

SAFETY DATA SHEET

Cortron™ RN-531FB

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Cortron™ RN-531FB

Other means of identification : Not applicable.

Recommended use : CORROSION INHIBITOR

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Champion Company
7705 Highway 90-A
Sugar Land, Texas 77478
USA
TEL: (281) 263-7000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 10/12/2015

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

Skin sensitization : Category 1

Specific target organ toxicity : Category 1 (Eyes)

- single exposure

Specific target organ toxicity : Category 2

- single exposure

Specific target organ toxicity : Category 3 (Central Nervous System)

- single exposure

Specific target organ toxicity : Category 2

- repeated exposure (Oral)

GHS Label element

Hazard pictograms :






Signal Word : Danger

Hazard Statements : Flammable liquid and vapour.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.

SAFETY DATA SHEET

Cortron™ RN-531FB

Causes damage to organs (Eyes).
May cause damage to organs.
May cause damage to organs through prolonged or repeated exposure if swallowed.
Harmful if swallowed, in contact with skin or if inhaled

Precautionary Statements : **Prevention:**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or doctor/ physician. Immediately call a POISON CENTER or doctor/ physician. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:
Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Methanol	67-56-1	10 - 30
Imidazoline salts	Proprietary	5 - 10
Quaternary ammonium compound	Proprietary	5 - 10
2-Mercaptoethanol	60-24-2	1 - 5
Cyclic amine derivatives, acetate	Proprietary	1 - 5

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before

SAFETY DATA SHEET

Cortron™ RN-531FB

reuse. Get medical attention immediately.

- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Hydrogen chloride
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike

SAFETY DATA SHEET

Cortron™ RN-531FB

spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Open drum carefully as content may be under pressure. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Do not ingest. Keep away from fire, sparks and heated surfaces. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. Avoid direct sunlight. At temperatures greater than 30°C a component of this product may degrade leading to the production of hydrogen sulfide (H₂S).
- Suitable material : Keep in properly labelled containers.
- Unsuitable material : not determined

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m ³	NIOSH REL
		STEL	250 ppm 325 mg/m ³	NIOSH REL
		TWA	200 ppm 260 mg/m ³	OSHA Z1
2-Mercaptoethanol	60-24-2	TWA	0.2 ppm	AIHA WEEL

- Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

- Eye protection : Safety goggles
Face-shield
- Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

SAFETY DATA SHEET

Cortron™ RN-531FB

Respiratory protection	: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear
Odour	: Pungent
Flash point	: 36.7 °C Method: Pensky-Martens closed cup
pH	: 4.7 - 6.7, (undiluted)
Odour Threshold	: no data available
Melting point/freezing point	: no data available
Initial boiling point and boiling range	: no data available
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 0.9518 - 0.9919 (20 °C)
Density	: 0.9501 - 0.9901 g/cm ³
Water solubility	: soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: 1 - 16 mPa.s
Viscosity, kinematic	: 5.8 mm ² /s (40 °C)
Molecular weight	: no data available
VOC	: no data available

SAFETY DATA SHEET

Cortron™ RN-531FB

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: At temperatures greater than 30°C a component of this product may degrade leading to the production of hydrogen sulfide (H ₂ S).
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NO _x) Sulphur oxides Hydrogen chloride

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Harmful in contact with skin. Causes severe skin burns. May cause allergic skin reaction.
Ingestion	: May cause blindness if swallowed. Harmful if swallowed. Causes digestive tract burns.
Inhalation	: Harmful if inhaled. May cause nose, throat, and lung irritation. Inhalation may cause central nervous system effects.
Chronic Exposure	: May cause damage to organs. May cause damage to organs through prolonged or repeated exposure.

Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Irritation, Corrosion, Allergic reactions
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough, Dizziness, Drowsiness

Toxicity

Product

SAFETY DATA SHEET

Cortron™ RN-531FB

Acute oral toxicity	: Acute toxicity estimate : 383.6 mg/kg
Acute inhalation toxicity	: Acute toxicity estimate : 11.57 mg/l Exposure time: 4 h
Acute dermal toxicity	: Acute toxicity estimate : 1,100 mg/kg
Skin corrosion/irritation	: no data available
Serious eye damage/eye irritation	: no data available
Respiratory or skin sensitization	: no data available
Carcinogenicity	: no data available
Reproductive effects	: no data available
Germ cell mutagenicity	: no data available
Teratogenicity	: no data available
STOT - single exposure	: no data available
STOT - repeated exposure	: no data available
Aspiration toxicity	: no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects	: Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
-----------------------	---

Components

Toxicity to fish	: Methanol LC50 : 15,400 mg/l Exposure time: 96 h
------------------	---

Components

Toxicity to daphnia and other aquatic invertebrates	: Methanol EC50 : > 10,000 mg/l Exposure time: 48 h Quaternary ammonium compound EC50 : 0.0059 mg/l Exposure time: 48 h 2-Mercaptoethanol
---	---

SAFETY DATA SHEET

Cortron™ RN-531FB

EC50 : 0.89 mg/l
Exposure time: 48 h

Components

Toxicity to algae : Methanol
EC50 : 22,000 mg/l
Exposure time: 72 h

Components

Toxicity to bacteria : Methanol
> 1,000 mg/l

Components

Toxicity to fish (Chronic toxicity) : Methanol
NOEC: 7,900 mg/l
Exposure time: 8.3 d

Persistence and degradability

no data available

Mobility

no data available

Bioaccumulative potential

no data available

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The classification or waste code may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

SAFETY DATA SHEET

Cortron™ RN-531FB

Land transport (DOT)

Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name(s) : Methanol, Imidazoline salts
UN/ID No. : UN 2924
Transport hazard class(es) : 3, 8
Packing group : II
Reportable Quantity (per package) : 22,450 lbs
RQ Component : Methanol

Air transport (IATA)

Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name(s) : Methanol, Imidazoline salts
UN/ID No. : UN 2924
Transport hazard class(es) : 3, 8
Packing group : II
Reportable Quantity (per package) : 22,450 lbs
RQ Component : Methanol

Sea transport (IMDG/IMO)

Proper shipping name : FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name(s) : Methanol, Imidazoline salts
UN/ID No. : UN 2924
Transport hazard class(es) : 3, 8
Packing group : II

*Marine pollutant : Quaternary ammonium compound, 2-Mercaptoethanol

*Note: This product is regulated as a Marine Pollutant when shipped by Rail, Highway (in bulk quantities), or Air (if no other hazard class applies), and when shipped by water in all quantities.

Section: 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Methanol	67-56-1	5000	22450

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard
Fire Hazard
Chronic Health Hazard

SAFETY DATA SHEET

Cortron™ RN-531FB

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Methanol 67-56-1 10 - 30 %

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Methanol

67-56-1

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

On the inventory, or in compliance with the inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

This product contains one or several components listed in the Canadian NDSL.

AUSTRALIA

not determined

CHINA

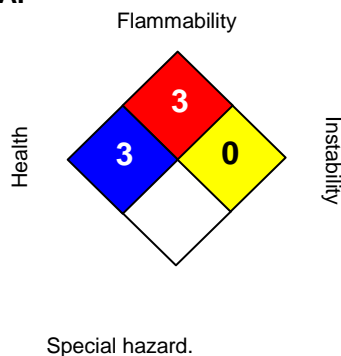
not determined

NEW ZEALAND

not determined

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 10/12/2015

Version Number : 1.1

Prepared By : Regulatory Affairs

SAFETY DATA SHEET

Cortron™ RN-531FB

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.