Material Safety Data Sheet

Date revised: N/A (first edition)

Date prepared: August, 29th, 2012

Section 1 - General Information

Chemical Name: Norethindrone solution, 100ppm

Synonyms: NA
CAS Reg. Number: 68-22-4
Catalog Number: 1ST2203-100A
Manufacturer's Name: A Chemtek, Inc.
100 Barber Avenue

Worcester, MA 01606, USA

Telephone Number: 508-471-4121 **Fax Number:** 508-845-9201

For R & D use only

Section 2 - Hazardous Ingredients/Identity Information

Emergency Overview OSHA Hazards

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Eye irritation (Category 2A), H319

GHS Label elements, including precautionary statements



Pictogram
Signal word
Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled

H319 Causes serious eye irritation.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.Precautionary statement(s)

P201 Obtain special instructions before use.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Call a POISON

CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/ container to an approved waste disposal plant.

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Section 3 - Hazardous Components/Identity Information

| Hazardous Components | CAS# | Concentration |
|----------------------|---------|---------------|
| Acetonitrile | 75-05-8 | Balance |
| Norethindrone | 68-22-4 | 0.01% |

Section 4 - First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

Section 6 - Accidental Release Measures

Personal precautionsUse personal protective equipment. Avoid breathing vapours, mist

or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low

areas

Environmental precautions

product enter drains.

Prevent further leakage or spillage if safe to do so. Do not let

Methods for cleaning up Contain spillage, and then collect with an electrically protected

vacuum cleaner or by wet-brushing and place in container for

disposal according to local regulations

Section 7 - Handling and Storage

Handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use

explosion-proof

equipment.Keep away from sources of ignition - No smoking.Take measures

to prevent the build up of electrostatic charge.

Storage Keep container tightly closed in a dry and well-ventilated place. Containers

which are opened must be carefully resealed and kept upright to prevent

leakage.Store at -20°C.

Section 8 - Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values

Personal protective equipment

Respiratory protection

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Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate

government standards such as NIOSH (US) or CEN (EU).

Hand protection For prolonged or repeated contact use protective gloves

Eye protection Safety glasses

Hygiene measures General industrial hygiene practice

Section 9 - Physical and Chemical Properties

Appearance: Form Liquid Color Colorless

Safety data

pH: not available
Melting point: not available
Boiling point: not available e
Flash point: not available
Ignition temperature: not available
Lower explosion limit: not available
Upper explosion limit: not available
Water solubility: not available

Section 10 - Stability and Reactivity

Storage stability Stable under recommended storage conditions

Materials to avoid Heat, flames and sparks. Extremes of temperature and direct sunlight.

Hazardous decomposition products Hazardous decomposition products formed under fire

conditions. Carbon oxides. Nitrogen oxides (NOx).

Section 11 - Toxicological Information

Acute toxicity: no data available

Other information on acute toxicity no data available

Irritation and corrosion: not available
Sensitization: not available
Respiratory or skin sensitization: not available

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. Ingestion: Toxic if swallowed.

Section 12 - Ecological Information

Toxicity not available
Persistence and degradability not available
Bioaccumulative potential not available
Mobility in soil not available
Results of PBT and vPvB assessment not available

Section 13 - Disposal Considerations

Product Burn in a chemical incinerator equipped with an afterburner and scrubber but

exert extra care in igniting

as this material is highly flammable. Offer surplus and non-recyclable

solutions to a licensed disposal

company. Contact a licensed professional waste disposal service to dispose

of this material.

Contaminated packaging: Dispose of as unused product.

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Section 14- Transport Information

| DOT | IATA |
|------------------------------------|------------------------------------|
| Proper Shipping Name: Acetonitrile | Proper Shipping Name: Acetonitrile |
| UN#: 1648 | UN#: 1648 |
| Class: 3 | Class: 3 |
| Packing Group: II | Packing Group: II |
| Small quantities exempted | Small quantities exempted |

Section 15 - Regulatory Information

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Section 16 - Other Information

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. A Chemtek shall not be held liable for any damage resulting from handling or from contact with the above product.