
MATERIAL SAFETY DATA SHEET

Date prepared: 13.01.11
Supersedes date: 17.11.10

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1. Product and company identification

1.1 Product identifier

Product name: Masteret 80450

1.2 Relevant identified uses of the substance or mixture and uses advised against

General use: Flame retardant

1.3 Details of the supplier of the safety data sheet

Producer: ITALMATCH CHEMICALS S.p.A.

Headquarter: via Pietro Chiesa, 7/13 (piano 8°)
Torri Piane - San Benigno
16149 Genova - Italy
Tel: +39/010 - 64208.1
Fax: +39/010 - 4695296
E-mail: sales.dpt@italmatch.it

Plant: via S. Tommaso, 13
06049 Spoleto (PG) - Italy
Tel: +39/0743 - 20191
Fax: +39/0743 - 45841 E-mail: factory@italmatch.it

1.4. Emergency telephone number

Switchboard/safety number: +39/0743 - 20191
Fax: +39/0743 - 45841 E-mail: hse.spoleto@italmatch.it

CHEMTREK 1-800-424-9300 Day or Night – Toll free in the continental USA and Canada. From elsewhere +1.702.527.3887 (collect calls accepted)

2. Hazards Identification

2.1 Classification of the mixture

Directive 1999/45/CE:
R 52/53 - Harmful to aquatic organism. May cause long term effect in the aquatic environment

Regulation 1272/2008/CE:
Hazardous to the aquatic environment: Cat.3; H412

2.2. Label elements

H412 - Harmful to aquatic life with long lasting effects.
P273 - Avoid release to the environment
P501 - Dispose of contents/container in accordance with local/ regional/national/international regulation

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2.3. Other hazards

To the best of our knowledge, Masteret 80450 has not been associated with negative effects on human if used in accordance with good hygienic practice and any legal requirements.

Masteret 80450 is harmful to aquatic organisms and may cause long-term effects in the aquatic environment.

The product is not flammable but the dried residues may be highly flammable.

3. Composition / information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Product information: 50% dispersion of Red Amorphous Phosphorus in water.

Red phosphorus (~50%): CAS 7723-14-0; EC 231-768-7

Classification Directive 67/548/CE: F; R11-R16-R52/53;

Classification Regulation 1272/08/CE:

Flammable solids: Cat 1; H228 - Flammable solid.

Hazardous to the aquatic environment: Cat.3; H412- Harmful to aquatic life with long lasting effects

4. First Aid Measures

4.1. Description of first aid measures

Inhalation: In case of inhalation of the product remove to fresh air and get medical attention if symptoms occur.

Skin contact: Wash skin with water and soap and remove contaminated clothing.

Eye contact: Wash immediately the eyes with large amounts of water for at least 15 minutes, occasionally lifting the lower and upper lids. Get medical attention in case of persistent irritations.

Ingestion: Do not induce vomiting. Remove product from the mouth. Get medical aid immediately.

4.2. Most important symptoms and effects, both acute and delayed

N.A.

4.3. Indication of any immediate medical attention and special treatment needed

N.A.

5. Fire Fighting Measures

5.1. Extinguishing media

Dry chemical powder, foam, carbon dioxide, water spray, sand or earth.

Do not use: Water in jet

5.2. Special hazards arising from the substance or mixture

The product is not flammable but the dried residues may be highly flammable. Corrosive gases may yield if combustion occurs. Combustion off-gases may contain corrosive substances (phosphoric anhydride).

5.3. Advice for firefighters

Protective equipment: Full protective clothing and self-contained breathing apparatus.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Avoid contact with skin and eyes. Wear standard chemical personal protection equipment (protective clothing, gloves, safety goggles, safety shoes).

6.1.2. For emergency responders

Avoid contact with skin and eyes. Wear standard chemical personal protection equipment (safety goggles, gloves, protective clothing, safety shoes).

6.2. Environmental precautions

Prevent dispersion on soil and in water. Prevent from spreading or entering into drains, ditches or rivers by using dry sand, earth or other appropriate barriers.

6.3. Methods and material for containment and cleaning up

Absorb or contain liquid with sand, earth or inert material. Shovel up and collect for subsequent disposal. Scrub contaminated surfaces with detergent solution and retain washings as contaminated waste.

6.4. Reference to other sections

7. Handling and Storage

7.1. Precautions for safe handling

Open containers in well ventilated area just before using the product. Avoid conditions which may cause drying of the product.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original containers tightly closed in a well ventilated area away from sources of ignition and oxidizing agents. The preparation is stable (with regard to the separation of red phosphorus) at least 5 months if maintained in the original containers under ordinary condition.

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7.3. Specific end use(s)

N.A.

8. Exposure Controls / Personal Protection

8.1. Control parameters

Standard occupational exposure: None established.

8.2. Exposure controls

Personal protection: Safety glasses for chemicals or face shield, gloves for chemicals (nitrile or neoprene), protective clothing and safety shoes.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:	Viscous liquid
Colour:	Dark red
Odour:	Light
pH:	6,5 - 7,5
Density (23°C):	1,4÷1,6 g/cm ³
Dynamic viscosity (25°C):	2÷8 Pa s (Brookfield viscometer)
Auto-ignition temperature:	> 290 °C for Red phosphorus
Solubility in water:	The product is mixable in water (red phosphorus is insoluble).

9.2. Other information

N.A.

10. Stability / Reactivity

10.1. Reactivity

N.A.

10.2. Chemical stability

Stable if maintained in the original packing and under ordinary storage conditions

10.3. Possibility of hazardous reactions

Slow decomposition of red phosphorus can cause traces of phosphine (toxic and flammable gas) to form in time

10.4. Conditions to avoid

Temperature above 100° C, sources of ignition and drying.

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10.5. Incompatible materials

Avoid contact with strong oxidizing agents.

10.6. Hazardous decomposition products

Slow decomposition of red phosphorus can cause traces of phosphine (toxic and flammable gas) to form in time. For information on combustion off-gases see point 5.

11. Toxicological Information

11.1. Information on toxicological effects

acute toxicity:

LD50 > 2000 mg/kg body weight (oral, rat; red phosphorus).

skin corrosion/irritation:

N.A.

serious eye damage/irritation:

Both ingredients are slight eye and skin irritant.

respiratory or skin sensitisation:

N.A.

germ cell mutagenicity:

N.A.

carcinogenicity:

N.A.

reproductive toxicity:

N.A.

STOT-single exposure:

N.A.

STOT-repeated exposure:

N.A.

aspiration hazard:

N.A.

12. Ecological Information

12.1. Toxicity

10 mg/l < EC₅₀/LC₅₀/LC₅₀ ≤ 100 mg/l, (daphnia, algae, fish, red phosphorus).

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

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12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

N.A.

12.6. Other adverse effects

Red phosphorus is not readily biodegradable, it is harmful to aquatic organisms and may cause long-term effects in the aquatic environment:

In the environment red phosphorus slowly degrades by disproportionating and hydrolysis to phosphine and phosphorus acids.

13. Disposal Considerations**13.1. Waste treatment methods**

Recover for controlled re-use when technically possible; otherwise waste disposal of the product and its containers must be done according to national or local regulation

14. Transport Information

Not regulated under international transport regulations (ADR/RID, IMDG-IMO, ICAO/IATA).

14.1. UN number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

N.A.

15. Regulatory Information

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 67/548/CE
Directive 99/45/CE
Regulation 1907/2006/CE
Regulation 1272/2008/CE
D.Lgs 81/2008

15.2. Chemical safety assessment

N.A.

16. Other information

This product must be stored, handled and used according to the existing industrial practice and legislation.

This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only.

This safety data sheet has been revised entirely.

It should not therefore be construed as guaranteeing any specific property of the product.

Meaning of symbols and R-phrases

F – Flammable

R11 - Highly flammable

R16 - Explosive when mixed with oxidizing substances

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

References

N-CLASS Database on Environmental Hazard Classification – <http://ecb.jrc.it/classification-labelling/> - (European Chemicals Bureau)

European Flame Retardants Association – Flame retardants fact sheet “Red Phosphorus (RP)” – http://www.cefic-efra.com/code/fact_sheets/phos_red.html