

SAFETY DATA SHEET

ADDITIN RC 3180



Version Revision Date: SDS Number: Date of last issue: 09/30/2020
2.0 10/03/2024 203000001805 Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : ADDITIN RC 3180
Product code : 000000000001180952

Manufacturer or supplier's details

Company : LANXESS Corporation
 Product Safety & Regulatory Affairs
 111 RIDC Park West Drive
 Pittsburgh, Pennsylvania 15275-1112

Responsible Department : (800) LANXESS
 (412) 809-1000
 lanxesshes@lanxess.com

Emergency telephone : CHEMTREC (800) 424-9300 or
 (703) 527-3887 (Outside U.S.A) and mention CCN12916.
 Lanxess Emergency Phone (800) 410-3063.

Recommended use of the chemical and restrictions on use


Recommended use : Additive for lubricants

SECTION 2. HAZARDS IDENTIFICATION

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

Serious eye damage : Category 1

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : Causes serious eye damage.

Precautionary Statements : **Prevention:**
Wear eye protection/ face protection.

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

Response:

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/ doctor.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Substance name : Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4)

Components

Chemical name	CAS-No.	Concentration (% w/w)
Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4)	4259-15-8	>= 90 - <= 100

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

SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and water.
Get medical attention if symptoms occur.

In case of eye contact : Get medical attention immediately.
In case of contact, flush eyes with plenty of water for at least 30 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.
Remove contact lenses, if present and easy to do. Continue rinsing.
Chemical burns must be treated promptly by a physician.

If swallowed : Rinse mouth with water.
Do not induce vomiting unless directed to do by medical personnel.
Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

Symptoms : Eye: Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.

Effects : Causes serious eye damage.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : Water runoff from fire fighting may be corrosive. May release toxic, irritating and/or corrosive gases.

Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Sulfur oxides
Oxides of phosphorus
Metal oxides

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. Put on appropriate personal protection equipment. Do not touch or walk through spilled material.

SAFETY DATA SHEET

ADDITIN RC 3180



Version Revision Date: SDS Number: Date of last issue: 09/30/2020
2.0 10/03/2024 203000001805 Country / Language: US / EN

Evacuate personnel to safe areas.
Keep unnecessary and unprotected personnel from entering.
Provide adequate ventilation.
Do not breathe vapors, aerosols.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform
respective authorities.

Methods and materials for : Stop leak if safe to do so.
containment and cleaning up Move containers from spill area.
Wash spillages into an effluent treatment plant or proceed as
follows.
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.
Contaminated absorbent material may pose the same hazard
as the spilled product.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Remove contaminated clothing and protective equipment be-
fore entering eating areas.
Workers should wash hands and face before eating, drinking
and smoking.
Put on appropriate personal protection equipment.
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 container closed when not in use.
Containers that have been opened must be carefully resealed
and kept upright to prevent leakage.
Do not store in unlabeled containers.
Use appropriate container to avoid environmental contamina-
tion.
Empty containers retain residue and can be dangerous.
Do not reuse container.

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

|| Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline.
A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.

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 : Tightly fitting safety goggles
If inhalation hazards exist, a full-face respirator may be required instead.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

SAFETY DATA SHEET

ADDITIN RC 3180



Version Revision Date: SDS Number: Date of last issue: 09/30/2020
2.0 10/03/2024 203000001805 Country / Language: US / EN

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : viscous liquid

Physical state : liquid

Color : amber

Odor : characteristic

Odor Threshold : No data available

pH : 5.5 - 6.5

Pour point : -17 °F / -27 °C

Boiling point/boiling range : (1,013 hPa)
Decomposition: Yes

Flash point : 297 °F / 147 °C

Method: closed cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available
Remarks: No data available

Self-ignition : 464 °F / 240 °C
Autoignition temperature

Upper explosion limit / Upper
flammability limit : No data available

Lower explosion limit / Lower
flammability limit : No data available

Vapor pressure : 0.000042 hPa (77 °F / 25 °C)

Relative vapor density : No data available

Relative density : No data available

Density : 1.15 g/cm³ (68 °F / 20 °C)

Solubility(ies)
Water solubility : 0.0091 g/l

Solubility in other solvents : No data available

SAFETY DATA SHEET

ADDITIN RC 3180



Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2020
2.0	10/03/2024	203000001805	Country / Language: US / EN

Partition coefficient: n-octanol/water : log Pow: 3.59

Ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

 Viscosity, dynamic : No data available

 Viscosity, kinematic : 300 mm²/s (104 °F / 40 °C)

Explosive properties : No data available

Oxidizing properties : No data available

Molecular weight : 772 g/mol

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 chemically 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 : Formation of alkylmercaptans, dialkylsulphides, traces of hydrogen sulphide possible.
After prolonged heating, slow decomposition may start at above 80°C.
Decomposition begins at 180 °C with longer persisting heating.

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Eye contact
Skin contact
Ingestion

Acute toxicity

Not classified due to lack of data.

Components:

Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4):

Acute oral toxicity : LD50 (Rat): > 3,100 mg/kg
 Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
 Method: OECD Test Guideline 402

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Components:

Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4):

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4):

Species : Rabbit
Result : Risk of serious damage to eyes.

Respiratory or skin sensitization

Skin sensitization

Based on available data, the classification criteria are not met.

Respiratory sensitization

Not classified due to lack of data.

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

Components:

Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4):

Species : Guinea pig
Method : OECD Test Guideline 406
Result : Not a skin sensitizer.

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

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

Not classified due to lack of data.

STOT-single exposure

Not classified due to lack of data.

STOT-repeated exposure

Not classified due to lack of data.

Repeated dose toxicity

Components:

Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4):

NOAEL : 125 mg/kg
Method : OECD Test Guideline 407

Aspiration toxicity

Not classified due to lack of data.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4):

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.4 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 75 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 240 mg/l
Exposure time: 72 h
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.4 mg/l
Exposure time: 21 d
- Toxicity to microorganisms : EC50 (Pseudomonas putida): 380 mg/l
Exposure time: 16 h
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kS,kS']-, (T-4):

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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)

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

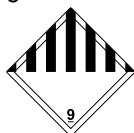
Waste from residues : The generation of waste should be avoided or minimized wherever possible.
This material and its container must be disposed of in a safe way.
Empty containers retain product residue; observe all precautions for product.
Avoid dispersal of spilled material and runoff and contact with 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

International Regulations

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(2-ETHYLHEXYL-ZINCDITHIOPHOSPHATE)
Class : 9
Packing group : III
Labels : 9
:



Packing instruction (cargo aircraft) : 964 : 450.00 L
Packing instruction (passenger aircraft) : 964 : 450.00 L
Environmentally hazardous : yes



IMDG-Code

UN number : UN 3082
UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(2-ETHYLHEXYL-ZINCDITHIOPHOSPHATE)
Class : 9
Packing group : III
Labels : 9

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

EmS Code : F-A, S-F
Marine pollutant : yes



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

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(2-ETHYLHEXYL-ZINCDITHIOPHOSPHATE)
Class : 9
Packing group : III
Labels : 9



ERG Code : 171
Marine pollutant : yes



Hazard and Handling Notes.

Environmentally hazardous substance.

Risk of serious damage to eyes

Keep separated from foodstuffs

The U.S. DOT regulations in 49 CFR 172.102 permit this material to ship as an Environmentally Hazardous Substance, Class 9, using Special Provision 146.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet.

SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA 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 : Serious eye damage or eye irritation

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

Zinc, bis[O,O-bis(2-ethylhexyl)phosphorodithioato-kS,kS']-, (T-4)	4259-15-8	>= 90 - <= 100 %
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US State Regulations

Massachusetts Right To Know

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

Pennsylvania Right To Know

Zinc, bis[O,O-bis(2-ethylhexyl)phosphorodithioato-kS,kS']-, (T-4)	4259-15-8	>= 90 - <= 100
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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 : All substances listed as active on the 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.

SECTION 16. OTHER INFORMATION

Further information

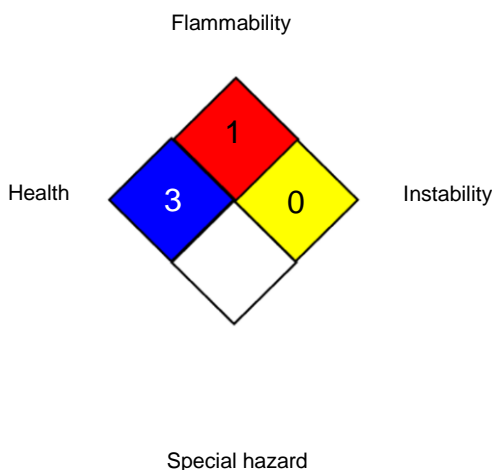
SAFETY DATA SHEET

ADDITIN RC 3180



Version 2.0 Revision Date: 10/03/2024 SDS Number: 203000001805 Date of last issue: 09/30/2020
Country / Language: US / EN

NFPA 704:



HMIS® IV:

HEALTH	/	3
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.

Full text of other abbreviations

AiIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments

SAFETY DATA SHEET

ADDITIN RC 3180



Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2020
2.0	10/03/2024	203000001805	Country / Language: US / EN

and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 10/03/2024

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. 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 to be a guidance for processing and does not contain any 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. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

Relevant changes from the previous version are marked on the left side of the Safety Data Sheet with a black double bar in appropriate places.