

SAFETY DATA SHEET



Exolit AP 420

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Substance key: SXR049373

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SECTION 1. IDENTIFICATION

Identification of the company:	Clariant Corporation 500 East Morehead Street Charlotte, NC, 28202 Telephone No.: +1 704 331 7000
	Information of the substance/preparation: Product Stewardship, +1-704-331-7710 e-mail: SDS.NORAM@clariant.com
	Emergency tel. number: +1 800-424-9300 CHEMTREC

Trade name: Exolit AP 420

Material number: 106975

CAS number: 68333-79-9

Primary product use: Additive

Primary product use: Flame retardants

Chemical family: aqueous solution of ammoniumpolyphosphate, approx. 45 % b.w.

SECTION 2. HAZARDS IDENTIFICATION

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

Hazards for the product as supplied

Not a hazardous substance or mixture.

Other hazards

None known.

GHS label elements

Not a hazardous substance or mixture.

Hazards resulting from a reaction with other chemicals under normal conditions of use:

Conditions	Chemicals formed	Hazards
Reacts with Strong bases	Ammonium hydroxide	Harmful if swallowed. Causes severe skin burns and eye damage.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

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Components

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 4. FIRST AID MEASURES

General advice	: Remove/ Take off immediately all contaminated clothing.
If inhaled	: Move the victim to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical advice/ attention. Never give anything by mouth to an unconscious person.
In case of skin contact	: Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.
In case of eye contact	: Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
If swallowed	: If swallowed, DO NOT induce vomiting. Do not give anything to drink. Call a physician immediately.
Most important symptoms and effects, both acute and delayed	: The possible symptoms known are those derived from the labelling (see section 2). No additional symptoms are known.
Notes to physician	: None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: water
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO) Carbon dioxide (CO2) Ammonia Burning produces noxious and toxic fumes.
Further information	: Exercise caution when fighting any chemical fire. Use NIOSH approved self-contained breathing apparatus and full protective clothing.
Special protective equipment for firefighters	: Self-contained breathing apparatus

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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
Contain spill. Small spills may be flushed to the sewer or absorbed on suitable absorbants. Larger spills should be collected as liquid or absorbed. Clean-up may be accomplished by flushing with water if appropriate or remove contaminated soils. place in appropriate containers.
- Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Observe the general rules of industrial fire protection
- Advice on safe handling : Avoid contact with skin, eyes and clothing.
Wash thoroughly after handling.
- Further information on storage conditions : Store in original container.
Keep container tightly closed.
Store in a cool, dry, well-ventilated area.
- Materials to avoid : Keep in a cool, well-ventilated place.
Keep away from alkali.

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

Contains no substances with occupational exposure limit values.

- Engineering measures** : Local ventilation recommended - mechanical ventilation may be used.

Personal protective equipment

- Respiratory protection : Use NIOSH/MSHA approved respirators following manufacturer's recommendations where dust or fume may be generated.
- Hand protection
Remarks : Butyl Rubber, PVC Or Neoprene.
- Eye protection : Safety glasses or chemical splash goggles.

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Skin and body protection : Wear suitable protective clothing.

Protective measures : Avoid prolonged or repeated contact with skin.

Hygiene measures : Clean skin thoroughly after work; apply skin cream.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : colourless

Odour : ammoniacal

pH : 5.0 - 7.5 (68 °F / 20 °C)
Concentration: 100 g/l
Method: DIN 19261

Freezing point : not determined

Boiling point : 210 °F / 99 °C
Based on water-content.

Flash point : Method: Expert judgement
does not flash

Evaporation rate : not determined

Flammability (solid, gas) : Not applicable

Flammability (liquids) : The product is not flammable.

Self-ignition : Not applicable

Upper explosion limit / upper
flammability limit : Not applicable

Lower explosion limit / Lower
flammability limit : Not applicable

Vapour pressure : < 1 mbar (68 °F / 20 °C)

Relative vapour density : not determined

Density : 1.29 - 1.31 g/cm³ (77 °F / 25 °C)

Bulk density : Not applicable

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Solubility(ies)	
Water solubility	: completely soluble (77 °F / 25 °C)
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: approx. 248 °F / 120 °C Method: DTA
Viscosity	
Viscosity, dynamic	: <= 100 mPa.s (68 °F / 20 °C)
Viscosity, kinematic	: not determined
Explosive properties	: Not explosive Method: Expert judgement GLP: no
Oxidizing properties	: The substance or mixture is not classified as oxidizing. Method: Expert judgement GLP: no The product does not contain organic peroxide-groups which result from either the manufacturing process or from added ingredients.
Impact sensitivity	: Not impact sensitive.
Metal corrosion rate	: Not applicable
Particle size	: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable
Possibility of hazardous reactions	: Contact with strong bases liberates ammonia. Stable
Conditions to avoid	: Incompatible with bases such as caustic soda. Evolves ammonia in contact with alkalies. Keep away from strong bases.
Incompatible materials	: See section 10.3. "Possibility of hazardous reactions"

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Hazardous decomposition products : Hazardous decomposition products:
Phosphorus oxides (eg Phosphorus pentoxide)
Ammonia

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Eye contact
Skin contact

Acute toxicity

Not classified

Product:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Remarks: Information refers to the main component.

Skin corrosion/irritation

Not classified

Product:

Species : Rabbit
Result : slight irritant effect - does not require labelling

Serious eye damage/eye irritation

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

Product:

Species : rabbit eye
Result : No eye irritation

Respiratory or skin sensitisation**Skin sensitisation**

Not classified

Respiratory sensitisation

Not classified

Germ cell mutagenicity

Not classified

Product:

Germ cell mutagenicity - Assessment : Not mutagenic in Ames Test

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Carcinogenicity

Not classified

Product:

Remarks : not tested.

IARC 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.

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 component 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

Product:

Reproductive toxicity - : No information available.
Assessment

STOT - single exposure

Not classified

STOT - repeated exposure

Not classified

Repeated dose toxicity

Product:

Remarks : not tested.

Aspiration toxicity

Not classified

Experience with human exposure

Product:

General Information : The possible symptoms known are those derived from the labelling (see section 2).

Further information

Product:

Remarks : Toxicological data refers to the pure substance.

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 100 - 1,000 mg/l
Exposure time: 96 h
Method: OECD

Toxicity to daphnia and other :
aquatic invertebrates Remarks: not tested.

Toxicity to algae/aquatic :
plants Remarks: not tested.

Toxicity to microorganisms : Remarks: not tested.

Persistence and degradability

Product:

Biodegradability : Remarks: not available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not tested.

Mobility in soil

no data available

Other adverse effects

Product:

Environmental fate and : Remarks: no data available
pathways

Additional ecological : May contribute to eutrophication in static waters, therefore
information should not be released into surface waters

Can be eliminated from water by flocculation.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource : No -- Not as sold.
Conservation and Recovery
Authorization Act

Waste from residues : Small quantities may be treated in aerobic wastewater
treatment systems. Larger quantities may be incinerated or
landfilled after solidification in permitted systems.

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Contaminated packaging : Uncontaminated packaging may be taken for recycling

SECTION 14. TRANSPORT INFORMATION

DOT	not restricted
IATA	not restricted
IMDG	not restricted

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

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

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS 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 : No SARA Hazards

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.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

The components of this product are reported in the following inventories:

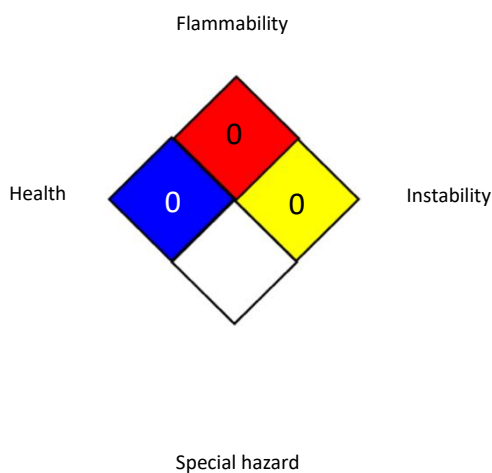
TSCA : On TSCA Inventory, All components are compliant with the TSCA Inventory Notification (Active) rule.

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SECTION 16. OTHER INFORMATION**Further information****NFPA 704:****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 Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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 - Organisation 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

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(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 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

Observe national and local legal requirements
None known.

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