Substance key: SXR020969	Revision Date: 10/25/2021
Version : 4 - 3 / USA	Date of printing :04/01/2022

SECTION 1. IDENTIFICATION

Identification of the company:	Clariant Plastics & Coatings (Deutschland) GmbH Frankfurt am Main, 65926 Telephone No.: +49 69 305 18000 **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:	**HOSTANOX O 3 P**
Material number:	107014
CAS number:	32509-66-3
Primary product use:	Industrial use
Chemical family:	Bis-(3,3-bis-(4'-hydroxy-3'-tert butylphenyl) butanoic acid)-glycol ester

SECTION 2. HAZARDS IDENTIFICATION

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

Combustible dust

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.
P243 Take precautionary measures against static discharge.
P233 Keep container tightly closed.

Other hazards

Dust can form an explosive mixture in air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Substance name : Bis-(3,3-bis-(4'-hydroxy-3'-tert butylphenyl) butanoic acid)-glycol ester

CAS-No. : 32509-66-3

Components

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard 2012.

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	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if irritation develops and persists.
If swallowed	:	If conscious, give the victim plenty of water to drink. Get immediate medical advice/ attention.
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	:	Foam Water spray jet Dry powder
Unsuitable extinguishing media	:	High volume water jet Carbon dioxide (CO2)
Specific hazards during firefighting	:	Electrical grounding of equipment is required to prevent possible dust explosion. Emits toxic fumes under fire conditions.
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 Impervious clothing Protective helmets

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Wear suitable protective equipment. Wearing appropriate personal protective equipment, contain spill and collect into a suitable container. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
Environmental precautions	:	Do not allow to enter drains or waterways
Methods and materials for containment and cleaning up	:	Take up mechanically Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Take precautionary measures against build-up of electrostatic charges, e.g earthing during loading and off-loading operations. Keep away sources of ignition. Dust can form an explosive mixture in air.
Advice on safe handling	:	Avoid inhalation, ingestion and contact with skin and eyes. Wash thoroughly after handling. Avoid dust formation. Keep away from sources of ignition. Lead off electrostatic charges.
Further information on storage conditions	:	Store in a cool, dry, well-ventilated area. Keep container sealed when not in use.
Materials to avoid	:	Do not store with strong oxidizing agents Do not store or transport together with foodstuffs

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : A system of local and/or general exhaust is recommended where employee exposures are at or above Occupational Exposure Limits (OEL).

Personal protective equipment

Respiratory protection : Use NIOSH/MSHA approved respirators following manufacturer's recommendations where dust or fume may be generated.

Hand protection
Remarks : Nitrile rubber gloves.

Eye protection : Safety glasses with side-shields

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.

Hygiene measures : Observe the usual precautions for handling chemicals.
Do not eat, drink or smoke when using this product.
Keep away from food and drink.
Wash hands before breaks and at the end of workday.
Keep working clothes separately.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : light yellow

Odour : not specified

Odour Threshold : no data available

pH : Not applicable

Crystalline melting point : >= 333 °F / >= 167 °C
Method: DSC (after annealing at 140 °C/4h for crystallisation)
GLP: no

Boiling range : 655 - 658 °F / 346 - 348 °C
(1,013.25 hPa)
Method: OECD Test Guideline 103
GLP: no

Flammability (solid, gas) : not highly flammable
Method: Regulation (EC) No. 440/2008, Annex, A.10

Self-ignition	:	> 752 °F / > 400 °C Method: VDI 2263 (Grewer) GLP: no The substance or mixture is not classified as self heating. Method: Expert judgement GLP: no The substance or mixture is not classified as pyrophoric.
Burning number	:	1 Method: VDI 2263, ESCIS, Vol. 1 GLP: no Does not catch fire
Upper explosion limit / upper flammability limit	:	not tested.
Lower explosion limit / Lower flammability limit	:	20,000 mg/m3
Vapour pressure	:	< 0.0000001 hPa (68 °F / 20 °C) Method: OECD Test Guideline 104 GLP: yes < 0.0000001 hPa (77 °F / 25 °C) Method: OECD Test Guideline 104 GLP: yes < 0.0000001 hPa (122 °F / 50 °C) Method: OECD Test Guideline 104 GLP: yes
Relative density	:	ca. 1.1 (73 °F / 23 °C) Method: ISO 1183 GLP: no
Density	:	approx. 1.1 g/cm3 (73 °F / 23 °C) Method: ISO 1183
Solubility(ies)		
Water solubility	:	0.5 mg/l (68 °F / 20 °C) Method: OECD Test Guideline 105 GLP: no
Solubility in other solvents	:	> 70 g/l (68 °F / 20 °C) Solvent: Acetone 360 g/l (68 °F / 20 °C) Solvent: 1-octanol Method: OECD Test Guideline 105 GLP: yes

Partition coefficient: n-octanol/water	:	log Pow: > 6.5 Method: OECD Test Guideline 117 GLP: no
Auto-ignition temperature	:	788 °F / 420 °C
Decomposition temperature	:	> 752 °F / > 400 °C
Viscosity		
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	Not applicable
Surface tension	:	not required
Conductivity	:	0 µS/cm
Dust deflagration index (Kst)	:	329 m.b_/s
Dust explosion class	:	St3
Minimum ignition energy	:	13 mJ with inductive electrical resistance

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable
Possibility of hazardous reactions	:	The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions. The substance or mixture does not emit flammable gases in contact with water. Not corrosive to metals
Conditions to avoid	:	Keep away from heat and sources of ignition.
Incompatible materials	:	no data available
Hazardous decomposition products	:	At high temperatures: thermal decomposition giving toxic products. Carbon dioxide (CO2) Possible in traces: Phenol Toxic gases/vapours The product does not contain any chemical groups which suggest self-reactive properties, nor is the estimated SADT less than 75 °C, nor is the exothermic decomposition energy higher than 300 J/g.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Skin contact
Inhalation

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat, female): > 15,000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	Remarks: no data available
Acute dermal toxicity	:	Remarks: no data available

Skin corrosion/irritation

Product:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Product:

Species: Mouse
Method: OECD Test Guideline 429
Result: Not a skin sensitizer.

Germ cell mutagenicity

Product:

Genotoxicity in vitro	:	Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Mammalian cell gene mutation assay Test system: Chinese hamster fibroblasts Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects

Carcinogenicity

Product:

Carcinogenicity - Assessment : No information available.

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

Product:

Effects on foetal development : Species: Rat, male and female
Strain: wistar
Application Route: oral (feed)
Developmental Toxicity: NOAEL: 500 mg/kg body weight
Method: OECD Test Guideline 415

Species: Rat, male and female
Strain: wistar
Application Route: oral (feed)
General Toxicity Maternal: NOAEL: 100 mg/kg body weight
Developmental Toxicity: NOAEL: 100 mg/kg body weight
Method: OECD Test Guideline 421

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

STOT - single exposure

Product:

Remarks: no data available

STOT - repeated exposure

Product:

Remarks: no data available

Repeated dose toxicity

Product:

Species: Rat, male and female
NOAEL: 500 mg/kg bw/day
Application Route: oral (feed)
Method: OECD Test Guideline 452

Aspiration toxicity

Product:

no data available

Experience with human exposure

Product:

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

Further information

Product:

Remarks: According to experience, the product is considered to be harmless to health if used in the correct manner

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :
Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
End point: mortality
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : NOEC (Desmodesmus subspicatus (green algae)): 2.18 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to fish (Chronic : Remarks: no data available

toxicity)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 5 mg/l End point: Reproduction rate Exposure time: 21 d Test Type: semi-static test Method: OECD Test Guideline 211
Toxicity to microorganisms	:	NOEC (activated sludge): 1,000 mg/l Exposure time: 3 h Test Type: static test Method: OECD Test Guideline 209
Toxicity to soil dwelling organisms	:	NOEC (Eisenia fetida (earthworms)): 1000 mg/kg dry weight (d.w.) Exposure time: 56 d Method: OECD Test Guideline 222

Ecotoxicology Assessment

Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.

Persistence and degradability

Product:

Biodegradability	:	Test Type: aerobic Inoculum: activated sludge, domestic, non-adapted Biodegradation: 50 % Exposure time: 28 d Method: OECD Test Guideline 301F GLP: yes Remarks: Not readily biodegradable.
Stability in water	:	Degradation half life (pH): 508 d (68 °F / 20 °C) pH: 4 Hydrolysis: at 68 °F / 20 °C Method: OECD Test Guideline 111 GLP: yes Remarks: Hydrolyses readily. Degradation half life (pH): 178 d (86 °F / 30 °C) pH: 4 Hydrolysis: at 86 °F / 30 °C Method: OECD Test Guideline 111 GLP: yes Remarks: Hydrolyses readily. Degradation half life (pH): 456 h (122 °F / 50 °C) pH: 4 Hydrolysis: at 122 °F / 50 °C Method: OECD Test Guideline 111 GLP: yes Remarks: Hydrolyses slowly. Degradation half life (pH): 245 d (68 °F / 20 °C) pH: 7 Hydrolysis: at 68 °F / 20 °C

Method: OECD Test Guideline 111
GLP: yes
Remarks: Hydrolyses readily.

Degradation half life (pH): 2,045 h (86 °F / 30 °C) pH: 7
Hydrolysis: at 86 °F / 30 °C
Method: OECD Test Guideline 111
GLP: yes
Remarks: Hydrolyses readily.

Degradation half life (pH): 666 h (122 °F / 50 °C) pH: 7
Hydrolysis: at 122 °F / 50 °C
Method: OECD Test Guideline 111
GLP: yes
Remarks: Hydrolyses slowly.

Degradation half life (pH): 1,234 h (68 °F / 20 °C) pH: 9
Hydrolysis: at 68 °F / 20 °C
Method: OECD Test Guideline 111
GLP: yes
Remarks: Hydrolyses readily.

Degradation half life (pH): 357 h (86 °F / 30 °C) pH: 9
Hydrolysis: at 86 °F / 30 °C
Method: OECD Test Guideline 111
GLP: yes
Remarks: Hydrolyses readily.

Degradation half life (pH): 63.5 h (122 °F / 50 °C) pH: 9
Hydrolysis: at 122 °F / 50 °C
Method: OECD Test Guideline 111
GLP: yes
Remarks: Hydrolyses slowly.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Low potential for bioaccumulation (log Pow < 3).

Mobility in soil

Product:

Distribution among environmental compartments : adsorption
Medium: Soil
Koc: 8940, log Koc: 3.951
Method: OECD Test Guideline 121

Other adverse effects

Product:

Additional ecological information : Product is insoluble in water

May be eliminated in purification plants

The product should not be allowed to enter drains, water courses or the soil.

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	:	Must be incinerated in a suitable incineration plant holding a permit delivered by 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

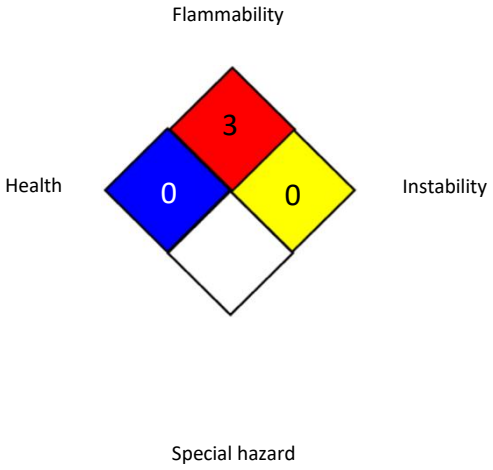
The components of this product are reported in the following inventories:

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

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 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 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

Handle with care. Organic dusts have the potential to be explosive with static spark or flame initiation.
For additional information, contact Product Stewardship.

Revision Date : 10/25/2021