Safety Data Sheet
IRGANOX® 1010

1. Product and Company Identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

Registrant:

2. Hazards Identification

Emergency overview

Signal word:	NOTICE! !
Colour:	White to off-white
Appearance:	powder
State of matter:	solid
Odour:	odourless
Health:	This product has no known adverse effect on human health.
Physical/Chemical hazards:	Refer to MSDS Section 7 for Dust Explosion information.

Potential health effects

Primary routes of entry:

Ingestion, Skin, Inhalation, Eyes

Potential environmental effects

Low toxicity to aquatic organisms.

3. Composition/Information on Ingredients

This material is classified as not hazardous under OSHA regulations.

4. First-aid Measures

Inhalation:

Remove to fresh air, if not breathing give artificial respiration. If breathing is difficult, give oxygen and get immediate medical attention.

Skin:

After contact with skin, wash immediately with plenty of water and soap.
Get medical attention if irritation occurs.

Eyes:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion:

Do not induce vomiting. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Seek medical attention immediately.

Notes to physician:

None known

5. Fire-fighting Measures

Suitable extinguishing media:

carbon dioxide, dry powder, foam, water fog

Hazardous combustion products:

Burning may produce toxic combustion products.

Hazards during fire-fighting:

Standard procedure for chemical fires.
The product can form an explosive dust/air mixture. For further information, see Section 7 Explosion Hazards.

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

6. Accidental Release Measures

Cleanup:

Sweep up and shovel into suitable containers for disposal.
Avoid raising dust.
Wear suitable protective equipment.
Should not be released into the environment.

7. Handling and Storage

Handling

General advice:

As with all industrial chemicals, use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale. Do not taste or swallow. Use only with adequate ventilation.

Protection against fire and explosion:

Combustible powder. - Avoid creating dusty conditions. - Grounding is required when emptying into a conductive container. - When flammable solvents are present, the container must be inerted or the system otherwise designed to prevent or contain an explosion. Seek expert advice. In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liners, steel drums, steel pails, and Type " C " FIBC (bulk bags), or other conductive the following instructions also apply: - Always ground this package before emptying. The user is responsible for designing the system to handle solid and ensuring proper training of employees in the system's use.

Storage

General advice:

Keep container tightly closed in a dry, cool and well-ventilated place.

> for industrial use only <

8. Exposure Controls and Personal Protection

Exposure Guidelines

Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, 1,1'-[2,2-bis[[3-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopro (6683-19-8)	CIEL	8h TWA: 10 mg/m3 (Inhalable) General exposure limit for inhalable particulate matter

Engineering Controls:

Work in well ventilated areas. Do not breathe dust.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified respirator as necessary.

Eye protection:

Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

Body protection:

Wear chemical resistant gloves and protective clothing.

General safety and hygiene measures:

There are no OSHA or ACGIH exposure guidelines available for component(s) in this product.

9. Physical and Chemical Properties

Colour:	White to off-white	
Form:	powder	
State of matter:	solid	
Odour:	odourless	
pH value:	5.9	(20 - 25 °C) (as suspension), Tested concentration: 1%
Evaporation rate:		Not tested
Flammability:	Not tested	
Lower explosion limit:		no data available
Upper explosion limit:		no data available
Flash point:	297 °C	(DIN 51584)
Self-ignition temperature:	> 350 °C	
Dust explosion class:	Heavy Dust Explosion. (2)	(20 lt ball at 10'000 Joule)
Melting point:	110 - 125 °C	
Boiling point:		Not applicable
Sublimation point:		Not applicable
Vapour pressure:	0.13 nPa	(20 °C)
Density:	1.15 g/cm3	(20 °C)
Relative density:		no data available
Vapour density:		Not tested

Partitioning coefficient n-octanol/water (log Pow):	23	(OECD 107/EC A.8) calculated
Viscosity, dynamic:		Not applicable
Viscosity, kinematic:		no data available
% Volatiles:	0.5 %	
Solubility in water:	< 0.0001 g/l	(20 °C)
Solubility in other solvents:		Not tested
Autoignition:	410 °C	(BAM)

10. Stability and Reactivity

Stability:

Stable

Conditions to avoid: Avoid electro-static discharge. Avoid sources of ignition.

Substances to avoid: Strong oxidizing agents, strong acids, strong bases.

Possibility of Hazardous Reactions: No hazardous reactions known.

Hazardous decomposition products: No decomposition expected under normal storage conditions.

11. Toxicological Information

Acute oral toxicity:

LD50 / Oral / rat: > 5,000 mg/kg

Acute inhalation toxicity:

No deaths or substance-related symptoms were recorded.

Acute dermal toxicity:

LD50 / dermal / rat: > 3,160 mg/kg

Skin irritation:

(Rabbits) Not an irritant.

Eye irritation:

(Rabbits) Not an irritant.

Skin Sensitization:

RIPT (Humans): Not an irritant or a sensitizer. under the conditions of the study, which involved testing of a 0.5% w/v solution in dimethyl phthalate. (Guinea pig) Maximization test: Not a sensitizer.

Subchronic Toxicty:

The test substance was administered by incorporation into the diet to albino rats at concentrations of 0, 2,000, 10,000 and 50,000 ppm for 90 days. No significant abnormalities were seen among parameters such as growth, food consumption, mortality, behavioral patterns, hematology, clinical blood chemistry, urinalysis, organ weight data and gross and microscopic pathology. The no-observable effect level (NOEL) was 50,000 ppm, equivalent to 2,500 mg/kg/day. The test substance was administered by incorporation into the diet to groups of Beagle dogs at concentrations of 0, 1,000 and 10,000 ppm for 3 months. There were no deaths during the study. Growth rates and food consumption were within normal limits in all groups. There were no relevant changes in laboratory parameters(hematology, clinical chemistry and urinalysis) and no treatment related changes were seen at autopsy or on histopathological examination. The NOEL was 10,000 ppm, corresponding to an average intake of 322 mg/kg/day.

Subacute toxicity:

not determined

Genetic toxicity:

Ames Test: negative
Dominant lethal study: Non-mutagenic
Nucleus anomaly test in somatic interphase nuclei (Chinese hamster): Negative.

Carcinogenicity:

No treatment related changes were seen in any of the measured endpoints, including tumor formation. The NOEL was 10,000 ppm, equivalent to approximately 116 mg/kg/day.
None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Developmental toxicity/teratogenicity:

No evidence of teratogenic or embryotoxic effects when pregnant rats and mice were dosed at levels up to and including 1000 mg/kg by gavage from day 6 through 15 of pregnancy.
(Rats)
NOEL = 10,000 ppm, in diet, for all endpoints over two generations of parents, litters, and offspring.

Neurotoxicity:

not determined

12. Ecological Information

Toxicity to fish:

Brachydanio rerio/96 h/LC50: > 100 mg/l (OECD Guide-line 203)

Toxicity to aquatic invertebrates:

Daphnia magna/24 h/EC50: > 86 mg/l (OECD 202)
The tested concentration is well above its water solubility

Toxicity to aquatic plants:

Scenedesmus sp./72 h/EC50: > 100 mg/l (Guideline 92/69/EEC, C.3)

Toxicity to microorganisms:

activated sludge/3 h/IC50: > 100 mg/l (OECD 209)

Mobility

no data available

Biodegradation:

Test method:	OECD 303A
Degree of elimination:	45 % (28 Days)
Evaluation:	Eliminated
Test method:	OECD 301B
Degree of elimination:	5 % (28 Days)
Evaluation:	Not readily biodegradable.

Bioaccumulation:

OECD Guideline 305 C

Bioconcentration factor: < 2.3

13. Disposal Considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

14. Transport Information

U.S. Department of Transportation

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

Road transport:

Special shipping information: Not classified as a dangerous good under transport regulations.

Air transport:

Special shipping information: Not classified as a dangerous good under transport regulations.

International Air Transport Association (IATA)

Special shipping information: Not classified as a dangerous good under transport regulations.

International Maritime Dangerous Goods Code (IMDG)

Special shipping information: Not classified as a dangerous good under transport regulations.

15. Regulatory Information

US: Toxic Substances Control Act (TSCA):	All component(s) comprising this product are either exempt or listed on the TSCA inventory
Canada: Domestic Substances List (DSL):	All components either exempt or listed on the DSL

United States - Regulations

SARA Section 311/312 Hazard Communication Standard:

Acute Health:	N	Fire:	N
Chronic Health:	N	Reactivity:	N
		Sudden release of pressure:	N

SARA Reportable Quantities:

No components listed.

SARA Section 313 Toxic Chemical List:

No components listed.

OSHA hazard category:

This material is classified as not hazardous under OSHA regulations.

Toxic Substances Control Act (TSCA) Significant New Use Rule (SNUR):

This product is not subject to a Significant New Use Rule (SNUR).

Toxic Substances Control Act (TSCA) Section 5(e) Consent Orders:

This product is not subject to a Section 5(e) Consent Order.

Toxic Substances Control Act (TSCA) Section 5(f):

This product is not subject to a Section 5(f)/6(a) rule.

Toxic Substances Control Act (TSCA) Section 12(b) Export Notification:

No components listed.

Clean Air Act - Hazardous Air Pollutants (HAP):

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

Clean Air Act 602 - Ozone Depleting Substances (ODS):

This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS), as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).

Clean Water Act - Priority Pollutants (PP):

This product does not contain any priority pollutants listed under the U.S. Clean Water Act Section 307(2)(1) Priority Pollutant List (40 CFR 401.15).

Pennsylvania Right to Know:

This product does not contain any components that are subject to the Pennsylvania Right-To-Know disclosure requirement.

California Proposition 65 - Chemicals Known to the State to Cause Cancer:

No components listed.

California Proposition 65 - Chemicals Known to the State to Cause Reproductive Toxicity:

No components listed.

International Regulations

Chemical Weapons Convention:

This product does not contain any component(s) listed under the Chemical Weapons Convention Schedule of Chemicals.

16. Other Information