

Safety Data Sheet

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1. PRODUCT IDENTIFICATION

Product Identifier

Copolymer of vinyl chloride and vinyl isobutyl ether

Other means of Identification

Newflex NP 45

Recommended use and restriction on use

Newflex is used in the production of printing ink.

Company Identification

Maha Chemicals (Asia) Pte Ltd

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+65 6863 1808

2. HAZARD IDENTIFICATION

GHS Classification of the substance

Skin irritation (Category 2)

Eye irritation (Category 2)

Harmful if swallowed (Category 4)

Label elements

Signal Word Warning

Hazard statements

Hazards not otherwise classified

The product is under certain conditions capable of dust explosion.

Emergency overview

WARNING:

Avoid creating dust.

Can form explosive dust-air mixtures.

Avoid inhalation of dusts.

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Avoid contact with the skin, eyes and clothing.
Take precautionary measures against static discharges.
Proper precautions should be taken to eliminate fire and explosion hazards.
Ensure adequate ventilation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterisation	CAS Number	Content (w/w)
vinyl chloride and vinyl isobutyl ether Copolymer	25154-85-2	> 99%

4. FIRST-AID MEASURES

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Rinse mouth and then drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

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water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:
carbon dioxide

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

Hydrogen chloride, harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

Further information:

The substance/product forms flammable mixtures with air.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Notify proper authorities.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of.

Avoid raising dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Closed containers should only be opened in well-ventilated areas.

Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Advice on system design:

Provide local exhaust ventilation to control dust.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Wash soiled clothing immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: powder, fine particles

Odour: faint specific odour

Odour threshold: not determined

Colour: colourless

pH value: not applicable

Softening range: 55 - 57 °C (DIN EN ISO 306)

Boiling point: not applicable

Flash point: not applicable

Flammability: not flammable

Lower explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Upper explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Autoignition: not determined

Vapour pressure: not applicable

Density: approx. 1.24 g/cm³ (20 °C) (DIN 53217-5)

Relative density: approx. 1.24 (20 °C)

Bulk density: approx. 370 kg/m³

Vapour density: The product is a non-volatile solid.

Thermal decomposition: 240 °C

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Viscosity, dynamic: Study does not need to be conducted.

Particle size: No data available.

Solubility in water: sparingly soluble

Solubility (quantitative): insoluble

Evaporation rate: The product is a non-volatile solid.

10. STABILITY AND REACTIVITY

Conditions to avoid:

Avoid humidity.

Substances to avoid:

No substances known that should be avoided.

Hazardous reactions:

Dust explosion hazard.

Decomposition products:

Carbon monoxide, carbon dioxide, Hydrogen chloride

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

Not fire-propagating

11. TOXICOLOGICAL INFORMATION

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute toxicity

Oral:

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

Moderately toxic.

Inhalation:

not determined

Dermal:

not determined

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Irritation / corrosion

Skin:

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

Eye:

Species: rabbit

Result: non-irritant

Method: OECD Guideline 405

Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

12. ECOLOGICAL INFORMATION

Fish

Acute:

Fish/LC50 (96 h):

not determined

Chronic:

No data available.

Aquatic invertebrates

Acute:

OECD Guideline 202, part 1 Daphnia magna/EC50 (48 h): > 100 mg/l

No toxic effects occur within the range of solubility. The product has low solubility in the test medium. An eluate has been tested.

Aquatic plants

Toxicity to aquatic plants:

algae/EC50 (72 h):

not determined

Microorganisms

Toxicity to microorganisms:

bacteria/EC50 (0.5 h):

not determined

Degradability / Persistence

Biological Degradation

Evaluation: The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

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Bioaccumulation

Due to the consistency of the product, dispersion into the environment is impossible. Therefore no negative effect on the environment may be anticipated based on the present state of knowledge.

Other adverse effects:

Do not release untreated into natural waters. At the present state of knowledge, no negative ecological effects are expected.

13. DISPOSAL CONSIDERATIONS

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

Container disposal:

Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. TRANSPORT INFORMATION

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. REGULATORY INFORMATION

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Chronic;

Reportable Quantity for release: 5,000 lb

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16. OTHER INFORMATION

Recommended uses and restrictions : None

SDS Prepared by:

Maha Chemicals (Asia) Pte Ltd

Prepared on: 10 July 2015

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