drive
Milton
Ontario
L9T 3Y5

Product identifier..... RF 1050-Q CLEANER & REDUCER QUART

Recommended use and restrictions on .. Cleaning solution. Solvent.
use

Chemical family..... Aromatic hydrocarbons.

NFPA rating..... Health: 2 Fire: 2 Reactivity: 0.

HMIS..... H: 2 F: 2 R: 0.

24 hour emergency number..... For transportation emergencies (in Canada) call CANUTEC 1-888-226-8832 (CAN-UTEC);
IN THE UNITED STATES CALL CHEMTREC 1-800-424-9300.
** For medical emergencies contact your local poison control centre **.

SECTION 02: HAZARD IDENTIFICATION

Signal Word..... DANGER.

Hazard Classification..... Flammable Liquid 3. Aspiration Toxicity 1.

Hazard Description..... H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways.

Prevention..... P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P233
Keep container tightly closed. P240 Ground and bond container and receiving equipment.
P241 Use explosion proof equipment. P242 Use only non-sparking tools. P243 Take
precautionary measures against static discharge. P280 Wear protective gloves and eye
protection.

Response P370 + P378 In case of fire - use dry chemical powder, CO2 or foam to extinguish. P303 +
P361 + P353 If on skin or in hair: take off all contaminated clothing immediately. Rinse
thoroughly with water and use safety shower . P301 + P310 If swallowed IMMEDIATELY
CALL A POISON CONTROL CENTRE and follow instructions provided by the centre. P331
Do NOT induce vomiting.

Storage..... P403 + P235 Store in well ventilated area. Keep cool. P405 Store locked up.

Disposal..... P501 Dispose all unused, waste or empty containers in accordance with local regulations.

Note This product mixture has been classified based on its ingredients.

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
Naphtha (petroleum), hydrotreated heavy	64742-48-9	90-100
<<The actual concentration(s) withheld as a trade secret>> .		

SECTION 04: FIRST-AID MEASURES

Eye contact..... In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at
least 15 minutes. Consult a physician if irritation continues.

Skin contact..... Immediately flush skin with plenty of soap and water. Remove contaminated clothing.
Wash clothing before reuse. If irritation persists, seek medical attention.

Inhalation..... If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is
difficult, give oxygen, obtain medical attention.

Ingestion..... Do not induce vomiting. If ingestion is suspected, contact physician or poison control
center immediately. Rinse mouth with water. Give 1 to 2 glasses of water to drink. If
spontaneous vomiting occurs have victim lean forward with head down to prevent
aspiration of fluid into the lungs. Never give anything by mouth to an unconscious person.

PRODUCT: RF 1050-Q CLEANER & REDUCER QUART**SECTION 04: FIRST-AID MEASURES**

Most important symptoms and effects, The main hazard from ingestion is aspiration of the liquid into the lungs producing chemical whether acute or delayed pneumonitis. May cause mild skin irritation. May cause eye irritation.
 Additional information..... Treat victims symptomatically. The main hazard from ingestion is aspiration of the liquid into the lungs producing chemical pneumonitis. In the event of an incident involving this product ensure that medical authorities are provided a copy of this safety data sheet.

SECTION 05: FIRE-FIGHTING MEASURES

Suitable extinguishing media..... "Alcohol" foam, CO2, dry chemical. Water spray. Do not use water in a jet.
 Specific hazards arising from the Flammable liquid. The vapour is heavier than air, spreads along the ground and distant hazardous product, such as the nature of ignition is possible. Oxides of carbon (CO, CO2).
 any hazardous combustion products
 Special protective equipment and Firefighter should be equipped with self-contained breathing apparatus and full protective precautions for fire-fighters clothing to protect against potentially toxic and irritating fumes. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture. Keep run-off water from entering sewers and other waterways. Dike for water control.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up
 Leak/spill..... Ventilate. Eliminate all sources of ignition. Evacuate all non-essential personnel. Avoid all personal contact. Contain the spill. Prevent runoff into drains, sewers, and other waterways. Absorb with earth, sand, or another dry inert material. Use explosion-proof or hand pumps and non-sparking tools and equipment. Spilled material and water rinses are classified as chemical waste, and must be disposed of in accordance with current local, provincial, state, and federal regulations.
 Personal precautions, protective Isolate area and keep unauthorized people away. Do not walk through spilled material. equipment and emergency procedures Wear recommended protective equipment. Ventilate. Open windows and doors to allow air circulation. Dike area to prevent spreading. The use of absorbent socks or spill pillows may be required. Stop leak if safe to do so. Prevent runoff into drains, sewers, and other waterways. Use non-sparking tools and equipment to pick up the spilled material.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling..... This material is a static accumulator. Prevent accumulation of electrostatic charges. Always adopt precautionary measures against build-up of static which may arise from appliances, handling and the containers in which product is packed. Ground handling equipment. Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. Avoid breathing vapours or mist. Handle and open container with care. Employees should wash hands and face before eating or drinking. Keep away from heat, sparks, and open flame.
 Conditions for safe storage, including any incompatibilities Keep away from heat, sparks, and open flames. Keep container closed when not in use. Store away from oxidizing and reducing materials. Store away from sunlight. Unsuitable materials and coatings: Polystyrene, Natural rubber, Butyl rubber, EPDM.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
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Naphtha (petroleum), hydrotreated heavy	175 ppm	Not established	Not established	Not established	Not established	Not established
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Personal Protective Equipment
 Respiratory/type..... Local exhaust ventilation is recommended. Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits.
 Eye/type..... Liquid chemical goggles. Chemical safety goggles and full faceshield if a splash hazard exists.
 Gloves/ type..... Wear skin protection equipment. The selection of skin protection equipment depends on the nature of the work to be performed.
 Clothing/type..... Wear adequate protective clothes.
 Footwear/type..... Safety boots per local regulations.
 Other/type..... Emergency showers and eye wash stations should be available. Employees should wash their hands and face before eating, drinking, or using tobacco products.

PRODUCT: RF 1050-Q CLEANER & REDUCER QUART**SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

Appropriate engineering controls..... Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. Local mechanical exhaust ventilation should be used at sources of air contamination, such as open process equipment, or during purging operations, to capture gases and fumes that may be emitted. Standard reference sources regarding industrial ventilation (ie. ACGIH industrial ventilation) should be consulted for guidance about adequate ventilation. Explosion-proof exhaust ventilation.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state..... Liquid.
 Colour..... Clear, colourless.
 Odour..... Odourless.
 Odour threshold (ppm)..... Not available.
 pH..... Not applicable.
 Melting / Freezing point (deg C)..... < -78 C.
 Initial boiling point / boiling range (deg C). 182.
 Flash point (deg C), method..... 54°C. (TCC).
 Evaporation rate..... 0.09.
 Flammability (solids and gases)..... Flammable liquid.
 Upper flammable limit (% vol)..... 5.3.
 Lower flammable limit (% vol)..... 0.7.
 Vapour pressure (mm Hg)..... 0.09. kPa @ 20 C.
 Vapour density (air=1)..... 5.6.
 Relative Density (Specific Gravity)..... 0.762.
 Solubility..... Negligible.
 Partition coefficient — n-octanol/water..... Not available.
 Auto ignition temperature (deg C)..... 246C.
 Decomposition temperature..... Not available.
 Viscosity..... Kinematic: 1.84 cST @ 25C.
 % Volatile by volume..... 100.
 VOC (less water)..... 6.342 lbs/USG.

SECTION 10: STABILITY AND REACTIVITY

Reactivity Avoid heat, sparks and flames.
 Chemical stability..... Stable at normal temperatures and pressures.
 Possibility of hazardous reactions..... Hazardous polymerization will not occur.
 Conditions to avoid, including static Avoid heat, spark, open flames.
 discharge, shock or vibration
 Incompatible materials..... Strong oxidizing agents.
 Hazardous decomposition products..... Material does not decompose at ambient temperatures. By fire: Dense black smoke. Oxides of carbon (CO,CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
Naphtha (petroleum), hydrotreated heavy	>8500 mg/m3 (rat, 4 hr)	>6000 mg/kg (oral, rat)
Acute Toxicity Estimate (ATE).....	ATE mix (oral): . 6006 mg/m3. ATE mix (dermal):. 3163 mg/kg.	
Route of exposure.....	Eye contact. Skin contact. Inhalation.	
Effects of acute exposure.....	Aspiration of material into lungs can cause chemical pneumonitis which can be fatal. Can result in irritation in the digestive tract. Aspiration of liquid into lungs can cause chemical pneumonitis. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea. Excessive inhalation of vapours can cause respiratory irritation, dizziness, headache, vomiting and unconsciousness. Can be irritating to eyes and skin. May be harmful or fatal if swallowed.	
Effects of chronic exposure.....	Breathing high concentrations of vapour may cause anesthetic effects and serious health effects. Prolonged or repeated skin contact may cause drying or cracking of skin. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. Chronic exposure to organic solvent vapors have been associated with various neurotoxic effects including permanent brain and/or nervous system damage, kidney, liver, blood damage and reproductive effects among women. Symptoms may include nausea, vomiting, abdominal pain, headache, impaired memory, loss of coordination, insomnia and breathing difficulties.	
Carcinogenicity of material.....	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC or ACGIH.	
Reproductive effects.....	No data on reproductive effects were found in the literature sources consulted.	

PRODUCT: RF 1050-Q CLEANER & REDUCER QUART**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity.....	96 Hr., LC50 Pimephales promelas: 2200 mg/L.
Persistence and degradability.....	Product data not available.
Bioaccumulative potential.....	Product data not available.
Mobility in soil.....	Not available.
Other adverse effects.....	Do not allow to enter waters, waste water or soil.

SECTION 13: DISPOSAL CONSIDERATIONS

Information on safe handling for disposal and methods of disposal, including any contaminated packaging	Dispose of waste in accordance with all applicable Federal, Provincial/State and local regulations. This material and its container must be disposed of as hazardous waste. Avoid release to the environment.
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SECTION 14: TRANSPORT INFORMATION

TDG Classification.....	UN1268 - PETROLEUM DISTILLATES, N.O.S. (Naphtha, heavy) - Class 3 - Packing Group III. This product meets limited quantity exemption when shipped in containers less than 5 litres. This product is a flammable liquid, Class 3, Packing Group III material with a flash point >37.8C and is exempt from the application of these regulations in non-bulk (< 450L) packaging as per TDG 1.33.
DOT Classification (Road).....	UN1268 - PETROLEUM DISTILLATES, N.O.S. (Naphtha, heavy) - Class 3 - Packing Group III. Refer to 49CFR 172.101 for additional non-bulk packaging requirements.
IATA Classification (Air).....	UN1268 - PETROLEUM DISTILLATES, N.O.S. (Naphtha, heavy) - Class 3 - Packing Group III. Limited Quantity. Do not ship by air without checking appropriate IATA regulations.
IMDG Classification (Marine).....	UN1268 - PETROLEUM DISTILLATES, N.O.S. (Naphtha, heavy) - Class 3 - Packing Group III. Limited Quantity. Check IMDG regulations for limited quantity exemptions.
Marine Pollutant.....	No.
Proof of Classification.....	In accordance with Part 2.2.1 of the Transportation of Dangerous Goods Regulations (July 2, 2014) - we certify that classification of this product is correct. .

SECTION 15: REGULATORY INFORMATION

CEPA status.....	On Domestic Substances List (DSL).
TSCA inventory status.....	All components are listed.
OSHA.....	This product is considered hazardous under the OSHA Hazard Communication Standard.
SARA Title III	
Section 302 - extremely hazardous substances	None.
Section 311/312 - hazard categories.....	Immediate health, delayed health, fire hazard.
Section 313.....	None.
EPA hazardous air pollutants (HAPS) 40CFR63	None.
California Proposition 65.....	This product does not contain any chemical(s) known to the State of California to cause cancer or reproductive toxicity. For more information, go to www.P65Warnings.ca.gov .

SECTION 16: OTHER INFORMATION

Prepared by:	REGULATORY AFFAIRS. Trivalent Data Systems Ltd. www.trivalent.com .
Telephone number:.....	(800) 387-7981.
Disclaimer:.....	DISCLAIMER: All information appearing herein is based upon data obtained from experience and recognized technical sources. To the best of our knowledge, it is believed to be correct as of the date of issue but we make no representations as to its accuracy or sufficiency and do not suggest or guarantee that any hazards listed herein are the only ones which exist. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. The information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.
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