We create chemistry

Safety data sheet

1. Substance/preparation and manufacturer/supplier identification

Irganox® 1076

Use: stabilizer

Manufacturer/supplier:
BASF Vietnam Co. Ltd.
12 Tu do Boulevard, Vietnam-Singapore IP
Thuan An, Binh Duong, VIETNAM
Telephone: +84 6503 743-100
Telefax number: +84 6503 743-200
E-mail address: dinhnam.nguyen@basf.com

Emergency information:
International emergency number:
Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:
No need for classification according to GHS criteria for this product.

Label elements and precautionary statement:

The product does not require a hazard warning label in accordance with GHS criteria.

Other hazards which do not result in classification:
The product is under certain conditions capable of dust explosion.

3. Composition/information on ingredients

Chemical nature

Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, octadecyl ester
CAS Number: 2082-79-3

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink plenty of water.

Note to physician:
Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
Further important symptoms and effects are so far not known.
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
dry powder, foam

Unsuitable extinguishing media for safety reasons:
carbon dioxide

Additional information:
Avoid whirling up the material/product because of the danger of dust explosion.

Specific hazards:
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:
Avoid dust formation. Use personal protective clothing.

Environmental precautions:
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Contain with dust binding material and dispose of.
Avoid raising dust.

7. Handling and Storage

Handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:
Avoid dust formation. Take precautionary measures against static discharges.

Dust explosion class: Dust explosion class 2 (Kst-value 200 up to 300 bar m s-1).

Storage

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:
Storage temperature: < 40 °C

The packed product is not damaged by low temperatures or by frost.
Protect from temperatures above: 40 °C
The packed product must be protected against exceeding the indicated temperature.

8. Exposure controls and personal protection

Components with occupational exposure limits

No occupational exposure limits known.

Personal protective equipment

Respiratory protection:
Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:
Chemical resistant protective gloves
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):
e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Safety glasses with side-shields.

Body protection:
Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	granules, fine	
Colour:	white	
Odour:	odourless	
Odour threshold:	No applicable information available.	
pH value:	5.7 (1 %(m), 20 - 25 °C) (as suspension)	
Melting point:	50 - 55 °C	
Boiling point:	not applicable	
Flash point:	273 °C	(DIN 51584)
Evaporation rate:	The product is a non-volatile solid.	
Flammability (solid/gas):	not highly flammable	
Lower explosion limit:	For solids not relevant for classification and labelling.	

Upper explosion limit:		
	For solids not relevant for classification and labelling.	
Ignition temperature:	320 °C	
	> 250 °C The product has not been tested. The statement has been derived from the properties of the individual components.	
Thermal decomposition:	> 350 °C	
Self ignition:	not self-igniting	
Self heating ability:	It is not a substance capable of spontaneous heating.	
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.	
Fire promoting properties:	not fire-propagating	
Vapour pressure:	26.6 Pa (250 °C)	
Density:	1.02 g/cm3 (25 °C)	
Relative density:	1.012	(OECD Guideline 109)
Bulk density:	260 - 320 g/l	
Solubility in water:	practically insoluble	
Hygroscopy:	Non-hygroscopic	
Partitioning coefficient n-octanol/water (log Pow):	> 6 (20 - 25 °C)	
Surface tension:	not relevant	
Viscosity, dynamic:	not relevant	
Viscosity, kinematic:	not relevant	
Molar mass:	530.87 g/mol	

Other Information:
If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:
Avoid dust formation. Avoid deposition of dust. Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge.

Thermal decomposition:	> 350 °C

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

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:
Dust explosion hazard.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Experimental/calculated data:
LD50 rat (oral): > 5,000 mg/kg

LC50 rat (by inhalation): > 1,800 mg/m3 4 h (OECD Guideline 403)

LD50 rabbit (dermal): > 2,000 mg/kg

Irritation

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

Respiratory/Skin sensitization

Experimental/calculated data:
other guinea pig: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:
Based on the ingredients, there is no suspicion of a mutagenic effect.

Experimental/calculated data:
Ames-test
negative

Cytogenetic assay
hamster: negative

Carcinogenicity

Assessment of carcinogenicity:
In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect.

Specific target organ toxicity (single exposure):

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
The substance may cause damage to the liver after repeated ingestion of high doses, as shown in animal studies.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

Contact allergenic properties have not been observed in test animals (guinea pigs). In humans workroom temperatures of about 40°C and profuse sweating might exacerbate potential irritancy and rashes may develop.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. No toxic effects occur within the range of solubility. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:
LC50 (96 h) > 100 mg/l, Fish

Aquatic invertebrates:
EC50 > 100 mg/l, Daphnia magna

Aquatic plants:
EC50 (72 h) > 30 mg/l, Scenedesmus sp.
Tested above maximum solubility. No toxic effects occur within the range of solubility. No effects at the highest test concentration.

Microorganisms/Effect on activated sludge:
EC50 (3 h) > 100 mg/l, activated sludge

Chronic toxicity to fish:
No data available regarding toxicity to fish.

Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), >= 2 mg/l, Daphnia magna (OECD Guideline 211, semistatic)
The product has low solubility in the test medium. A saturated solution has been tested. Limit concentration test only (LIMIT test). The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.

Mobility

Assessment transport between environmental compartments:
The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is expected.

Persistence and degradability

Elimination information:
Not readily biodegradable (by OECD criteria).

Primary degradation.

Information on Stability in Water (Hydrolysis):
$t_{1/2}$ 7.2 a (25 °C), (calculated, pH 7)
In contact with water the substance will hydrolyse slowly.

Bioaccumulation potential

Assessment bioaccumulation potential:
Accumulation in organisms is not to be expected.

Bioaccumulation potential:
Bioconcentration factor: < 100, Cyprinus carpio (OPPTS 850.1730 (EPA Guideline))

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

14. Transport Information

Domestic transport:

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Other regulations

16. Other Information

Unsuitable for use: This material is not intended for use in products for which prolonged contact with mucous membranes, body fluids or abraded skin, or implantation within the human body, is specifically intended, unless the finished product has been tested in accordance with nationally and internationally applicable safety testing requirements. Because of the wide range of such potential uses, we are not able to recommend this material as safe and effective for such uses and assume no liability for such uses.

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.