

# SAFETY DATA SHEET



## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

---

### SECTION 1. IDENTIFICATION

Product name : N-Serve® 24

#### Manufacturer or supplier's details

#### COMPANY IDENTIFICATION

**Manufacturer/importer** : CORTEVA AGRISCIENCE LLC  
9330 ZIONSVILLE RD  
INDIANAPOLIS, IN, 46268-1053  
UNITED STATES

**Customer Information Number** : 800-992-5994

**E-mail address** : customerinformation@corteva.com

**Emergency telephone** : INFOTRAC (CONTRACT 84224).  
800-992-5994 or 317-337-6009

#### Recommended use of the chemical and restrictions on use

Recommended use : Stabilizer

---

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 4

Skin irritation : Category 2

Skin sensitization : Sub-category 1B

Carcinogenicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Respiratory system, Central nervous system)

Aspiration hazard : Category 1

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

### GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H351 Suspected of causing cancer.

Precautionary Statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
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.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ 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.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P331 Do NOT induce vomiting.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

### Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

### Disposal:

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

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
nitrapyrin (ISO)	1929-82-4	22.2
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified	64742-95-6	>= 60 - < 70
1,2,4-trimethylbenzene	95-63-6	>= 20 - < 25
xylene	1330-20-7	>= 10 - < 20
4,6-dichloro-2-trichloromethyl pyridine	1129-19-7	>= 1 - < 3
cumene	98-82-8	>= 0.3 - < 1
2,3,4,5,6-Pentachloropyridine	2176-62-7	>= 0.3 - < 1

Actual concentration is withheld as a trade secret

## SECTION 4. FIRST AID MEASURES

- If inhaled : Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.  
If breathing is difficult, oxygen should be administered by qualified personnel.
- In case of skin contact : Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.  
Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.
- In case of eye contact : Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.
- If swallowed : Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).  
If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Maintain adequate ventilation and oxygenation of the patient.  
No specific antidote.  
Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.  
Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.  
Skin contact may aggravate preexisting dermatitis.
- 

### SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : Do not use direct water stream.  
High volume water jet
- Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.  
Vapors may form explosive mixtures with air.  
Do not allow run-off from fire fighting to enter drains or water courses.  
Flash back possible over considerable distance.
- Hazardous combustion products : During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.
- Combustion products may include and are not limited to:  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride gas  
Carbon oxides
- Specific extinguishing methods : Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.
- Further information : Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed.  
Do not use a solid water stream as it may scatter and spread fire.  
Use a water spray to cool fully closed containers.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

Special protective equipment for fire-fighters : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

---

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.  
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.  
Remove all sources of ignition.  
Use personal protective equipment.  
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.  
Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g., by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.  
Prevent from entering into soil, ditches, sewers, underwater.  
See Section 12, Ecological Information.

Methods and materials for containment and cleaning up : Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped,  
Recovered material should be stored in a vented container.  
The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-pressurization of the container.  
Wipe up with absorbent material (e.g. cloth, fleece).  
Non-sparking tools should be used.  
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Suppress (knock down) gases/vapors/mists with a water spray jet.  
See Section 13, Disposal Considerations, for additional information.

---

### SECTION 7. HANDLING AND STORAGE

Local/Total ventilation : Use with local exhaust ventilation.

---

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

- Advice on safe handling : Use only in an area equipped with explosion proof exhaust ventilation.  
: Avoid formation of aerosol.  
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Non-sparking tools should be used.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Open drum carefully as content may be under pressure.  
Do not breathe vapors/dust.  
Do not smoke.  
Handle in accordance with good industrial hygiene and safety practice.  
Avoid exposure - obtain special instructions before use.  
Smoking, eating and drinking should be prohibited in the application area.  
Do not get on skin or clothing.  
Do not breathe vapors or spray mist.  
Do not swallow.  
Avoid contact with skin and eyes.  
Avoid contact with eyes.  
Keep container tightly closed.  
Keep away from heat and sources of ignition.  
Take precautionary measures against static discharges.  
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Store in a closed container.  
No smoking.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Keep in properly labeled containers.  
Keep tightly closed.  
Store in accordance with the particular national regulations.
- Materials to avoid : Strong oxidizing agents  
Organic peroxides  
Flammable solids  
Pyrophoric liquids  
Self-heating substances and mixtures  
Substances and mixtures which in contact with water emit flammable gases  
Explosives  
Gases
- Packaging material : Unsuitable material: None known.

## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified	64742-95-6	TWA	500 ppm 2,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	200 mg/m <sup>3</sup> (total hydrocarbon vapor)	ACGIH
nitrapyrin (ISO)	1929-82-4	TWA (Inhalable fraction and vapor)	10 mg/m <sup>3</sup>	ACGIH
		STEL (Inhalable fraction and vapor)	20 mg/m <sup>3</sup>	ACGIH
		TWA (total dust)	15 mg/m <sup>3</sup>	OSHA Z-1
		TWA (respirable fraction)	5 mg/m <sup>3</sup>	OSHA Z-1
1,2,4-trimethylbenzene	95-63-6	TWA	25 ppm	ACGIH
xylene	1330-20-7	TWA	100 ppm 435 mg/m <sup>3</sup>	OSHA Z-1
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
cumene	98-82-8	TWA	50 ppm	ACGIH
		TWA	50 ppm 245 mg/m <sup>3</sup>	OSHA Z-1
2,3,4,5,6-Pentachloropyridine	2176-62-7	TWA	7 mg/m <sup>3</sup>	Dow IHG

## Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
xylene	1330-20-7	Methylhippuric acids	Urine	End of shift (As soon as possible after exposure ceases)	1.5 g/g creatinine	ACGIH BEI

**Engineering measures** : Use engineering controls to maintain airborne level below exposure limit requirements or guidelines.  
If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation.  
Local exhaust ventilation may be necessary for some operations.

**Personal protective equipment**

Respiratory protection : Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

Hand protection

Remarks : If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Remarks : Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Eye protection : Use safety glasses (with side shields).

Skin and body protection : Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

---

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid.

Color : Colorless to yellow

Odor : Aromatic

Odor Threshold : No data available

pH : 6.26

Melting point/range : Not applicable

Freezing point : No data available

Boiling point/boiling range : 322 °F / 161 °C  
Method: Literature  
Approx.

Flash point : 104 °F / 40 °C  
Method: ASTM D 56, closed cup

Evaporation rate : Not applicable

Flammability (solid, gas) : No data available



# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

Upper explosion limit / Upper flammability limit : 7 vol %  
Method: Literature

Lower explosion limit / Lower flammability limit : No data available

Vapor pressure : 5.332 hPa (68 °F / 20 °C)  
Method: Literature  
Approx.

Relative vapor density : 3.7  
Method: Literature  
Calculated.

Density : 0.98 g/cm<sup>3</sup> (68 °F / 20 °C)  
Method: Literature

Solubility(ies)  
Water solubility : Immiscible  
Method: Literature

Autoignition temperature : No data available

Viscosity  
Viscosity, dynamic : > 3 mPa.s (68 °F / 20 °C)

Explosive properties : No data available

Oxidizing properties : No data available

---

### SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : No decomposition if stored and applied as directed.  
Stable under normal conditions.

Possibility of hazardous reactions : Stable under recommended storage conditions.  
No hazards to be specially mentioned.  
Vapors may form explosive mixture with air.  
May form explosive dust-air mixture.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : None.

Hazardous decomposition products : Decomposition products depend upon temperature, air supply and the presence of other materials.  
Decomposition products can include and are not limited to:  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride gas  
Carbon oxides

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : LD50 (Rat, female): 1,405 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 6.0 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

**Components:****nitrapyrin (ISO):**

Acute oral toxicity : LD50 (Rat, male): 1,072 mg/kg  
LD50 (Rat, female): 1,231 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 3.51 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Symptoms: No deaths occurred at this concentration., The LC50 value is greater than the Maximum Attainable Concentration.  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): 2,830 mg/kg

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Acute oral toxicity : Remarks: Low toxicity if swallowed.  
Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.  
LD50 (Rat): 3,492 mg/kg

Acute inhalation toxicity : Remarks: Mist may cause irritation of upper respiratory tract (nose and throat).  
May cause dizziness and drowsiness.  
LC50 (Rat): 6.193 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Maximum attainable concentration.

Acute dermal toxicity : Remarks: Prolonged skin contact is unlikely to result in ab-

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

sorption of harmful amounts.

LD50 (Rabbit): > 3,160 mg/kg

**1,2,4-trimethylbenzene:**

Acute oral toxicity : LD50 (Rat): > 3,400 mg/kg

Acute inhalation toxicity : Remarks: Prolonged excessive exposure may cause serious adverse effects, even death.  
Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs.  
May cause central nervous system effects.  
Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

LC50 (Rat): 18 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**xylene:**

Acute oral toxicity : LD50 (Rat): 4,300 mg/kg

Acute inhalation toxicity : LC50 (Rat): 27.5 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

**4,6-dichloro-2-trichloromethyl pyridine:**

Acute oral toxicity : LD50 (Rat): 1,000 - 2,000 mg/kg  
Method: Estimated.

**cumene:**

Acute oral toxicity : LD50 (Rat): 2,260 mg/kg  
Remarks: Contact with the tongue may produce a burning sensation and excess salivation.

Acute inhalation toxicity : LC50 (Rat): > 17.6 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Symptoms: No deaths occurred at this concentration.  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg

**N-Serve® 24**

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

**2,3,4,5,6-Pentachloropyridine:**

Acute oral toxicity : LD50 (Rat, male): 435 mg/kg

**Skin corrosion/irritation****Product:**

Species : Rabbit  
Result : Skin irritation

**Components:****nitrapyrin (ISO):**

Species : Rabbit  
Result : No skin irritation

**1,2,4-trimethylbenzene:**

Result : Skin irritation

**xylene:**

Result : Skin irritation

**4,6-dichloro-2-trichloromethyl pyridine:**

Result : Skin irritation

**cumene:**

Result : No skin irritation

**2,3,4,5,6-Pentachloropyridine:**

Species : Rabbit  
Result : No skin irritation

**Serious eye damage/eye irritation****Product:**

Species : Rabbit  
Result : No eye irritation

**Components:****nitrapyrin (ISO):**

Species : Rabbit  
Result : Eye irritation

**1,2,4-trimethylbenzene:**

Result : Eye irritation

**N-Serve® 24**

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

**xylene:**

Result : Eye irritation

**4,6-dichloro-2-trichloromethyl pyridine:**

Result : Eye irritation

**cumene:**

Result : No eye irritation

**2,3,4,5,6-Pentachloropyridine:**

Species : Rabbit

Result : No eye irritation

**Respiratory or skin sensitization****Product:**

Species : Mouse

Result : The product is a skin sensitizer, sub-category 1B.

**Components:****nitrapyrin (ISO):**

Species : Guinea pig

Result : May cause sensitization by skin contact.

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Remarks : For skin sensitization:  
Did not cause sensitization on laboratory animals.

Remarks : For respiratory sensitization:  
No relevant data found.

**1,2,4-trimethylbenzene:**

Remarks : For similar material(s):  
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:  
No relevant data found.

**4,6-dichloro-2-trichloromethyl pyridine:**

Remarks : Not expected to be a skin sensitizer based on Structure-Activity Relationship (SAR).

Remarks : For respiratory sensitization:  
No relevant data found.

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

**cumene:**

Remarks : For skin sensitization:  
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:  
No relevant data found.

**2,3,4,5,6-Pentachloropyridine:**

Assessment : May cause sensitization by skin contact.

**Germ cell mutagenicity****Components:****nitrapyrin (ISO):**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Germ cell mutagenicity - Assessment : Did not show mutagenic effects in animal experiments.

**1,2,4-trimethylbenzene:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

**xylene:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

**cumene:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

**2,3,4,5,6-Pentachloropyridine:**

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative.

**Carcinogenicity****Components:****nitrapyrin (ISO):**

Carcinogenicity - Assessment : Kidney effects and/or tumors have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

Has caused cancer in laboratory animals., However, the relevance of this to humans is unknown.

**xylene:**

Carcinogenicity - Assessment : Xylene was not found to be carcinogenic in a National Toxicology Program bioassay in rats and mice.

**cumene:**

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Has caused cancer in laboratory animals., However, the relevance of this to humans is unknown.

**IARC** Group 2B: Possibly carcinogenic to humans  
cumene 98-82-8

**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP** Reasonably anticipated to be a human carcinogen  
cumene 98-82-8

**Reproductive toxicity****Components:****nitrapyrin (ISO):**

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Has been toxic to the fetus in laboratory animals at doses toxic to the mother., Exposures having no effect on the mother should have no effect on the fetus., Did not cause birth defects in laboratory animals.

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.

**1,2,4-trimethylbenzene:**

Reproductive toxicity - Assessment : For similar material(s);, In animal studies, did not interfere with reproduction. Has been toxic to the fetus in laboratory animals at doses toxic to the mother., Did not cause birth defects in laboratory animals.

**xylene:**

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Exaggerated doses of xylene given orally to pregnant mice resulted in an increase in cleft palate, a common developmental abnormality in mice. In animal inhalation studies, xylene caused toxicity to the fetus but did not cause birth defects.

**N-Serve® 24**

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

**cumene:**

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

**2,3,4,5,6-Pentachloropyridine:**

Reproductive toxicity - Assessment : Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

**STOT-single exposure****Components:****Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Routes of exposure : inhalation (dust/mist/fume)  
Assessment : May cause respiratory irritation., May cause drowsiness or dizziness.

**1,2,4-trimethylbenzene:**

Routes of exposure : Inhalation  
Target Organs : Respiratory Tract  
Assessment : May cause respiratory irritation.

**xylene:**

Routes of exposure : Inhalation  
Target Organs : Respiratory system  
Assessment : May cause respiratory irritation.

**4,6-dichloro-2-trichloromethyl pyridine:**

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

**cumene:**

Routes of exposure : Inhalation  
Target Organs : Respiratory Tract  
Assessment : May cause respiratory irritation.

**2,3,4,5,6-Pentachloropyridine:**

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**STOT-repeated exposure****Components:****Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.



**N-Serve® 24**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

**Repeated dose toxicity****Components:****nitrapyrin (ISO):**

Remarks : In animals, effects have been reported on the following organs:  
Kidney.  
Liver.  
Blood.  
Female reproductive organs.  
Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**1,2,4-trimethylbenzene:**

Remarks : In animals, effects have been reported on the following organs:  
Respiratory tract.

**xylene:**

Remarks : In animals, effects have been reported on the following organs:  
Blood.  
Kidney.  
Liver.  
Xylene is reported to have caused hearing loss in laboratory animals upon exposure to high concentrations; such effects have not been reported in humans.

**4,6-dichloro-2-trichloromethyl pyridine:**

Remarks : No relevant data found.

**cumene:**

Remarks : Cataracts were observed in rats exposed to cumene vapors.

**2,3,4,5,6-Pentachloropyridine:**

Remarks : In animals, effects have been reported on the following organs:  
Kidney.

**Aspiration toxicity****Product:**

May be fatal if swallowed and enters airways.

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

**Components:****nitrapyrin (ISO):**

Based on physical properties, not likely to be an aspiration hazard.

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

May be fatal if swallowed and enters airways.

**1,2,4-trimethylbenzene:**

May be harmful if swallowed and enters airways.

**xylene:**

May be fatal if swallowed and enters airways.

**4,6-dichloro-2-trichloromethyl pyridine:**

Based on available information, aspiration hazard could not be determined.

**cumene:**

May be fatal if swallowed and enters airways.

**2,3,4,5,6-Pentachloropyridine:**

Based on physical properties, not likely to be an aspiration hazard.

---

**SECTION 12. ECOLOGICAL INFORMATION**
**Ecotoxicity****Components:****nitrapyrin (ISO):**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 3.4 - 7.9 mg/l  
 Exposure time: 96 h  
 Test Type: static test  
 Method: OECD Test Guideline 203 or Equivalent

LC50 (Rainbow trout (Oncorhynchus mykiss)): 4 mg/l  
 Exposure time: 96 h  
 Test Type: static test

Toxicity to daphnia and other : EC50 (eastern oyster (Crassostrea virginica)): 1.8 mg/l  
 aquatic invertebrates : Exposure time: 96 h  
 Test Type: flow-through test

LC50 (Daphnia magna (Water flea)): 2.2 mg/l  
 Exposure time: 48 h  
 Test Type: flow-through test

Toxicity to algae/aquatic : ErC50 (Pseudokirchneriella subcapitata (green algae)): 1.7  
 plants : mg/l

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

End point: Growth rate inhibition  
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (Fathead minnow (*Pimephales promelas*)): 2.87 mg/l  
Exposure time: 34 d

Toxicity to soil dwelling organisms : LC50 (*Eisenia fetida* (earthworms)): 209 mg/kg  
Exposure time: 15 d  
End point: survival

Toxicity to terrestrial organisms : Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg)., Material is slightly toxic to birds on a dietary basis (LC50 between 1001 and 5000 ppm).

oral LD50 (*Anas platyrhynchos* (Mallard duck)): 2708 mg/kg bodyweight.

dietary LC50 (*Anas platyrhynchos* (Mallard duck)): 1466 mg/kg diet.

dietary LC50 (*Coturnix japonica* (Japanese quail)): 820 mg/kg diet.

oral LD50 (*Apis mellifera* (bees)): > 100 µg/bee  
Exposure time: 48 h

contact LD50 (*Apis mellifera* (bees)): > 100 µg/bee  
Exposure time: 48 h

### Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

### Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 9.2 mg/l  
Exposure time: 96 h  
Remarks: For similar material(s):

Toxicity to daphnia and other aquatic invertebrates : EL50 (*Daphnia magna* (Water flea)): 3.2 mg/l  
Exposure time: 48 h  
Remarks: For similar material(s):

Toxicity to algae/aquatic plants : EL50 (*Pseudokirchneriella subcapitata* (green algae)): 2.9 mg/l  
Exposure time: 72 h  
Remarks: For similar material(s):

NOEC (*Pseudokirchneriella subcapitata* (green algae)): 1 mg/l  
Exposure time: 72 h  
Remarks: For similar material(s):

### Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**1,2,4-trimethylbenzene:**

Toxicity to fish : Remarks: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50 (Pimephales promelas (fathead minnow)): 7.7 mg/l  
Exposure time: 96 h  
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.6 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 2.356 mg/l  
Exposure time: 96 h

**Ecotoxicology Assessment**

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**xylene:**

Toxicity to fish : Remarks: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50 (Oncorhynchus mykiss (rainbow trout)): 2.6 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203 or Equivalent

Toxicity to daphnia and other aquatic invertebrates : IC50 (Daphnia magna (Water flea)): 1 - 4.7 mg/l  
Exposure time: 24 h  
Method: OECD Test Guideline 202 or Equivalent

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (algae)): 4.36 mg/l  
End point: Growth rate  
Exposure time: 73 h  
Test Type: Static  
Method: OECD Test Guideline 201 or Equivalent

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.44 mg/l  
End point: Growth rate  
Exposure time: 73 h  
Method: OECD Test Guideline 201 or Equivalent

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): > 1.3 mg/l  
End point: mortality  
Exposure time: 56 d  
Test Type: flow-through

**cumene:**

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.7 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203 or Equivalent
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.0 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202 or Equivalent
- Toxicity to algae/aquatic plants : EbC50 (Pseudokirchneriella subcapitata (green algae)): 2.6 mg/l  
End point: Biomass  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201 or Equivalent
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.35 mg/l  
End point: number of offspring  
Exposure time: 21 d  
Test Type: semi-static test  
Method: OECD Test Guideline 211 or Equivalent
- Toxicity to terrestrial organisms : oral LD50 (redwing blackbird (Agelaius phoeniceus)): > 98 mg/kg

### **2,3,4,5,6-Pentachloropyridine:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0.47 mg/l  
Exposure time: 96 h  
Test Type: flow-through test
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 4 mg/l  
End point: Growth rate inhibition  
Exposure time: 96 h  
Test Type: static test

### **Ecotoxicology Assessment**

- Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

### **Persistence and degradability**

#### **Components:**

#### **nitrapyrin (ISO):**

- Biodegradability : Remarks: Chemical degradation (hydrolysis) is expected in the environment within days to weeks.  
Degradation is expected in the soil environment within days to weeks.
- ThOD : 0.97 kg/kg
- Stability in water : Test Type: Hydrolysis

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

Degradation half life (half-life): 186 h (25 °C) pH: 5

Test Type: Hydrolysis

Degradation half life (half-life): 173 - 233 h (25 °C) pH: 7

Test Type: Hydrolysis

Degradation half life (half-life): 129 h (25 °C) pH: 9

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Biodegradability : Biodegradation: 78 %  
 Exposure time: 28 d  
 Remarks: Material is expected to be readily biodegradable.

**1,2,4-trimethylbenzene:**

Biodegradability : Result: Readily biodegradable.  
 Remarks: Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).

Biodegradation: 100 %

Exposure time: 1 d

ThOD : 3.19 kg/kg

Photodegradation : Test Type: Half-life (indirect photolysis)  
 Sensitizer: OH radicals  
 Rate constant: 1.670E-11 cm<sup>3</sup>/s  
 Method: Estimated.

**xylene:**

Biodegradability : Result: Readily biodegradable.  
 Remarks: Material is expected to be readily biodegradable.

aerobic

Biodegradation: > 60 %

Exposure time: 10 d

Method: OECD Test Guideline 301F or Equivalent

Remarks: 10-day Window: Pass

Biochemical Oxygen Demand (BOD) : 37.000 %  
 Incubation time: 5 d  
 Method: DOW Test

58.000 %

Incubation time: 10 d

Method: DOW Test

72.000 %

Incubation time: 20 d

Method: DOW Test

ThOD : 3.17 kg/kg

Photodegradation : Test Type: Half-life (indirect photolysis)

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

Sensitizer: OH radicals  
Concentration: 1,500,000 1/cm<sup>3</sup>  
Rate constant: 6.5E-12 cm<sup>3</sup>/s  
Method: Estimated.

### **cumene:**

Biodegradability : Result: Readily biodegradable.  
Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation: 70 %  
Exposure time: 20 d  
Method: OECD Test Guideline 301D or Equivalent  
Remarks: 10-day Window: Pass

Biochemical Oxygen Demand (BOD) : 40%  
Incubation time: 5 d  
  
62%  
Incubation time: 10 d  
  
70%  
Incubation time: 20 d

ThOD : 3.20 kg/kg  
Method: Estimated.

Photodegradation : Test Type: Half-life (indirect photolysis)  
Sensitizer: OH radicals  
Concentration: 1,500,000 1/cm<sup>3</sup>  
Rate constant: 6.90E-12 cm<sup>3</sup>/s  
Method: Estimated.

### **2,3,4,5,6-Pentachloropyridine:**

ThOD : 0.64 kg/kg

### **Bioaccumulative potential**

#### **Components:**

#### **nitrapyrin (ISO):**

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)  
Bioconcentration factor (BCF): < 85  
Exposure time: 30 d  
Method: Measured

Partition coefficient: n-octanol/water : log Pow: 3.324  
Method: Measured  
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

### **1,2,4-trimethylbenzene:**

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Bioconcentration factor (BCF): 33 - 275  
Exposure time: 56 d  
Concentration: 0.2 mg/l  
Method: Measured

Partition coefficient: n-octanol/water : log Pow: 3.63  
Method: Measured  
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

### **xylene:**

Bioaccumulation : Species: Rainbow trout (Salmo gairdneri)  
Bioconcentration factor (BCF): 25.9  
Method: Measured

Partition coefficient: n-octanol/water : log Pow: 3.12  
Method: Measured  
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

### **4,6-dichloro-2-trichloromethyl pyridine:**

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

### **cumene:**

Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 35.5  
Method: Measured

Partition coefficient: n-octanol/water : log Pow: 3.4 - 3.7  
Method: Measured  
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

### **2,3,4,5,6-Pentachloropyridine:**

Partition coefficient: n-octanol/water :  
  
log Pow: 3.53  
Method: Measured  
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

### **Mobility in soil**

#### **Components:**

#### **nitrapyrin (ISO):**

Distribution among environ- : Koc: 321



# SAFETY DATA SHEET



## N-Serve® 24

Version 1.0      Revision Date: 03/31/2022      SDS Number: 800080003184      Date of last issue: -  
Date of first issue: 03/31/2022

---

mental compartments      Method: Measured  
Remarks: Potential for mobility in soil is medium (Koc between 150 and 500).

Stability in soil      :    Dissipation time: 3 - 35 d

**Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:**

Distribution among environmental compartments      :    Remarks: No relevant data found.

**1,2,4-trimethylbenzene:**

Distribution among environmental compartments      :    Koc: 720  
Method: Estimated.  
Remarks: Potential for mobility in soil is low (Koc between 500 and 2000).

**xylene:**

Distribution among environmental compartments      :    Koc: 443  
Method: Estimated.  
Remarks: Potential for mobility in soil is medium (Koc between 150 and 500).

**4,6-dichloro-2-trichloromethyl pyridine:**

Distribution among environmental compartments      :    Remarks: No relevant data found.

**cumene:**

Distribution among environmental compartments      :    Koc: 800 - 2800  
Method: Estimated.  
Remarks: Potential for mobility in soil is low (Koc between 500 and 2000).

**Other adverse effects**

**Components:**

**nitrapyrin (ISO):**

Results of PBT and vPvB assessment      :    This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential      :    Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**1,2,4-trimethylbenzene:**

Results of PBT and vPvB assessment      :    This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential      :    Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**xylene:**

**N-Serve® 24**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**4,6-dichloro-2-trichloromethyl pyridine:**

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**cumene:**

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**2,3,4,5,6-Pentachloropyridine:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.  
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

UN number	: UN 1993
Proper shipping name	: FLAMMABLE LIQUID, N.O.S. (XYLENE RANGE AROMATIC SOLVENT)
Class	: 3
Packing group	: III
Labels	: 3

**IATA-DGR**

UN/ID No.	: UN 1993
Proper shipping name	: Flammable liquid, n.o.s. (XYLENE RANGE AROMATIC SOLVENT)
Class	: 3
Packing group	: III
Labels	: Flammable Liquids
Packing instruction (cargo aircraft)	: 366
Packing instruction (passenger aircraft)	: 355

**IMDG-Code**

UN number	: UN 1993
Proper shipping name	: FLAMMABLE LIQUID, N.O.S. (XYLENE RANGE AROMATIC SOLVENT, 1,2,4-Trimethylbenzene, Nitrapyrin)
Class	: 3
Packing group	: III
Labels	: 3
EmS Code	: F-E, <u>S-E</u>
Marine pollutant	: yes
Remarks	: Stowage category A

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation****49 CFR**

UN/ID/NA number	: UN 1993
Proper shipping name	: Flammable liquids, n.o.s. (XYLENE RANGE AROMATIC SOLVENT)
Class	: 3
Packing group	: III
Labels	: FLAMMABLE LIQUID
ERG Code	: 128
Marine pollutant	: no

**Further information**

For US Domestic transport, according to 49 CFR 173.150 f (1), A flammable liquid with a flash point at or above 38 °C (100 °F) that does not meet the definition of any other hazard class may be reclassified as a combustible liquid. This provision does not apply to transportation by vessel or aircraft, except where other means of transportation is impracticable., This product is only classi-

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

fied in containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters). If transporting by vessel or aircraft, unless other means of transportation is impracticable, the product must be shipped as a flammable liquid.

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)  
Acute toxicity (any route of exposure)  
Respiratory or skin sensitization  
Carcinogenicity  
Aspiration hazard  
Skin corrosion or irritation  
Specific target organ toxicity (single or repeated exposure)

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

nitrapyrin (ISO)	1929-82-4	>= 20 - < 30 %
1,2,4-trimethylbenzene	95-63-6	>= 20 - < 30 %
xylene	1330-20-7	>= 10 - < 20 %
cumene	98-82-8	>= 0.1 - < 1 %

**US State Regulations****Pennsylvania Right To Know**

Solvent naphtha (petroleum), light arom.; Low boiling point	64742-95-6
naphtha -unspecified	
nitrapyrin (ISO)	1929-82-4
1,2,4-trimethylbenzene	95-63-6
xylene	1330-20-7

**California Prop. 65**

WARNING: This product can expose you to chemicals including nitrapyrin (ISO), cumene, which is/are known to the State of California to cause cancer, and nitrapyrin (ISO), which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**The ingredients of this product are reported in the following inventories:**

TSCA : Product contains substance(s) not listed on TSCA inventory.

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

**Federal Insecticide, Fungicide and Rodenticide Act**

EPA Registration Number : 62719-020

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**WARNING**

Causes skin irritation  
 Harmful if swallowed  
 Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**SECTION 16. OTHER INFORMATION**

## Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

**Full text of other abbreviations**

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
Dow IHG	:	Dow Industrial Hygiene Guideline
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
Dow IHG / TWA	:	Time Weighted Average (TWA):
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC

# SAFETY DATA SHEET



## N-Serve® 24

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/31/2022	800080003184	Date of first issue: 03/31/2022

---

- No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 03/31/2022

Product code: XRM-4786

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN