

SAFETY DATA SHEET

ADDITIN RC 4803



Version 1.0 Revision Date: 07/25/2018 SDS Number: 103000012632 Date of previous issue: 11/29/2017
Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : ADDITIN RC 4803
Material number : 56592842
Recommended use : Corrosion inhibitor

Manufacturer or supplier's details

Supplier : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
PittsburghPA 15275-1112
USA
Telephone : +1800LANXESS
+14128091000 (international)
Emergency telephone : CHEMTREC (800) 424 9300
International (703) 527 3887
Lanxess Emergency Phone (800) 410-3063

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin irritation : Category 2
Reproductive toxicity : Category 2

GHS label elements

Hazard pictograms : The image shows two GHS hazard pictograms side-by-side. The first is a red diamond containing a black silhouette of a person with a starburst on their chest, representing a health hazard. The second is a red diamond containing a black exclamation mark, representing a general hazard.

Signal Word : Warning

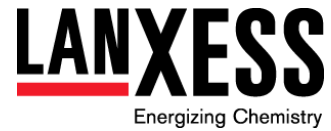
Hazard Statements : Causes skin irritation.
Suspected of damaging fertility or the unborn child.

Precautionary Statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash skin thoroughly after handling.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

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IF ON SKIN: Wash with plenty of soap and water.
IF exposed or concerned: Get medical advice/ attention.
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.

Storage:

Store locked up.

Disposal:

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

Hazard Not Otherwise Classified (HNOC)

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine	68478-81-9	>= 50 - < 70

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Get medical attention if symptoms appear.
- In case of skin contact : Wash off with soap and plenty of water.
Remove contaminated clothing and shoes.
Continue to rinse for at least 10 minutes.
Get medical attention if symptoms appear.
Wash contaminated clothing before reuse.
- In case of eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.
Remove contact lenses.
Get medical attention if symptoms appear.
- If swallowed : Rinse mouth with water.
Do not induce vomiting. Drink water. Call physician immediately.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
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Most important symptoms and effects, both acute and delayed

- Symptoms : Skin: Causes irritation with symptoms of reddening, itching, and swelling.
: Adverse effects from repeated exposure may include toxic effects for reproduction
- Effects : Causes skin irritation.
Suspected of damaging fertility or the unborn child.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : No special actions required.

Treat symptomatically.
The exposed person may need to be kept under medical surveillance for 48 hours.
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SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
In case of fire, use water spray (fog), foam or dry chemical.
- Specific hazards during fire fighting : In a fire or if heated, a pressure increase will occur and the container may burst.
Cool closed containers exposed to fire with water spray.

Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Nitrogen oxides (NO_x)
- Further information : 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 : Wear self-contained breathing apparatus for firefighting if necessary.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : No action shall be taken involving any personal risk or without suitable training.
Evacuate personnel to safe areas.
Keep unnecessary and unprotected personnel from entering.
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- Do not touch or walk through spilled material.
Use personal protective equipment.
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so.
Move containers from spill area.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Dispose of wastes in an approved waste disposal facility.
Do not allow into the sewerage system, surface waters or groundwater or into the soil.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid inhalation, ingestion and contact with skin and eyes.
Use only with adequate ventilation/personal protection.
Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.
Empty containers retain product residue; observe all precautions for product.
Do not re-use empty containers.
Remove contaminated clothing and protective equipment before entering eating areas.
Workers should wash hands and face before eating, drinking and smoking.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
- Conditions for safe storage : 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.
Keep containers sealed until ready for use.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Do not store in unlabeled containers.
Use appropriate container to avoid environmental contamination.
- Further information on storage stability : No decomposition if stored and applied as directed.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.
Hazardous components without workplace control parameters

Hazardous components without workplace control parameters

Ingredients	CAS-No.
9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine	68478-81-9

Engineering measures : Thermal processing operations should be ventilated to control gases and fumes given off during processing.
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.

Personal protective equipment

Respiratory protection : In the case of vapor formation use a respirator with an approved filter.

Hand protection
Material : PVC
Wearing time : < 60 min

Remarks : Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Wear safety glasses with side shields or goggles.

Skin and body protection : Wear suitable protective clothing.

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

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Color : brown

Odor : characteristic

Odor Threshold : No data available

pH : No data available

Melting point/range : 7 °F (-14 °C)

Boiling point/boiling range : No data available

Flash point : 327 °F (164 °C)
Method: closed cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit : No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : No data available

Density : 0.94 g/cm³ (68 °F (20 °C))

Bulk density : 940 kg/m³

Solubility(ies)
Water solubility : insoluble

Partition coefficient: n-octanol/water : No data available

Ignition temperature : No data available

Decomposition temperature : No data available

Viscosity
Viscosity, kinematic : 375 cSt (104 °F (40 °C))

Explosive properties : No data available

Oxidizing properties : No data available

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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 : Extremes of temperature and direct sunlight.
- Incompatible materials : Reducing agents
Oxidizing agents
Acids and bases
- Hazardous decomposition products : No decomposition if stored and applied as directed.
-

SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

Information on likely routes of exposure

Inhalation
Eye contact
Skin contact
Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: 5,000 mg/kg
Method: Calculation method

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: Extrapolation according to Regulation (EC) No. 440/2008
GLP: yes
Remarks: Dosage caused no mortality

LD50 (Rat): > 2,000 mg/kg
Method: OPPTS 870.1100
GLP: yes
Remarks: Dosage caused no mortality

LD50 (Rat): > 2,000 mg/kg

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Method: OECD Test Guideline 423
GLP: yes
Remarks: Dosage caused no mortality

Skin corrosion/irritation

Causes skin irritation.

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Assessment: Irritating to skin.
Method: OECD Test Guideline 431
Result: irritating

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Vapors may cause irritation to the eyes, respiratory system and the skin.

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Result: No eye irritation
Method: OECD Test Guideline 437

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Test Type: Buehler Test
Routes of exposure: Dermal
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitization.

Germ cell mutagenicity

Not classified based on available information.

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Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Genotoxicity in vitro : Test Type: gene mutation test
Test system: mouse lymphoma cells
Method: OECD Test Guideline 473
Result: negative

Carcinogenicity

Not classified based on available information.

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Effects on fetal development : Species: Rat
Application Route: Oral
Dose: 75 milligram per kilogram
Developmental Toxicity: NOAEL: 75 mg/kg body weight
Method: OECD Test Guideline 422
Result: Some evidence of adverse effects on development, based on animal experiments.
GLP: yes

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

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Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : EC50 (Cyprinodon variegatus (sheepshead minnow)): > 87.5 mg/l
Exposure time: 96 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (algae)): 362.6 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes

NOEC (Oncorhynchus mykiss (rainbow trout)): 1,000 mg/l
Method: OECD Test Guideline 203
GLP: yes

Lowest Observed Effect Concentration (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,000 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

NOEC (Daphnia magna (Water flea)): 1,000 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

Lowest Observed Effect Concentration (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

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Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 496 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

NOEC (Pseudokirchneriella subcapitata (green algae)): 318 mg/l
Exposure time:
Method: OECD Test Guideline 201
GLP: yes

Toxicity to microorganisms : EC50: 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
GLP:

NOEC: 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
GLP:

Ecotoxicology Assessment

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

Persistence and degradability

Product:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 62 %
Exposure time: 28 d

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Biodegradability : Concentration: 3.77 mg/l
Result: Not readily biodegradable.
Biodegradation: 10 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Bioaccumulative potential

No data available

Mobility in soil

Ingredients:

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylenetetramine:

Distribution among environ- : Koc: 269153.48

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mental compartments Method: OECD Test Guideline 121

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. May cause long lasting harmful effects to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

RCRA - Resource Conservation and Recovery Authorization Act : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Disposal methods : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers retain product residue; observe all precautions for product. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation

DOT

Not regulated as a dangerous good

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

CERCLA

None

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Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Skin corrosion or irritation
Reproductive toxicity

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

9-Octadecenoic acid (Z)-, reaction products with 3-(dodecenyldihydro-2,5-furandione and triethylene-tetramine	68478-81-9	>= 50 - < 70
Proprietary oleate compound	Trade Secret	>= 20 - < 30
Proprietary ester compound	Trade Secret	>= 20 - < 30

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

TSCA inventory

TSCA : On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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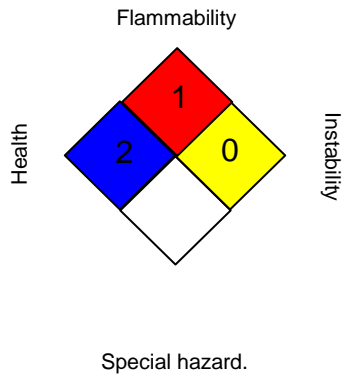


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SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS® IV:

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

LANXESS' method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS as a customer service.

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This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of our knowledge. The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information and belief at the date of its publication. We assume no legal responsibility for use of or reliance upon the information in this SDS.