Substance key: KS14282	Revision Date: 06/20/2018
Version : 5 - 1 / USA	Date of printing :10/07/2020

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 **Emergency tel. number:** +1 800-424-9300 CHEMTREC

Trade name:	**HOSTAVIN PR-31 P 0025**
Material number:	120470
CAS number:	147783-69-5
Primary product use:	Class of additive: Light stabilizer
Chemical family:	Bis(1,2,2,6,6-pentamethyl-4-piperidinyl)-2-(4-methoxy-benzylidene)malonate (IUPAC Name)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 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

Fine particles < 500 µm are potentially dust-explosive.
No additional hazards are known except those derived from the labelling.
Hazards Not Otherwise Classified:
Particulates of this material may cause mechanical irritation to the skin, eye and/or respiratory tract.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Substance name : Bis(1,2,2,6,6-pentamethyl-4-piperidinyl)-2-(4-methoxy-benzylidene)malonate

CAS-No. : 147783-69-5

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester	147783-69-5	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 : Get medical advice/ attention if you feel unwell.

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 : Treat symptomatically.

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 : Carbon oxides

Nitrogen oxides (NOx)

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

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 : Wear personal protective equipment.
In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
Keep away sources of ignition.
Avoid dust formation.
Wearing appropriate personal protective equipment, contain spill and collect into a suitable container.
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
Toxic to aquatic organisms.

Environmental precautions : Do not allow to enter drains or waterways

Methods and materials for containment and cleaning up : Take up with suitable equipment and if necessary collect in closed containers

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Avoid dust formation.

Observe the usual precautionary measures required for chemicals with dust explosive properties (Observe national regulations).

Advice on safe handling : Avoid dust formation. Keep away from sources of ignition.
Lead off electrostatic charges.
Avoid inhalation, ingestion and contact with skin and eyes.
Wash thoroughly after handling.

Technical measures/Precautions : Store in original container.
Keep container tightly closed.
Store in a cool, dry, well-ventilated area.

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 : Nitrile Gloves

Butyl Rubber, PVC Or Neoprene.

Eye protection : Safety glasses or chemical splash goggles.

Skin and body protection : Wear suitable protective equipment.

Protective measures : Observe the usual precautions for handling chemicals.
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Avoid contact with skin and eyes.

Hygiene measures : Do not breathe dust.
Avoid contact with skin and eyes.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : white

Odour : not specified

pH : approximately 9 (20 °C)
Concentration: 100 g/l

Melting range : 122 - 125 °C
Method: 92/69/EEC, A.1.
GLP: yes

Boiling point : 326 °C
(1,013 hPa)

		Method: OECD Test Guideline 103 GLP: yes
Flash point	:	Not applicable
Evaporation rate	:	not tested.
Flammability (solid, gas)	:	does not ignite Method: Flammability (solids) GLP: yes
Self-ignition	:	Method: Directive 67/548/EEC, Annex V, A.16 GLP: yes The substance or mixture is not classified as self heating. Method: Expert judgement The product melts below 160 °C. Therefore, no further testing of self-heating properties is required.
Burning number	:	2 (20 °C) Short flaring up without spreading 3 (100 °C) Local combustion without spreading
Upper explosion limit / upper flammability limit	:	not tested.
Lower explosion limit / Lower flammability limit	:	not tested.
Vapour pressure	:	< 0.0000001 mPa (25 °C) Method: OECD Test Guideline 104 GLP: yes
Relative vapour density	:	not tested.
Density	:	1.15 g/cm3 (22.5 °C, 1,013 hPa) Method: OECD Test Guideline 109 GLP: yes
Solubility(ies)		
Water solubility	:	0.0316 g/l (20 °C) Method: OECD Test Guideline 105 GLP: yes
Solubility in other solvents	:	approximately 0.5 g/l (20 °C) Solvent: Isopropanol not tested. Solvent: fat
Partition coefficient: n-	:	log Pow: 2.1 (24 °C)

octanol/water		Method: OECD Test Guideline 107 GLP: yes
Auto-ignition temperature	:	not tested.
Decomposition temperature	:	250 °C Method: isoperibolic decomposition test > 500 °C Heating rate: 3 K/min Method: OECD Test Guideline 113 No decomposition if used as directed.
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive Not explosive Method: OECD Test Guideline 113
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.
Dust explosion class	:	ST2 Capable of dust explosion
Minimum ignition energy	:	< 1 mJ with inductive electrical resistance
Particle size	:	< 98 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	:	Stable Potential dust explosion hazard. 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	:	none
Hazardous decomposition products	:	No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Skin contact
Ingestion

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat, male and female): 2,195 mg/kg Method: Tested according to Directive 92/69/EEC. GLP: yes
Acute inhalation toxicity	:	Remarks: no data available
Acute dermal toxicity	:	LD50 (Other): > 2,000 mg/kg Method: No information available. GLP: No information available.

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Acute oral toxicity	:	LD50 (Rat, male and female): 2,195 mg/kg Method: Tested according to Directive 92/69/EEC. GLP: yes
Acute inhalation toxicity	:	Remarks: no data available
Acute dermal toxicity	:	LD50 (Other): > 2,000 mg/kg Method: No information available. GLP: No information available.

Skin corrosion/irritation

Product:

Species: Rabbit
Method: Tested according to Directive 92/69/EEC.
Result: No skin irritation
GLP: yes

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Species: Rabbit
Method: Tested according to Directive 92/69/EEC.

Result: No skin irritation
GLP: yes

Serious eye damage/eye irritation

Product:

Species: Rabbit
Result: No eye irritation
Method: Tested according to Directive 92/69/EEC.
GLP: yes

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Species: Rabbit
Result: No eye irritation
Method: Tested according to Directive 92/69/EEC.
GLP: yes

Respiratory or skin sensitisation

Product:

Test Type: Mouse local lymphnode assay
Exposure routes: Dermal
Method: Tested according to Directive 92/69/EEC.
Result: Not a skin sensitizer.
GLP: yes

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Test Type: Mouse local lymphnode assay
Exposure routes: Dermal
Method: Tested according to Directive 92/69/EEC.
Result: Not a skin sensitizer.
GLP: yes

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: 92/69/EEC, B.14
Result: negative
GLP: yes

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster cells
Metabolic activation: with and without metabolic activation

Method: Mutagenicity (in vitro mammalian cytogenetic test)
Result: positive
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Strain: NMRI
Application Route: Oral
Method: Mutagenicity (micronucleus test)
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: 92/69/EEC, B.14
Result: negative
GLP: yes

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster cells
Metabolic activation: with and without metabolic activation
Method: Mutagenicity (in vitro mammalian cytogenetic test)
Result: positive
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Strain: NMRI
Application Route: Oral
Method: Mutagenicity (micronucleus test)
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Carcinogenicity

Product:

Carcinogenicity - Assessment : No information available.

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Carcinogenicity - Assessment : No information available.

IARC	Not listed
OSHA	Not listed
NTP	Not listed

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : No information available.

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Reproductive toxicity - Assessment : No information available.

STOT - single exposure

Product:

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

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

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

STOT - repeated exposure

Product:

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

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

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

Repeated dose toxicity

Product:

Species: Rat
NOAEL: 200 mg/kg bw/day
Application Route: oral (gavage)
Exposure time: 28
Number of exposures: daily
Dose: 0, 50, 200, 500 mg/kg/day b. w
Method: OECD Test Guideline 407
GLP: yes

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Species: Rat
NOAEL: 200 mg/kg bw/day
Application Route: oral (gavage)
Exposure time: 28
Number of exposures: daily
Dose: 0, 50, 200, 500 mg/kg/day b. w
Method: OECD Test Guideline 407
GLP: yes

Aspiration toxicity

Product:

no data available

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

no data available

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

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.7 mg/l
End point: mortality
Test Type: static test
Method: Tested according to Directive 92/69/EEC.

GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 46.5 mg/l
Exposure time: 48 h
Test Type: static test
Method: Tested according to Directive 92/69/EEC.
GLP: yes

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 60 mg/l
End point: Growth rate
Exposure time: 72 h
Method: Tested according to Directive 92/69/EEC.
GLP: yes

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.32 mg/l
Exposure time: 28 d
Test Type: flow-through test
Method: OECD Test Guideline 204
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.1 mg/l
End point: Reproduction rate
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yes

Toxicity to microorganisms : IC50 (other bacteria): > 100 mg/l
Exposure time: 0.5 h
Method: Directive 87/302/EEC, part C, p. 118
GLP: yes

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.7 mg/l
End point: mortality
Test Type: static test
Method: Tested according to Directive 92/69/EEC.
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 46.5 mg/l
Exposure time: 48 h
Test Type: static test
Method: Tested according to Directive 92/69/EEC.
GLP: yes

Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): > 60 mg/l End point: Growth rate Exposure time: 72 h Method: Tested according to Directive 92/69/EEC. GLP: yes
Toxicity to fish (Chronic toxicity)	:	NOEC (Oncorhynchus mykiss (rainbow trout)): 0.32 mg/l Exposure time: 28 d Test Type: flow-through test Method: OECD Test Guideline 204 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.1 mg/l End point: Reproduction rate Exposure time: 21 d Test Type: semi-static test Method: OECD Test Guideline 211 GLP: yes
Toxicity to microorganisms	:	IC50 (other bacteria): > 100 mg/l Exposure time: 0.5 h Method: Directive 87/302/EEC, part C, p. 118 GLP: yes

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Product:

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 14.1 % (Carbon dioxide (CO2)) Exposure time: 28 d Method: Tested according to Directive 92/69/EEC. GLP: yes

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Biodegradability	:	Carbon dioxide (CO2) Result: Not readily biodegradable. Biodegradation: 14.1 % Exposure time: 28 d Method: Tested according to Directive 92/69/EEC. GLP: yes

Bioaccumulative potential

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Partition coefficient: n-octanol/water : log Pow: 2.1 (24 °C)
Method: Tested according to Directive 92/69/EEC.
GLP: yes

Mobility in soil

no data available

Other adverse effects

Product:

Results of PBT and vPvB assessment : Remarks: No information is available as no chemical safety report (CSR) is required.

Components:

Propanedioic acid, ((4-methoxyphenyl)methylene)-, bis(1,2,2, 6,6-pentamethyl-4-piperidinyl)ester:

Results of PBT and vPvB assessment : The substance is not identified as a PBT or as a vPvB substance.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

Waste Code : none

Waste from residues : This product is not readily biodegradable in a wastewater treatment system and is toxic to aquatic life. The preferred method of disposal is incineration in approved systems.

Contaminated packaging : Consider recycling.

Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Regulation:

Proper shipping name:	Environmentally hazardous substances, solid, n.o.s.
Hazard class:	9
Packing group:	III
UN/NA-number:	UN 3077
Primary hazard class:	9
Technical Name:	Piperidinyl derivative

IATA

Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
Class:	9
Packing group:	III
UN/ID number:	UN 3077
Primary risk:	9
Remarks:	Shipment permitted
Hazard inducer(s):	Piperidinyl derivative

IMDG

Proper shipping name:	Environmentally hazardous substance, solid, n.o.s.
Class:	9
Packing group:	III
UN no.:	UN 3077
Primary risk:	9
Hazard inducer(s):	Piperidinyl derivative
Marine pollutant:	Marine Pollutant
EmS:	F-A S-F

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

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 product does not contain any toxic chemical listed under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986.

Clean Water Act

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

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

TSCA : On TSCA Inventory, This product or a component in this product is regulated by a TSCA Section 5 Significant New Use Rule (SNUR) or a proposed SNUR and is also subject to TSCA Section 12(B) Export Notification Requirements., See 40 CFR § 721.4589, For additional information, contact Product Stewardship.

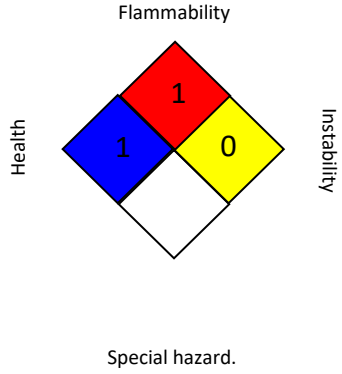
TSCA list

TSCA - 12(b) Export Notification List of Chemicals:

SECTION 16. OTHER INFORMATION

Further information

NFPA:



Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; 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; 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

On the basis of an extensive test program, which had to be submitted to the competent authority on the occasion of the Notification of the substance in the European Community, this product was found to be toxicologically not dangerous within the meaning of the EC Directives.
Nevertheless, in line with the precautionary principle, we recommend taking measures to avoid dust formation and to protect the skin, eyes and respiratory tract of exposed persons while handling this product in his powder form.
EPA issued a Significant New Use Rule (SNUR) in 40 CFR 721.4589 under Section 5(a)(2) of TSCA applicable to Clariant, as well as customers, restricting the planned release of the product from any site to US waters. All SNUR substances are subject to TSCA Export Notification provisions.

Revision Date : 06/20/2018

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