

Closed containers exposed to the heat of a fire may lead to pressure rise and explode. For information on environmental and health risks, protection of the respiratory airways, ventilation and individual protective measures refer to the other sections of this sheet.

Extinguishing measures: CO₂, foam, AFFF, chemical powder for flammable liquids. Water may not be effective to extinguish the fire, nevertheless it should be used to cool the containers exposed to flames and prevent fires and explosions. For leakage and spillage that have not caught fire, nebulized water may be used to disperse the flammable vapours and protect the people involved in stopping the leakage.

Equipment: wear equipment complete with helmet and face shield and protection of the neck, selfbreathing apparatus at pressure or demand, insulative jacket and trousers, with bands around the arms, legs and waist.

6. Accidental release measures

Extinguish the sources of ignition or heat; cover the spillage with inert absorbent material. Collect as far as possible the resulting mass and discard the remainder by spraying water, if not contraindicated.

For information on environmental and health risks, protection of the respiratory airways, ventilation and individual protective measures refer to the other sections of this sheet.

7. Handling and storage

Store in a wellventilated place keeping the containers closed when not used. Do not smoke while handling. Keep far away from sources of heat, naked flames and sparks and other sources of ignition; do not spray in the vicinity of flames or incandescent materials.

For information on environmental and health risks, protection of the respiratory airways, ventilation and individual protective measures refer to the other sections of this sheet.

8. Exposure controls/personal protection.

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM			
- TLV TWA	650	mg/m ³	ACGIH
2-METHOXY-1-METHYLETHYL ACETATE			
- TLV TWA	270	mg/m ³	MAK
CYCLOHEXANONE			
- TLV TWA	100	mg/m ³	ACGIH
BUTYLGLYCOL ACETATE			
- TLV TWA	33	mg/m ³	NIOSH94
TLV of solvent mixture:	188	mg/m ³	

In order to minimize exposure as far as possible, it is strongly recommended to use adequate individual protective measures such as: masks suitable for the product, goggles, gloves and overalls. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and at the end of the work shift.

9. Physical and chemical properties

Colour	various
Odour	characteristic
State	paste
Solubility	N.A.
Water solubility	none
Viscosity	N.A.
Vapour density	N.A.
Evaporation speed	N.A.
Comburent properties	N.A.
Partition coefficient: n-octanol/water	N.A.
pH	N.A.
Boiling point	140°C
Flash point	44°C
Explosive properties	N.A.
Vapour pressure	N.A.
Molecular weight	1
Specific gravity	1,200Kg/l

10. Stability and reactivity

The product is stable in normal conditions of use and storage. When heated or in the event of a fire, carbonoxides may be released and vapours which are dangerous to health. The vapours may also form explosive mixtures with the air.

Petroleum naphtha solvent: it can give flammable mixtures with air.

1-methoxy-2-propylacetate: it is stable but in presence of air, it can gradually form peroxides which explode due to the rise in temperature. It can react violently with oxidizing agents and strong acids and alkaline metals. Avoid copper, aluminium and their alloys when storing. Store under inert atmosphere, repaired from humidity because it easily hydrolyses. Cyclohexanone reacts violently with strong oxidizing agents and attacks different types of plastic materials (ref. H.C.S.)

11. Toxicological information

Acute effects: inhalation or cutaneous absorption of this product are harmful. This product may irritate mucosae, the upper respiratory tract, and eyes. Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness.

In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema. Upon contact with skin, this product may irritate it, causing an increase in skin temperature, swelling and itchiness. Ingestion of even small amounts of this product may cause health problems (stomach pain, nausea, sickness, diarrhoea, etc.).

The introduction of even small quantities of this liquid into the respiratory system during ingestion or vomit may cause bronchopneumonia and pulmonary edema.

1-methoxy-2-propanol and corresponding acetate: the main route of entry is the skin, whereas the respiratory route is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause irritation of the eyes, nose and oropharynx.

The recommended limit of exposure is 100 ppm for 8 hours. At 1000 ppm disturbance in the equilibrium and severe irritation of the eyes is observed. (For further details refer to INRS, Fiche toxicologique, nr. 221).

Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man. In vitro genotoxicity tests on animals resulted to be negative.

No significant effects were observed in studies on animal reproduction.

The following experimental data confirm that the substance is not even harmful: oral LD50 in the rat = 7900 mg/kg, inhalation CL50 in the rat 4 hours = 55.2 mg/l (Fiche toxicologique nr. 221).

12. Ecological information

Use this product according to good working practices. Avoid litter. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation. Petroleum distillates, charcoal, vegetable extracts: they are mixtures of paraffinic, naphthenic, diterpenic and aromatic hydrocarbons. Their behaviour on the environment depends on the concentration. In each case use, according to good working practices, avoiding disposal in the environment. As a rule, the product is poorly biodegradable.

13. Disposal considerations

Consider the possibility of burning the product in a suitable incinerator. Acid or basic products must always be neutralized before undergoing any treatment, including biological treatment whenever feasible. If the waste is solid, it can be disposed of in a landfill.

14. Transport informations

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packings or in packings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR: 3,III UN:1210
Label: 3
Proper Shipping Name: Printing ink

Carriage by sea (shipping):

IMO class: 3 UN:1210
Packing Group: III
EMS: 3-05
Proper Shipping Name: Printing ink

Transport by air:

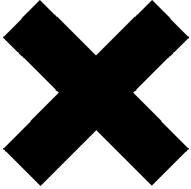
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Page n.4 / 4

IATA: 3 UN:1210
Packing Group: 3 III
Label: 3
Cargo:
Packaging instructions: 310 Maximum quantity: 220 L
Pass.:
Packaging instructions: 309 Maximum quantity: 60 L
Special Instructions: A72

15. Regulatory information

Health hazard symbol



Xn HARMFUL

- R10 FLAMMABLE.
- R20/21 HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
- R65 HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.
- S 9 KEEP CONTAINER IN A WELL-VENTILATED PLACE.
- S13 KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.
- S18 HANDLE AND OPEN CONTAINER WITH CARE.
- S36 WEAR SUITABLE PROTECTIVE CLOTHING.
- S62 IF SWALLOWED, DO NOT INDUCE VOMITING: SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.

Danger labelling under regulations 67/548/CEE and 1999/45/CE and following amendments and adjustments.

Workers exposed to this chemical agent must undergo health checks according to regulation 98/24/CE.

16. Additional information

Text of -R- phrases quoted in section 2 of the sheet.

- R10 FLAMMABLE.
- R20 HARMFUL BY INHALATION.
- R20/21 HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
- R36 IRRITATING TO EYES.
- R65 HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

THIS PRODUCT IS SUITABLE FOR PROFESSIONAL USE ONLY.

GENERAL BIBLIOGRAPHY

1. Regulation 1999/45/CE and following amendments;
2. Regulation 67/548/CEE and following amendments and adjustments (technical adjustment XXVIII);
3. Regulation 91/155/CEE and following amendments;
4. The Merck Index. - 10th Edition;
5. Handling Chemical Safety;
6. Niosh - Registry of Toxic Effects of Chemical Substances;
7. INRS - Fiche Toxicologique (toxicological sheet);
8. Patty - Industrial Hygiene and Toxicology;
9. N.I. Sax-Dangerous properties of Industrial Materials-7, 1989 Edition;

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review

The following sections were modified:

01 / 09 / 15