



SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006

Issue Date: 01/03/2015

BOOSTER KITS

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier:

Dibenzoyl peroxide + 20% mixture

Supplier:

Millfield Enterprises (Manufacturing) Limited

Shelley Road

Newburn Industrial Estate, Newburn

Newcastle upon Tyne NE15 9RT

Tel.: (0191) 264 8541

Emergency telephone:

Tel: (0191) 264 8541 / Fax (0191) 264 6962

Relevant identified uses of the substance or mixture:

Curing agent

Chemical family:

Peroxides

2. HAZARDS IDENTIFICATION

May cause fire.

Irritating to eyes.

May cause sensitization by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

PBT or vPvB: no

GHS classification

Description	Applicable
Organic peroxide	Type G
Eye irritation	category 2
Aquatic environment, acute	category 1
Skin sensitization	category 1

Pictogram(s) (GHS)



Signal word/Hazard statement(s) GHS

Signal word: WARNING

Code	Description
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H400	Very toxic to aquatic life



Precautionary statement(s) (GHS)

The precautionary statement marked with a * are mentioned on the label of the packaging of the product

Code	Description
P261e	Avoid breathing vapours
P264a	Wash hands and contaminated skin thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P283 *)	Avoid release to the environment *)
P280d *)	Wear protective gloves, eye/face protection and protective clothing *)
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P391	Collect spillage
P501a	Dispose of contents and container according to local regulations

2. COMPOSITION / INFORMATION ON INGREDIENTS

This product is to be considered as a preparation in conformance to EC directives
Information on hazardous ingredients

Chemical description: Dibenzoyl peroxide, 20% powder with inert fillers.

Composition / information on ingredients

Number	% w/w	CAS number	Chemical name
1	74-76	007778-18-9	Calcium sulfate
2	20-21	000094-36-0	Dibenzoyl peroxide
3	4-5	012125-28-9, 007760-50-1	Magnesium carbonate hydroxide

Number	REACH Registration number	EC-number	Classification according to 1272/2008 as amended			Classification according to 67/548/EEC as amended
1		231-900-3	GHS classification	None		None
2	01-21195 11472-50	202-327-6	Organic peroxide	Type B	H241 H317 H319 H400	E N Xi R03 R36 R43 R50/53
			Eye irritation	Category 2		
			Aquatic environment, acute	Category 1		
			Skin sensitization	Category 1		
			GHS classification	none		
3			GHS classification	None		none

4. FIRST AID MEASURES

Most important symptoms and effects:

Irritating to eyes. May cause sensitization by skin contact. Dust may be irritating to the respiratory tract and cause symptoms of bronchitis.

Symptoms and effects

Irritating to eyes. May cause sensitization by skin contact.

Description of first aid measures:

General

In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Oxygen may additionally be given by trained personnel, if it is applicable. Get medical attention if symptoms occur.

Skin

Wash immediately with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes.

Eye

Immediately flush eyes with plenty of water. If easy to do, contact lenses should be removed during the flushing by trained personnel. Hold the eyelids apart during the flushing to ensure rinsing the entire surface of the eye and lids with water. Get medical attention if irritation persists.

Ingestion

Call a physician or a poison control centre immediately. Induce vomiting only if directed by medical personnel. The patient should lie on their left side while vomiting to reduce the risk of aspiration. Never give anything by mouth to an unconscious or convulsing person.

Indication of any immediate medical attention and special treatment needed:

Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material. Attending physician should treat exposed patients symptomatically.



5. FIRE-FIGHTING MEASURES

Extinguishing media waterspray. Foam, sand, dry chemical powder, CO2
Unsuitable extinguishing media halones.
Hazardous decomposition/combustion products CO2, Carbon monoxide, Benzoic acid, Benzene
Protective equipment Firefighters must wear fire resistant protective equipment. Wear approved respirator and protective gloves.
Other information Evacuate all non-essential personnel. Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition. Cool closed containers with water. Water used to extinguish a fire should not be allowed to enter the drainage system or water courses. After a fire, thoroughly ventilate the area and soak with water, clean the walls and metallic surfaces.
Fire and explosion hazard CAUTION: re-ignition may occur. Decomposition under effect of heating (See also Section Hazardous decomposition products). If involved in a fire, it will support combustion, dust explosion hazard. In case of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Do not breathe dust. Avoid contact with skin and eyes. For personal protection see Section 8.
Environmental precautions Do not allow to enter drains or water courses.
Methods and material for containment and cleaning up Stop leakage if possible. Eliminate all sources of ignition, and do not generate flames or sparks. Sweep up and put it into a container for disposal. Avoid dust generation. Keep contents moist. The waste should NOT be confined. Flush surroundings with large amounts of water and soap.
Other information CAUTION: re-ignition may occur. Evacuate personnel to safe area.

7. HANDLING AND STORAGE

Precautions for safe handling Never weigh out in the storage room. When using do not eat, drink or smoke. Do not breathe dust. Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps). Keep product and emptied container away from heat and sources of ignition. Confinement must be avoided. Do not allow to dry out. Avoid contact with skin and eyes. Avoid Incompatible materials (See Section 10).
Fire and explosion prevention Avoid dust generation. Dust explosion possible in the presence of air. Use non-sparking tools in area's where explosive dust air mixtures may occur. Do not cut or weld on or near this container even when empty.
Conditions for safe storage Store in accordance with local/national regulations. Keep away from food, drink and animal feeding stuffs. Store in a dry well ventilated place away from sources of heat and direct sunlight. Store separate from other chemicals. Keep only in the original container.
Storage For maximum quality store below 25°C
Other Information It is recommended to use electrical equipment of temperature group T3. However, autoignition can never be excluded. Wash hands thoroughly after handling or contact. Keep working separately and do not take them home.
NR-7-UK-HSE Guidance (07) A COSHH assessment necessary to ensure compliance.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters Ensure good ventilation and local exhaustion of the working area. Explosion proof ventilation recommended.
Personal protection:
Respiratory Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment (respirator with Filter P1)
Hand Wear suitable protective gloves of neoprene or synthetic rubber.
Eye Wear eye/face protection.
Skin and body Wear suitable protective clothing.
Other information Emergency-shower and facilities for rinsing eyes must be accessible. Launder clothes before reuse.
Dibenzoyl peroxide:

Short Term Exposure Limit (STEL)	15 mg/m ³ (calculated)
Time Weighted Average (TWA)	5 mg/m ³
DNEL	Worker DNEL long term inhalation systemic (mg/m ³); 11.75 Worker DNEL long term dermal systemic n(mg/kg bw/day); 6.6 General population DNEL long term inhalation systemic (mg/m ³); 2.9 General population DNEL long term dermal systemic (mg/kg bw/day);3.3 General population DNEL long term oral systemic (mg/kg bw/day); 1.65
PNEC	PNEC fresh water (mg/l); 0.000602 PNEC marine water (mg/l); 0.0000602 PNEC intermittent release (mg/l); 0.000602 PNEC Sewage Treatment Plant (mg/l); 0.35 PNEC sediment fresh water (mg/kg); 0.338 PNEC soil (mg/kg); 0.0758 PNEC oral (mg/kg food); 6.67



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	free flowing powder
Colour	white
Odour	faint
Boiling point/range	Not applicable (Decomposes)
Melting point/freezing point	Not determined
Flash point	Not applicable
Flammability	Decomposition products may be flammable
Explosive properties	No
Oxidising properties	Not applicable
Vapour pressure	Not applicable
Density	2290kg/m ³ (20°C / 68°F) Specific gravity = 2.29 (20°C / 68°F)
Bulk density	588 kg/m ³ (20°C / 68°F)
Solubility in water	Insoluble
Solubility in other solvents	Not determined
pH value	Neutral
Partition coefficient n-octanol/water	Not determined
Relative vapour density (air=1)	No applicable
Viscosity	Not applicable
Active oxygen content	1.32%
Peroxide content	20%
Autoignition temperature	Test method not applicable (see section 7)
SADT	70°C. See also Section 10
Upper/lower flammability or explosive limits	Not determined
Volatile %	Not determined.

10. STABILITY AND REACTIVITY

Chemical stability

SADT – (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport.

A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the following temperature: 70°C. Contact with incompatible substances can cause decomposition at or below the SADT 70°C.

Conditions to avoid

To maintain quality store in original closed container below: 25°C

Avoid shock and friction. A high degree of confinement must be avoided.

Incompatible materials

Avoid contact with rust, iron and Copper. Contact with incompatible materials such as acids, alkalies, heavy metals, and reducing agents will result in hazardous decomposition. Do not mix with peroxide accelerators. Use only Stainless steel 316, PP, polyethylene or glass-lined equipment.

Possibility of hazardous reactions

Polymerisation does not occur.

Hazardous decomposition products

Hazardous decomposition products; Benzoic acid, Benzene

Other information

Emergency procedures will vary depending on conditions. The customer must have an emergency response plan in place.



11. TOXICOLOGICAL INFORMATION

No experimental toxicological data on the preparation as such is available. The following data is applicable to the ingredient(s) listed below.

Dibenzoyl peroxide, 78%

Acute toxicity	
Oral LD50	>5000 mg/kg (rat)
Inhalation LC50	>24300 mg/m ³ (rat), dust
Germ cell mutagenicity	Not mutagenic
Irritation	
Skin	Minimally irritating
Eye	Irritating to eyes (rabbit)
Sensitization	Sensitizing (skin)
Genotoxicity	No evidence of genotoxic effects in vivo. No evidence of genotoxic effects in vitro
Carcinogenic/Mutagenic data	Not carcinogenic
Chronic toxicity/Carcinogenicity	29 days, No Observed Adverse Effect Level (NOAEL); 1000 mg/kg/day No Observed Adverse Effect Level (NOAEL); 500 mg/kg/day (oral)

12. ECOLOGICAL INFORMATION

No experimental ecological data is available on the preparation as such. The following data is applicable to the ingredient(s) listed below.

Dibenzoyl peroxide, 78%

Ecotoxicity	
Fish	96h-LC50: 0.06 mg/l
Daphnia	48h-EC50: 0.11 mg/l (Daphnia magna)
Algae	72h-EC50: 0.06 mg/l
Bacteria	Activated sludge respiration inhibition test EC50: 35 mg/l
Fate	
Degradation Abiotic	Half-life: 2.4 hours at 50°C
Degradation Biotic	Inherently biodegradable
Bioaccumulation	Bio Concentration Factor (BCF): 66.6
Fate	Koc = 3.8 at 22°C
Other information	Very toxic to aquatic organisms

13. DISPOSAL CONSIDERATIONS

Product

Due to the high risk of contamination recycling/recovery is not recommended. Waste disposal in accordance with regulations (most probably controlled incineration).

Contaminated packaging

According to local regulations. Emptied container might retain product residues. Follow all warnings even after the container is empty. Do not wash residues into drains or other waterways.

Other information

For further advice contact manufacturer.

Waste code number

Waste should be regarded as special waste for disposal. Please refer to your specific industry in the European Waste Catalogue.



14. TRANSPORT INFORMATION

Land Transport

Transport hazard class	9
Classification Code	M7
RID Class	9
Packing Group	III
Hazard Identification Number	90
Substance Identification Number	3077
UN Number	3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,N.O.S. (Dibenzoyl peroxide+20% mixture)
Tunnel Code	E
Required Labels	9

Sea Transport (IMO/IMDH-Code)

Transport hazard class	9
Packing Group	III
UN Number	3077
EMS	F-A, S-F
Marine Pollutant	Yes
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,N.O.S. (Dibenzoyl peroxide+20% mixture)
Other Information	Label(s): 9

Air Transport (CAO-TI/IATA-DGR)

Transport hazard class	9
Packing Group	III
UN Number	3077
EMS	F-A, S-F
Marine Pollutant	Yes
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,N.O.S. (Dibenzoyl peroxide+20% mixture)
Other Information	Label(s): 9

15. REGULATORY INFORMATION

Product label name Dibenzoylperoxide, 20% powder with inert fillers
Labelling according to EC directives
EC-Number Not applicable

R(isk) phrase(s) (EU classification)

Code	Description
RO7	May cause fire
R35	Irritating to eyes
R43	May cause sensitization by skin contact
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment,

S(afety) phrase(s) (EU Classification)

Code	Description
S03/07	Keep container tightly closed in a cool place
S14B	Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal soaps)
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection
S50D	Do not mix with peroxide-accelerators or reducing agents
S61	Avoid release to the environment. Refer to special instructions/Safety data sheets

Classification according to 67/548/EC as amended



DANGEROUS
FOR THE
ENVIRONMENT (N)

OXIDISING (O)

IRRITANT (Xi)

Other information

Substance and/or product listed in Directive 96/82/EC

German Water Hazard Class (WGK)

1 (VwVwS Anhang 4 Nr. 3)

16. OTHER INFORMATION

Relevant hazard statements

Chemical name	Hazard statement(s) (GHS-classification)	
Dibenzoyl peroxide	H241	Heating may cause a fire or explosion
	H317	May cause an allergic skin reaction
	H319	Causes serious eye irritation
	H400	Very toxic to aquatic life

R-pharse information

Chemical name	R(isk) phrase(s) (EU classification)	
Calcium sulfate	None	none
Dibenzoyl peroxide	R03	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
	R36	Irritating to eyes
	R43	May cause sensitization by skin contact
	R50/53	Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
Magnesium carbonate hydroxide	None	none