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1. Product and Company Identification

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

Registrant:

24 Hour Emergency Response Information CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP

2. Hazards Identification

Emergency overview

Signal word: CAUTION!
Colour: white
Appearance: powder, fine
State of matter: solid
Odour: odourless

Health: This product has no known adverse effect on human health. Physical/Chemical Refer to MSDS Section 7 for Dust Explosion information.

hazards:

Potential health effects

Primary routes of entry:

Skin, Eyes, Inhalation, Ingestion

Potential environmental effects

This product is moderately toxic to aquatic organisms. Releases to the environment are to be avoided.

3. Composition/Information on Ingredients

<u>Chemical name</u>
Butanedioic acid, dimethyl ester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol (9CI)

<u>CAS Number</u>
65447-77-0
60.0 - 100.0 %
N

This material is classified as not hazardous under OSHA regulations.

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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:

May aggravate pre-existing skin conditions. Treat symptomatically.

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. Avoid dust formation!

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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) fiberdrums, 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

Butanedioic acid, dimethyl ester, polymer with	CIEL	8h TWA: 10 mg/m3 (inhalable)
4-hydroxy-2,2,6,6-tetramethyl-1-		
piperidineethanol (9CI) (65447-77-0)		

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. Eye wash station and safety shower should be available in immediate work area., Select additional protective equipment based upon potential for exposure.

9. Physical and Chemical Properties

Colour: white
Form: powder, fine
State of matter: solid
Odour: odourless
pH value: 6.3

(20 - 25 °C) 1% Aqueous suspension (w:v)

Flammability: Not tested

Flash point: > 250 °C (DIN 51376) Self-ignition temperature: Not tested

Dust explosion class: Weak Dust

Explosion. (1)

Melting point: 50 - 70 °C

Boiling point: Not applicable

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Vapour pressure: 0.0000025 Pa (20 °C) Density: approx. 1.22 g/cm3 (20 °C) Partitioning coefficient n- 5.2 (20 - 25 °C)

octanol/water (log Pow):

% Volatiles: 0.5 %

Solubility in water: approx. 1.6 mg/l (20 °C) Solubility in other Not tested

solvents:

Autoignition: 370 °C (BAM)

Decomposition > 350 °C (Isoperibol (Lütolf))

temperature:

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: 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:

LC50 / by inhalation / rat: > 1,100 mg/m3

in air for a 4-hour aerosol exposure with approximately 40% of particles <7 microns. There were no deaths or untoward behavioral alterations nor did necropsy reveal any gross pathologic alterations.

Acute dermal toxicity:

dermal:

Not tested

Skin irritation:

(Rabbits) Not an irritant.

Eye irritation:

(Rabbits) Not an irritant.

Skin Sensitization:

(Guinea Pig) Not a sensitizer.

Subchronic Toxicty:

3 Month study (rats): The organ weights were all within the normal variations and there was no evidence of any dose-related effect. The only macro- and histopathological findings was a mammary adeno-carcinoma in the right inguinal region of a female treated with 50 mg/kg bw. The tumor was not regarded as treatment related. The NOEL was 450 mg/kg.

Genetic toxicity:

Ames Test: negative

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(Chinese hamsters) Nucleus anomaly test: Negative

(Chinese Hamster)

Sister chromatid exchange test, negative

Carcinogenicity:

2 Year study (rats): There were no macro- or histopathological findings related to the treatment, including no tumor effects. Slight reductions in the rate of body weight gain were noted for femalies in the 3000 ppm and the 10000 ppm group which was restricted to the first 26 weeks of treatment. The NOEL was 1000 ppm. 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:

(Rats) No evidence of a teratogenic effect for an oral administration of 500 mg/kg during days 6 to 15 of pregnancy.

Metabolism:

(rat) An average of 58% was excreted within 24 hours. After 144 hours, almost all radioactivity was excreted. Residual readioactivity was found in the liver, testes, and ovaries. There is evidence that this product is first partially degraded in the intestinal tract. Thereafter, these degradation products are absorbed and further degraded.

Photosenstivitiy:

Not a photo-irritant.

Not a photosensitizer.

12. Ecological Information

Toxicity to fish:

Brachydanio rerio/96 h/LC50: > 100 mg/l (OECD 203; ISO 7346; 92/69/EEC, C.1)

Toxicity to aquatic invertebrates:

Daphnia magna/24 h/EC50: 25 mg/l (OECD 202/EC C.2)

Toxicity to aquatic plants:

Scenedesmus sp./72 h/EC50: > 100 mg/l (OECD 201/EC C. 3)

Toxicity to microorganisms:

activated sludge/3 h/IC50: > 100 mg/l (OECD 209 / EC C.11)

Biodegradation:

Evaluation: Not biodegradable.

Theoretical Carbon Dioxide Demand:

17 %

13. Disposal Considerations

Waste disposal of substance:

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

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261).

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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.

Inland-waterway transport:

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):

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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 111 - Volatile Organic Compounds (VOC):

This product does not contain any SOCMI Intermediate or Final VolatileOrganic Compounds (VOC), as defined by the U.S. Clean Air Act Section 111 (40 CFR 60.489).

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

TINUVIN® 622 is a registered trademark of BASF Canada or BASF SE

Due to the merger of CIBA and BASF Group all Material Safety Data Sheets have been reassessed on the basis of consolidated information. This may have resulted in changes of the Material Safety Data Sheets. In case you have questions concerning such changes please contact us at the address mentioned in Section I.

END OF DATA SHEET