

# SAFETY DATA SHEET

## ADDITIN RC 3580



Version            Revision Date:            SDS Number:            Date of previous issue: 10/30/2018  
2.0                12/05/2020              103000010550        Country / Language: US / EN

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### SECTION 1. IDENTIFICATION

Product name                : ADDITIN RC 3580  
Material number             : 05058031  
Recommended use            : Additive for lubricants

#### 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


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### SECTION 2. HAZARDS IDENTIFICATION

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

Skin irritation                : Category 2  
Skin sensitization            : Category 1

#### GHS label elements

Hazard pictograms            : 

Signal Word                    : Warning  
Hazard Statements            : Causes skin irritation.  
                                  May cause an allergic skin reaction.

Precautionary Statements    : **Prevention:**  
                                  Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
                                  Wash skin thoroughly after handling.  
                                  Contaminated work clothing must not be allowed out of the

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workplace.  
Wear protective gloves.

**Response:**

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

**Disposal:**

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

**Hazard Not Otherwise Classified (HNOC)**

None known.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture  
Chemical nature : Phosphorus, solution, in mineral oil

**Hazardous ingredients**

Chemical name	CAS-No.	Concentration (% w/w)
Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum	72030-25-2	>= 70 - < 90
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 20 - < 30

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

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### SECTION 4. FIRST AID MEASURES

If inhaled : Get medical attention.  
Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If unconscious, place in recovery position and get medical attention immediately.  
Maintain open airway.  
Loosen tight clothing such as a collar, tie, belt or waistband.  
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

In case of skin contact : Get medical attention.  
Wash off with soap and plenty of water.  
Continue to rinse for at least 20 minutes.

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Wash contaminated clothing thoroughly with water before removing it, or wear gloves.  
Wash contaminated clothing before re-use.  
Thoroughly clean shoes before reuse.  
In the event of any complaints or symptoms, avoid further exposure.

- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Continue to rinse for at least 10 minutes.  
Remove contact lenses.  
Get medical attention.
- If swallowed : Get medical attention.  
Rinse mouth with water.  
Do not induce vomiting unless directed to do by medical personnel.  
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

### Most important symptoms and effects, both acute and delayed

- Symptoms : Skin: Causes irritation with symptoms of reddening, itching, and swelling.  
Once sensitized, an allergic skin reaction may occur with reddening, swelling, and rash when subsequently exposed to very low levels.  
May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
- Effects : Causes skin irritation.  
May cause an allergic skin reaction.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.

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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.  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
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- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
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 : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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### 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.  
Evacuate personnel to safe areas.  
Keep unnecessary and unprotected personnel from entering.
- 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.  
Wash spillages into an effluent treatment plant or proceed as follows.  
Keep people away from and upwind of spill/leak.  
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.
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### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Remove contaminated clothing and protective equipment before entering eating areas.  
Workers should wash hands and face before eating, drinking
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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 contamination.

Recommended storage temperature : 68 - 77 °F (20 - 25 °C)

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

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	TWA (Mist)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Inhalable particulate matter)	5 mg/m <sup>3</sup>	ACGIH

**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.  
Recommended:  
NIOSH approved, air-purifying organic vapor respirator.

Hand protection  
Material : Use chemical-resistant, impervious gloves.

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Material : Polyvinyl chloride - PVC  
Wearing time : < 60 min

Material : Nitrile rubber - NBR  
Wearing time : < 60 min

Material : Butyl rubber - IIR  
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.  
Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

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.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Color : green, dark

Odor : slight

Odor Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : 302 °F (150 °C)  
Method: DIN ISO 2592, open cup

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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	:	1.08
Density	:	1.08 g/cm <sup>3</sup> (68 °F (20 °C))
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	soluble Solvent: mineral oil
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	No data available
Decomposition temperature	:	302 °F (150 °C)
Viscosity		
Viscosity, kinematic	:	50 mm <sup>2</sup> /s (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 chemically stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.

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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.

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### 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 inhalation toxicity : Acute toxicity estimate: 26.25 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method

#### Components:

##### **Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

Acute oral toxicity : LD50 (Rat): 6.81 ml/kg bw

Acute dermal toxicity : LD50 (Rabbit): 10 ml/kg bw

##### **Distillates (petroleum), hydrotreated heavy naphthenic:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

#### **Skin corrosion/irritation**

Causes skin irritation.

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### Components:

#### **Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

Species: reconstructed human epidermis (RhE)  
Method: OECD Test Guideline 439  
Result: Irritating to skin.

#### **Distillates (petroleum), hydrotreated heavy naphthenic:**

Result: No skin irritation

#### **Serious eye damage/eye irritation**

Not classified based on available information.

### Components:

#### **Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

Species: Bovine cornea  
Result: No eye irritation  
Method: OECD Test Guideline 437

#### **Distillates (petroleum), hydrotreated heavy naphthenic:**

Result: No eye irritation

#### **Respiratory or skin sensitization**

##### **Skin sensitization**

May cause an allergic skin reaction.

##### **Respiratory sensitization**

Not classified based on available information.

### Components:

#### **Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

Test Type: Lymph nodes  
Species: Mouse  
Method: OECD Test Guideline 429  
Result: Probability or evidence of low to moderate skin sensitization rate in humans

#### **Distillates (petroleum), hydrotreated heavy naphthenic:**

Routes of exposure: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: Did not cause sensitization on laboratory animals.

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**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

Genotoxicity in vitro            : Test Type: reverse mutation assay  
  : Test system: Salmonella typhimurium  
  : Metabolic activation: with and without metabolic activation  
  : Method: OECD Test Guideline 471  
  : Result: negative

  : Test Type: Micronucleus test  
  : Test system: Human lymphocytes  
  : Metabolic activation: with and without metabolic activation  
  : Method: OECD Test Guideline 487  
  : Result: negative

  : Test Type: gene mutation test  
  : Test system: mouse lymphoma cells  
  : Metabolic activation: with and without metabolic activation  
  : Method: OECD 490  
  : Result: negative

**Distillates (petroleum), hydrotreated heavy naphthenic:**

Genotoxicity in vitro            : Test system: Mammalian-Animal  
  : 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**

Not classified based on available information.

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### Components:

#### **Distillates (petroleum), hydrotreated heavy naphthenic:**

Effects on fetal development : Species: Rat  
Application Route: Dermal  
Dose: 0 - 2000 milligram per kilogram  
Result: No teratogenic potential.

#### **STOT-single exposure**

Not classified based on available information.

### Product:

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

### Components:

#### **Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

Assessment: May cause respiratory irritation.

#### **Distillates (petroleum), hydrotreated heavy naphthenic:**

Assessment: May cause respiratory irritation.

#### **STOT-repeated exposure**

Not classified based on available information.

#### **Repeated dose toxicity**

### Components:

#### **Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

Species: Rat  
NOAEL: 100 mg/kg  
Method: OECD Test Guideline 422

#### **Aspiration toxicity**

Not classified based on available information.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

#### **Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum:**

- Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
 End point: mortality  
 Exposure time: 96 h  
 Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 100 mg/l  
 End point: Immobilization  
 Exposure time: 48 h  
 Method: OECD Test Guideline 202
- Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l  
 End point: Growth rate  
 Exposure time: 72 h  
 Method: OECD Test Guideline 201
- Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l  
 End point: Respiration inhibition  
 Exposure time: 3 h  
 Method: OECD Test Guideline 209

#### **Distillates (petroleum), hydrotreated heavy naphthenic:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 5,000 mg/l  
 Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l  
 Exposure time: 48 h
- EL50 (Daphnia magna (Water flea)): > 100,000 mg/l  
 Exposure time: 96 h  
 Method: OECD Test Guideline 202
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 10 mg/l  
 Exposure time: 21 d  
 Method: OECD Test Guideline 211  
 Remarks: Fresh water
- Toxicity to microorganisms : IC50 (Desmodesmus subspicatus (green algae)): > 1,000 mg/l  
 Exposure time: 96 h

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### Persistence and degradability

#### Components:

##### Distillates (petroleum), hydrotreated heavy naphthenic:

Biodegradability : aerobic  
Concentration: 44 mg/l  
Result: Inherently biodegradable.  
Biodegradation: 31 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F  
GLP: yes

### Bioaccumulative potential

#### Components:

##### Distillates (petroleum), hydrotreated heavy naphthenic:

Partition coefficient: n-octanol/water : log Pow: > 6

### Mobility in soil

No data available

### Other adverse effects

No data available

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## 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.

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### 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.

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### SECTION 15. REGULATORY INFORMATION

#### CERCLA

None

#### 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** : Respiratory or skin sensitization  
Skin corrosion or irritation

#### 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

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##### Pennsylvania Right To Know

Bis[O,O-bis(2-ethylhexyl) phosphorodithioato-kappaS,kappaS']dioxodi-mu-thioxodimolybdenum	72030-25-2	>= 70 - < 90
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### California Prop. 65

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

### TSCA inventory

TSCA : On TSCA Inventory

### TSCA list

No substances are subject to a Significant New Use Rule.

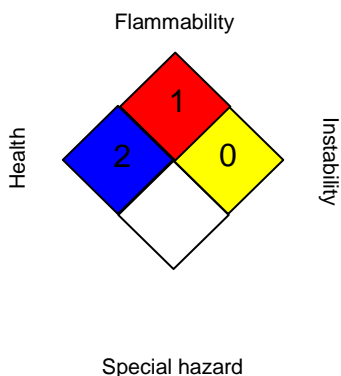
No substances are subject to TSCA 12(b) export notification requirements.

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## 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.

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