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 OP 1400**
Material number: 253192

Primary product use: Flame retardants

Chemical family: mixture of flame retardants

SECTION 2. HAZARDS IDENTIFICATION

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

Hazards for the product as supplied
Combustible dust

Other hazards
No additional hazards are known except those derived from the labelling.

GHS label elements

Signal word : Warning

Hazard statements : May form combustible dust concentrations in air.

Precautionary statements :

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P243 Take action to prevent static discharges.
Prevent dust accumulations to minimize explosion hazard.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 4. FIRST AID MEASURES

General advice	:	Get medical advice/ attention if you feel unwell. Do not leave the victim unattended.
If inhaled	:	Move to fresh air. If unconscious, place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person. Get immediate medical advice/ attention. Give oxygen or artificial respiration if needed.
In case of skin contact	:	If on skin, rinse well with water. If on clothes, remove clothes. If skin irritation occurs, seek medical advice/attention.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. If easy to do, remove contact lens, if worn. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention.
Most important symptoms and effects, both acute and delayed	:	The possible health hazards known are those derived from the labelling (see corresponding section) and/or provided in this section. The possible symptoms known are those derived from the labelling (see section 2).
Notes to physician	:	Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray jet Alcohol-resistant foam Dry powder Carbon dioxide (CO2) Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	High volume water jet

Hazardous combustion products	:	Phosphorus compounds Carbon oxides Hydrocarbons
Further information	:	In the event of fire and/or explosion do not breathe fumes. Do not allow run-off from fire fighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	Wear full protective clothing and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Avoid breathing dust. Avoid dust formation. Wearing appropriate personal protective equipment, contain spill and collect into a suitable container.
Environmental precautions	:	The product should not be allowed to enter drains, water courses or the soil.
Methods and materials for containment and cleaning up	:	Avoid dust formation. Non-sparking tools should be used. Take measures to prevent the build up of electrostatic charge. Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly. Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Keep away from heat and sources of ignition. Observe the general rules of industrial fire protection Take precautionary measures against build-up of electrostatic charges, e.g earthing during loading and off-loading operations. Dust can form an explosive mixture in air. Electrical equipment should be protected to the appropriate standard.

Cool endangered containers with water spray jet.

Advice on safe handling	:	Use only with adequate ventilation/personal protection. For personal protection see section 8. Avoid contact with skin, eyes and clothing. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid dust formation. Take measures to prevent the build up of electrostatic charge. Ensure all equipment is electrically grounded before beginning transfer operations. Use only non-sparking tools.
Conditions for safe storage	:	Keep containers tightly closed in a dry, cool and well-ventilated place. Handle and open container with care. Keep away from sources of ignition - No smoking.
Materials to avoid	:	Keep in a cool place. Keep away from alkali.
Further information on storage stability	:	Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Use adequate exhaust ventilation and/or dust collection to keep dust levels below exposure limits.

Personal protective equipment

Respiratory protection	:	General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Hand protection Remarks	:	Butyl Rubber, PVC Or Neoprene.
Eye protection	:	Wear safety glasses with side shields or goggles.

Skin and body protection	:	Wear protective clothing, including long sleeves and gloves, to prevent skin contact.
Protective measures	:	Observe the usual precautions for handling chemicals. Avoid breathing dust or vapour.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Use protective skin cream before handling the product. Wash hands before breaks and at the end of workday. Take off immediately all contaminated clothing and wash it before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	white
Odour	:	odourless
Odour Threshold	:	not determined
pH	:	4.2 (68 °F / 20 °C) Concentration: 10 g/l
Melting point	:	> 680 °F / > 360 °C
Boiling point	:	not determined
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	not determined
Self-ignition	:	Method: Expert judgement The substance or mixture is not classified as pyrophoric. 644 °F / 340 °C 25 bar Method: VDI 2263 (Grewer) not auto-flammable
Burning number	:	1 Method: VDI 2263, ESCIS, Vol. 1 Does not catch fire

Upper explosion limit / upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Density	:	1.448 g/cm3 (68 °F / 20 °C)
Bulk density	:	466 g/lMethod: DIN 53466
Solubility(ies)		
Water solubility	:	3.2 g/l (68 °F / 20 °C)
Partition coefficient: n-octanol/water	:	not determined
Auto-ignition temperature	:	not determined
Decomposition temperature	:	> 662 °F / > 350 °C Heating rate: 5 K/min Method: DTA 824 - 860 °F / 440 - 460 °C Heating rate: 3 K/min Method: DSC Open cup at 25 bar air pressure 752 - 878 °F / 400 - 470 °C Heating rate: 3 K/min Method: DSC closed cup The substance or mixture is not classified self-reactive.
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive Not explosive Method: Regulation (EC) No. 440/2008, A.14
Oxidizing properties	:	Method: Expert judgement The product does not contain organic peroxide-groups which result from either the manufacturing process or from added ingredients.

Surface tension	:	Based on chemical structure, no surface activity is expected or can be predicted.
Dust explosion class	:	St1
Metal corrosion rate	:	no data available
Minimum ignition energy	:	> 100 mJ (68 °F / 20 °C) Method: Mike 3 apparatus
Particle size	:	14 µm Median value

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable
Possibility of hazardous reactions	:	The substance or mixture does not emit flammable gases in contact with water. Not corrosive to metals Risk of dust explosion.
Conditions to avoid	:	Temperatures exceeding thermal stability. High concentration of powders. Electrostatic charges.
Incompatible materials	:	none
Hazardous decomposition products	:	When handled and stored appropriately, no dangerous decomposition products are known

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact
Eye contact
Ingestion
Inhalation

Acute toxicity

Not classified

Skin corrosion/irritation

Not classified

Serious eye damage/eye irritation

Not classified

Respiratory or skin sensitisation

Skin sensitisation

Not classified

Respiratory sensitisation

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

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

STOT - single exposure

Not classified

STOT - repeated exposure

Not classified

Aspiration toxicity

Not classified

Experience with human exposure

Product:

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability

Product:

Biodegradability : Remarks: not available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not available

Mobility in soil

no data available

Other adverse effects

Product:

Environmental fate and pathways : Remarks: not available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource Conservation and Recovery Authorization Act : This product, if discarded as sold, is not a Federal RCRA hazardous waste.

Waste Code : NONE

Waste from residues : Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities

Contaminated packaging : Packaging that cannot be cleaned should be disposed of as product waste

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 : Combustible dust

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 SOCMI 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:

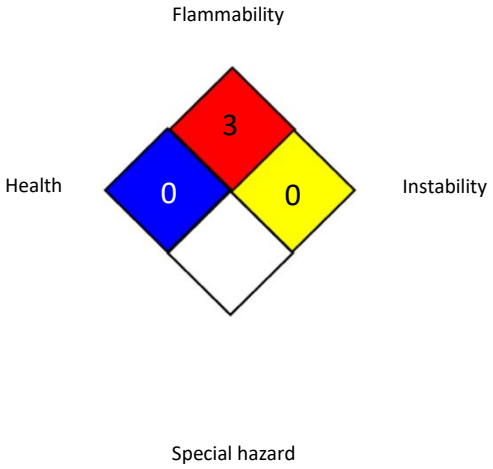
TSCA : On TSCA Inventory, All components are compliant with the TSCA Inventory Notification (Active) rule.

DSL : All components of this product are on the Canadian DSL

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 (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
Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Revision Date : 08/06/2025

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Clariant makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Clariant's products for its particular application. NO EXPRESS OR IMPLIED WARRANTY IS MADE OF THE MERCHANTABILITY, SUITABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE OF ANY PRODUCT OR SERVICE. Nothing included in this information waives any of Clariant's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Clariant products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Clariant.

US / EN