



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

1. Identification of the substance/mixture and of the company

1.1 Product identifiers

Product name : M&H test
Product number : MH0110
Product type: Ampoule
Brand : MMC International

1.2 Relevant identified uses of the substance or mixture

Identified uses : Presumptive substance testing

Restrictions on use: This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

1.3 Details of the supplier of the safety data sheet

Company : M.M.C. International B.V.
Frankenthalerstraat 16-18
4816KA Breda
The Netherlands
Telephone : +31 76-5711140
Fax : +31 76-5719300
E-mail address : Info@mmcinter.com

1.4 Emergency telephone number

Emergency Phone # : 112/911
National Poison Information Centre #: +3130-2748888

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification

Oxidizing liquids (Category 3)
Skin corrosion (Category 1A)

GHS Label element

Hazard pictograms:



Signal word: Danger



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

2.2 Label elements

Hazard statement(s)

H272

May intensify fire; oxidiser.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P220

Keep/Store away from clothing/ combustible materials.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER or doctor/ physician.

2.3 Other hazards

None

3. Composition/information on ingredients

3.1 Mixture:

Component	CAS-No.	EC-No	Concentration
Nitric Acid	7697-37-2	231-714-2	10-20%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen (To be administered by qualified medical personnel only!) Get medical attention.

In case of skin contact

Flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and seek medical advice.

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub or keep eyes closed. Seek medical advice.

If swallowed

Wash mouth thoroughly with plenty of water and give water or milk to drink. Do not induce vomiting. (Never give anything by mouth to an unconscious person!) Get medical attention immediately.



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

4.2 Most important symptoms and effects, both acute and delayed

May cause irritation to eyes, skin and respiratory tract. If inhaled may cause, exhaustion, shortness of breathing, loss of consciousness and asphyxiation. May cause frostbite. May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause headache.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote, medical staff contacts Poisons Information Center. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. Firefighting measures

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

nitrogen oxides (NO_x)

5.3 Advice for firefighters

Special protective equipment for fire fighters: Fire fighters should wear full protective clothing and self-contained breathing apparatus in positive pressure mode.

5.4 Further information

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state, and federal regulations

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ventilate area of spill. Avoid contact with skin, eyes and inhalation of vapors. Remove sources of ignition (i.e. open flames, sparks).

6.2 Environmental precautions

Prevent entry into waterways, sewers, basements or other confined areas.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, vermiculite) and place in container for disposal according to local/International regulations.

7. Handling and storage

7.1 Precautions for safe handling

Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Wash thoroughly after handling. Avoid all ignition sources (heat, open flame, spark). Hygiene Measures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Keep away from oxidizing agents, acids and liquefied or compressed air and oxygen. Keep away from heat, sparks, open flame or any other ignition source. "Empty" containers may contain product residue and may be dangerous. Dispose of according to local, state, and federal regulations.

7.3 Specific end uses: N A

8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

Ingredient name	Occupational exposure limits
Nitric Acid	1,3 mg/m ³

8.2 Exposure controls

Engineering Measures

Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Person Protective measures

Respiratory protection: Suitable respirator. Be sure to use an approved/certified or equivalent. Wear appropriate respirator when ventilation is inadequate.

Eye/face protection: Wear protective safety glasses.

Skin protection: Wear appropriate long-sleeved clothing to minimize skin contact.

Hand protection: Wear protective disposable gloves to prevent skin exposure.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Colorless Liquid

Odor: choking acrid odor

Odor threshold: N/A

pH: N/A



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

Melting point/Freezing point: N/A

Initial boiling point/boiling range: 125,5°C

Flash point

Evaporation rate: N/A

Flammability in air: N/A

Upper/lower flammability or explosive limits: N/A

Vapor pressure: 49 hPa at 50°C

Vapor density: N/A

Relative Density (Air=1): 1,413 g/ml at 25°C

Solubility(ies): N/A

Partition coefficient Octanol/Water: N/A

Auto-ignition temperature:

Decomposition temperature: N/A

Viscosity: N/A

Explosive properties: N/A

Oxidizing properties: The substance or mixture is classified as oxidizing with the category 3.

9.2 Other Information

N/A

10. Stability and reactivity

10.1 Reactivity:

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability:

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Keep away from heat, open flame and sparks.

10.5 Incompatible materials

Alkali metals, Organic materials, Acetic anhydride, Acetonitrile, Alcohols, Acrylonitrile, Ammonia, Crotonaldehyde, Halogenated hydrocarbon, Acids, Bases, Metals, hexalithium disilicide, Hydrogen peroxide, Ketones, metal acetylides, Water, Fluorine, Amines, Thiols, cadmium, Bromine, Copper, Hydrazine, Hydrazinium nitrate, Nitro compounds, Cyanides, Phosphorus trihydride (phosphine), Diphosphine, Halides, Organic halides, May set fire to wood or paper., Polyethers, Methyl vinyl ether.

10.6 Hazardous Decomposition products

Nitrogen Oxides (NO_x),

11. Toxicological information

11.1 Information on toxicological effects



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

Acute toxicity: N/A

Irritation: May cause irritation to skin, eyes and respiratory tract.

Corrosivity: N/A

Sensitization: N/A

Repeated dose toxicity: N/A

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Mutagenicity: N/A

Toxicity for reproduction: N/A

Potential health effects:

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Inhalation may provoke the following symptoms:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, pneumonitis, pulmonary edema, Symptoms and signs of poisoning are:, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed., Large doses may cause: conversion of hemoglobin to methemoglobin, producing cyanosis; marked fall in blood pressure, leading to collapse, coma, and possibly death. Liver - Irregularities - Based on Human Evidence (Nitric acid)

12. Ecological information

12.1 Toxicity

N/A

12.2 Persistence and Degradability

N/A

12.3 Bioaccumulative potential

N/A

12.4 Mobility in soil

N/A

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

N/A



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

13. Disposal considerations

13.1 Information on disposal

Product

Dispose in accordance with federal, state and local environmental control regulations.

Packing

Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

14.1 UN Number

ADR/RID, IMDG, IATA: UN2031

14.2 Proper shipping name:

ADR/RID, IMDG, IATA: Nitric acid Solution

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA: 8

14.4 Packing group

ADR/RID, IMDG, IATA: II

14.5 Environmental hazard

Marine pollutant: no

14.6 Other transport information

ADR/IATA: Excepted Quantity (E2) contains 100ul (0,1 ml) liquid per ampoule. The excepted quantity limit is 30ml maximum net quantity per inner packaging and 500ml maximum net quantity per outer packaging. Can send up to 5000 (or 500 packs of 10 ampoules) ampoules in one outer box.

15. Regulatory information

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

EU Directives 67/548/EEC and 1999/45/EC (including amendments)

EU Regulation (EC) No.1907/2006 (REACH)

15.2 Chemical Safety assessment

N/A

16. Other information

16.1 Risks

Using this product under normal, properly instructed procedures should not be hazardous.



M.M.C. International B.V.

SDS – Material Safety Data Sheet

According to 1907/2012/EG

16.2 Further Information

The information above is believed to be accurate and represents the best information currently available to us but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.