

SAFETY SPECIFICATION SHEET

According to 91/155/EWG

Trade mark : **Bright Metal Cleaner, Metal Surface Cleaner.**
Use : to pickle surface of steel, stainless steel, others.
Manufacturer/supplier : Mulyamandiri Jaya Sentosa
Citra Raya F2/1 Cikupa – Tangerang Telp. : 021-59401703
Indonesia Fax : 021-59402746
In case of emergency : Head of laboratory dept.

1. Chemical constituent : mixed acid product

CAS-No.	Specification	EG-No.	Index-No.	MAK
7664-38-2	Metal Cleaner contains nitric acid as well as additive < 25 % , mixed with Demin water .	231-633-2	015-011-006	
7697-37-2		231-714-2	007-004-001	
7664-39-3		231-634-8	009-003-001	
9016-45-9	Surface active agents , Wetting Agent < 20 %			

2. Potential danger :
Specification : **C** corrosive, **T** toxic
Special indication of danger to men and environment :
R 23/24/25 : Toxic by inhalation, in contact with skin and if swallowed
R 36 : Irritation to eyes
3. First Aid :
Remove soaked clothing immediately and remove the injured person from the zone of danger (attention : protect yourself).
After skin contact :
Wash immediately with plenty of soap and water, rinse well.
After inhaling :
Fresh air supply, resting position, keep warm, if necessary use respiration aid.
In case of unconsciousness resting or transporting in a lateral stable position.
Consult immediately a physician or medical officer.
After contacting the eyes :
Rinse the open eye for several minutes with running water and consult a physician.
After swallowing :
Drink a large quantity of water and supply fresh air. Consult immediately a physician.
4. Fire fighting measures :
Appropriate extinguishing agents :
CO2 extinguishing powder or water spray jet. Fight wider spread fire with water spray jet or alcohol resistant foam.
Special protective equipment note : breathing system independent from ambient air.
closed containers in designated fire zones should be cooled with water to avoid their bursting or exploding and generation of decomposition.
5. Protection measures by unintentional escape :
Personal precautionary measures : leave the danger zone immediately, do not inhale gas or fumes, if possible wear a respirator (filter type B2P3 white –gray colour).

Ecological measures :

Prevent from getting into canals, drains or sewage system. In case of damage at sea (ship or cargo) inform the local authorities.

Cleaning / absorption treatment :

Use a neutralization solution (f. i. soda lye, calcium hydroxide, alkali lye) after dilution with plenty of water. Keep the room ventilated.

Mechanical absorption: wipe up with mechanical absorber or with liquid agglutinate. Do not use inflammable materials (i.e. sawdust), precipitate gas/fumes/mist with water spray jet.

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6. Handling and storage :

Indication for safe handling :

Store in closed plastic containers, in a cool place with appropriate ventilation / exhaust and out of direct sunlight. Put them in a catching tub, be careful with the construction materials and the volumes. Do not store them together with inflammable materials or concentrated lye solutions.

Protective personal equipment :

Keep away from food and drink. Remove soaked clothes immediately. Wash your hands before breaks or leaving for the day. If necessary use protective glasses (plastic glass) protective shield, rubber / plastic gloves, acid proof clothing and shoes.

7. Physical and chemical properties :

Form : Liquid viscos

Colour : transparent

Smell : soft pungent

Change of state :

Fusion point : not applicable (non-combustible)

Boiling point : approx 106 deg C

Flash point : not applicable (non-combustible)

Explosion hazard : not applicable (non-combustible)

pH-value : approx 1

Density : at 20 deg C 1,10 – 1.15 g/cm³

Solubility in water : 98 %

Stability and reactivity : thermal decomposition at boiling point (is to be avoided), hazardous decomposition product, Dangerous reactions: exothermic neutralization reaction with concentrated lye, strong corrosion with most metals/alloy metals (releasing inflammable hydrogen and NO_x gas, which explodes when mixed with air), increasing danger of fire/explosion.

8. Toxicity : acute, life-threatening

Primary irritations : skin/mucosa soft irritation

Eyes : severe caustic burns

When swallowed : caustic burns in mouth and throat, danger of

perforation of oesophagus and stomach. After inhalation: danger of pulmonary oedema with a latency period of up to 24 hours.

9. Ecology : Water dangerous-materials class 1 (self-classification)

Do not let it get undiluted / unneutralised into canals, drains or sewage system. The toxic effect for fish and bacteria start with a pH-value under 6 and increases with a smaller pH-value.

10. Disposal : Recommendation

Disposal of a used acid solution by neutralizing with a calcium hydroxide solution in an appropriate container.

Filter the resulting neutral slush and dispose it according to government regulations. Waste key number : 51309

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11. Transportation regulations : Technical name: Corrosive liquids, Toxic, N.O.S
Overland transportation ADR/RID and GGVS/GGVE (across the borders / inland), Naval
transportation IMDG/GGVSea

ADR/RID – GGVS/E class : 8 corrosive material
And IMDP/GGVSea-class
UN-Number : 2922
Packing group : II
EmS-Number : F-A, S-B
MFAG : (760)

Air transportation ICAO –TI and IATA DGR

ICAO / IATA – class : 8
UN/ID – Number : UN 2922
Packing group : II
Technical name : Mixture of metal cleaner contains nitric acid as well as additive ,surface
active , thickener Agent.

12. Identification according to EU regulations : **C** corrosive, **T** toxic
R 23/24/25 : Toxic by inhalation and contact with skin and if swallowed.
R35 : Causes severe burns
S 1/2 : Keep locked up and out of reach of children
S 7/9 : Keep container tightly closed and in a well ventilated place
S 23 : Do not breathe gas/fumes/vapour/spray .
S 26 : In case of contact with eyes, rinse immediately with plenty of water
and seek medical advice.
S 27 : Take off immediately all contaminated clothing
S 36/37/39 : Wear suitable protective clothing, gloves and eye / face protection
S 45 : In case of accident or if you feel unwell, seek medical advice
immediately (show the lable where possible).

13. Other general information :

The indications in this safety specification sheet are based on our present level of knowledge and according to national and EU legislation.

Do not use the product for other purposes than those mentioned above without written permission. We have neither knowledge nor control of the actual working conditions of the user. The user is responsible for meeting all the necessary legal conditions. This safety specification sheet describes the safety requirements for our product. It is not an assurance of the product's properties nor is it valid as a basis for contractual legal relation.