



We create chemistry

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19
Version: 5.0

Page: 1/9
(30605507/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

MasterEmaco T 545 also SET 45

Recommended use of the chemical and restriction on use

Recommended use*: for industrial and professional users

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: No data available.

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

Classification of the product

Combustible Dust	Combustible Dust (1)	Combustible Dust
Repr.	1B (fertility)	Reproductive toxicity
Repr.	1B (unborn child)	Reproductive toxicity
STOT RE	1 (by inhalation)	Specific target organ toxicity — repeated exposure

Label elements

Pictogram:

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19

Version: 5.0

Page: 2/9

(30605507/SDS_GEN_US/EN)



Signal Word:
Danger

Hazard Statement:

H372 May form combustible dust concentration in air.
Causes damage to organs (Lung) through prolonged or repeated exposure (inhalation).
H360 May damage fertility. May damage the unborn child.

Precautionary Statements (Prevention):

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P260 Do not breathe dust/gas/mist/vapours.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P270 Do not eat, drink or smoke when using this product.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P314 Get medical advice/attention if you feel unwell.
P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage):

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

No applicable information available.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
14808-60-7	>= 50.0 - < 100.0%	crystalline silica
1309-48-4	>= 5.0 - < 15.0%	magnesium oxide
10043-35-3	>= 0.2 - < 1.0%	boric acid
1309-37-1	>= 0.0 - < 3.0%	Iron oxide

4. First-Aid Measures

Description of first aid measures

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19
Version: 5.0

Page: 3/9
(30605507/SDS GEN US/EN)

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

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

If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:

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

If swallowed:

Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No applicable information available.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus.

Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19
Version: 5.0

Page: 4/9
(30605507/SDS_GEN_US/EN)

6. Accidental release measures

Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures

Do not breathe dust. Wear eye/face protection. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions

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

Methods and material for containment and cleaning up

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Avoid raising dust. Wear suitable protective clothing and eye/face protection. Avoid inhalation of dusts/mists/vapours. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

Conditions for safe storage, including any incompatibilities

No applicable information available.

Suitable materials for containers: High density polyethylene (HDPE)

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Iron oxide	OSHA PEL	PEL 10 mg/m3 fumes/smoke ; TWA value 10 mg/m3 fumes/smoke ;
	ACGIH TLV	TWA value 5 mg/m3 Respirable fraction ;
magnesium oxide	OSHA PEL	PEL 15 mg/m3 Total particulate ; TWA value 10 mg/m3 Total particulate ;
	ACGIH TLV	TWA value 10 mg/m3 Inhalable fraction ;
boric acid		

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19
Version: 5.0

Page: 5/9
(30605507/SDS_GEN_US/EN)

	ACGIH TLV	TWA value 2 mg/m ³ ; STEL value 6 mg/m ³ ; TWA value 2 mg/m ³ Inhalable fraction ; STEL value 6 mg/m ³ Inhalable fraction ; TWA value 2 mg/m ³ Inhalable fraction ; STEL value 6 mg/m ³ Inhalable fraction ;
crystalline silica	OSHA PEL	TWA value 2.4 millions of particles per cubic foot of air Respirable ; The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits. TWA value 0.1 mg/m ³ Respirable ; The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits. TWA value 0.3 mg/m ³ Total dust ; The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.
	ACGIH TLV	TWA value 0.025 mg/m ³ Respirable fraction ;

Advice on system design:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate.

Hand protection:

Chemical resistant protective gloves, 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 depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

9. Physical and Chemical Properties

Form:	powder
Odour:	odourless
Odour threshold:	No applicable information available.

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19

Version: 5.0

Page: 6/9

(30605507/SDS_GEN_US/EN)

Colour:	grey
pH value:	slightly alkaline
Melting temperature:	> 1,000 °C
Boiling point:	No applicable information available.
Sublimation point:	No applicable information available.
Flash point:	The substance/product is non-combustible.
Flammability:	not determined
Lower explosion limit:	No applicable information available.
Upper explosion limit:	No applicable information available.
Autoignition:	No applicable information available.
Vapour pressure:	No applicable information available.
Relative density:	No applicable information available.
Bulk density:	1,000 kg/m ³
Vapour density:	No applicable information available.
Partitioning coefficient n-octanol/water (log Pow):	No applicable information available.
Thermal decomposition:	No applicable information available.
Viscosity, dynamic:	No applicable information available.
Viscosity, kinematic:	No applicable information available.
Solubility in water:	slightly soluble
Miscibility with water:	(20 °C) not soluble
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Evaporation rate:	No applicable information available.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No applicable information available.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

strong acids, strong bases, strong oxidizing agents, strong reducing agents

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

No applicable information available.

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19
Version: 5.0

Page: 7/9
(30605507/SDS_GEN_US/EN)

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Based on available Data, the classification criteria are not met.

Oral

No applicable information available.

Inhalation

No applicable information available.

Dermal

No applicable information available.

Assessment other acute effects

No applicable information available.

Irritation / corrosion

Assessment of irritating effects: No applicable information available.

Sensitization

Assessment of sensitization: The chemical structure does not suggest a sensitizing effect.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: This product contains crystalline silica (quartz). Prolonged or repeated inhalation of respirable crystalline silica may result in silicosis.

Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: crystalline silica

*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. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosols classified by the German MAK commission as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.
NTP listed carcinogen*

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19
Version: 5.0

Page: 8/9
(30605507/SDS_GEN_US/EN)

Reproductive toxicity

Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals.

Teratogenicity

Assessment of teratogenicity: The substance caused malformations/developmental toxicity in laboratory animals.

Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information

No applicable information available.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. Transport Information

Land transport

USDOT

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

Federal Regulations

Safety Data Sheet

MasterEmaco T 545 also SET 45

Revision date : 2015/11/19
Version: 5.0

Page: 9/9
(30605507/SDS_GEN_US/EN)

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Chronic;

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
5000 LBS	7758-29-4; 7785-84-4	Triphosphoric acid, pentasodium salt; Metaphosphoric acid (H3P3O9), trisodium salt
1000 LBS	7440-39-3	Barium

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

NFPA Hazard codes:

Health : 1 Fire: 0 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2015/11/19

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