

Product
INSTANT I-SOFT® + Addition (NB)
INSTANT DOSING TECHNOLOGY

Version: 1.0
 Printing Date: 24.04.2013

Watch® encourages and expects you to read and understand the entire MSDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1	CHEMICAL PRODUCT & COMPANY IDENTIFICATION
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Product Name: INSTANT I-SOFT® NB

Application: Drinking Water Treatment, Filtration, Biofouling prevention

Sub components	Function
I	Scale Inhibitor
SOFT	Corrosion inhibitor, Dispersant
<i>Addition:</i> NB	Non-oxidizing biocide

Company Identification/Supplier Watch GmbH
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 D-68165 Mannheim
 Germany
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Emergency information (8:00- 16:45) Phone: +49 621 87951-50

2	HAZARDS IDENTIFICATION
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Classification of the substance or mixture

Emergency overview

CORROSIVE: Corrosive to the skin, eyes and respiratory system. Avoid contact with the skin, eyes and clothing.

TOXIC: Toxic if inhaled.

Acute toxicity: Harmful if swallowed.

Irritation / corrosion: Corrosive to skin and/or eyes.

Assessment other acute effects: Apart from effects causing lethality, no specific target organ toxicity was observed in experimental studies.

Sensitization: Skin sensitizing effects were observed in animal studies.

Chronic toxicity:

Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity: In animal studies the substance did not cause malformations.

Genotoxicity: The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in bacteria. The substance was not mutagenic in a test with mammals.

Signs and symptoms of overexposure: The most important known symptoms and effects are described in the labeling (see section 2, next page) and/or in section 11.

Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA.

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Labeling:

- **Labeling according to Regulation (EC) No 1272/2008**
This product requires labeling according to 2008/1272/EC.
- **Labeling according to Directive 67/548/EEC or 1999/45/EC**
This product requires labeling according to 67/548/EEC or 1999/45/EC

**Other hazards**

The product is irritant to the skin and could be harmful if swallowed.

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3	COMPOSITION / INFORMATION ON INGREDIENTS
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- Chemical characterization: solid mixture

Component, name	CAS-Nr.	Classification	Hazard	Conc.
proprietary	proprietary	corrosive	H314, H317, H400	<40%
proprietary	proprietary	irritant	H315	<50%
proprietary	proprietary	none	none	>10%

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non hazardous and/or present at amounts below reportable limits.

4	FIRST-AID MEASURES
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- **General Information:**
Take off contaminated clothes. Wash immediately with plenty of water. Continue rinsing for at least 10 minutes. If any symptom persists, seek medical attention.
- **Eye contact:** Rinse immediately with plenty of running water. Continue for at least 15 minutes. Seek medical advice.
- **Skin contact:** Remove contaminated clothing. Wash immediately with plenty of water. Continue for at least 15 minutes. Obtain medical advice if there are persistent symptoms..
- **Inhalation:** Remove patient to fresh air, allow to rest and keep warm. In case of unconsciousness place patient stably in side position for transportation. Obtain medical advice.
- **Ingestion:** First rinse mouth with water. Immediately give 1-2 glasses of water, if victim is fully conscious. Seek medical attention.

Note to physician:

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

5	FIRE FIGHTING MEASURES
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- **Extinguishing media:** Extinguish with water spray, CO₂, foam, dry chemical
- **Unusual Fire and Explosion Hazards:** This material will not burn until the water has evaporated. Residue can burn. Container may rupture from gas generation in a fire situation.
- **Exposure hazards:** Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds.
- **Combustion products:** Nitrogen oxides. Hydrogen bromide. Carbon monoxide, Carbon dioxide.
- **Protective equipment:** Firefighters and other exposed, wear self-contained breathing apparatus and protective suit.

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6 ACCIDENTAL RELEASE MEASURES

- The product forms a slippery surface in contact with water.
- **Personal precautions:** Wear eye protection and protective clothing.
- **Environmental precautions:** Keep out of drains and water courses.
- **Methods for cleaning up:** Vacuum or sweep up material and placed in a designated waste container. Avoid dust formation.
- **Disposal method:** The material be disposed in accordance with applicable local, state and federal regulations.

7 HANDLING AND STORAGE

- **Handling:** Normal chemical handling. Dust mask should be used when large quantities are used in the absence of good local exhaust ventilation. Avoid the formation and deposition of dust. Take precautionary measures to avoid static charges. Wash hands after handling.
- **Storage:**
 Shelf life: use within 12 months after cut opening the bag
 Protect from sun. Store in a dry, cool place (temp ≤ 35°C). Keep container sealed and dry.
- The relevant fire protection measures should be noted.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure limit: no specific value; the national exposure limit for dust should be observed.

Personal protective equipment:

- **Respiratory protection:** Respiratory protection if dust is formed. In case of insufficient ventilation, use an appropriate approved particulate respirators (for example EN 143 or 149, type P2 or FFP2).
- **Eye protection:** Safety glasses with side-shields (frame goggles). Where eye contact or dusty conditions may be likely, dust tight goggles are recommended.
- **Hands:** Chemicals resistant gloves (EN 374) Nitril, PVC or chloroprene protective gloves.
- **Skin protection:** Wear appropriate protective clothing. Avoid skin contact with the spilled product.
- **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

9 PHYSICAL AND CHEMICAL PROPERTIES

General Information:	
Physical State	solid, granulate
Appearance	white
Odor	weak, product specific
Flash point:	> 180 °C
Bulk density:	ca. 800 - 900 kg/m ³
Solubility in water at 20°C:	>200 g/l

10 STABILITY AND REACTIVITY

- **Thermal decomposition/conditions to be avoided:** No decomposition if used according to specifications. Avoid storing at high temperatures or in direct sunlight.
- **Materials to avoid:** Contact with strong oxidizing agents and alkaline substances. Incompatible with chlorine and chlorine compounds, cyanides, sulfides, nitrites, nitrates, carbonates, metal oxides, strong oxidizing agents and strong bases.
- **Conditions to avoid:** Dust formation
- **Hazardous decomposition products:** None when used according to specifications

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1. Decomposition products depend upon temperature, air supply and the presence of other materials.
2. Decomposition products can include and are not limited to: cyanogen bromide, nitrogen oxides, carbon oxides, sulfur oxides and ammonia gas.
3. Concentrated solutions, when heated, will release sulfur dioxide, and sulfur trioxide.

11 TOXICOLOGICAL INFORMATION

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).

Information on toxicological effects

Acute toxicity

Ingestion: LD50 (rat) > 510 mg/kg
 Dermal: LD50 (rabbit) > 2000 mg/kg
 Inhalation: LC50 (rat, male), aerosol exposure: 4 h 1.4 mg/l

Primary irritant effect:

Skin (rabbit): Severely Irritant (400 mg for 24 h) to skin and mucous membranes
 Eye (rabbit): Severely Irritant
 Sensitization: May cause sensitizing effects

12 ECOLOGICAL INFORMATION

Toxicity

Fish Acute & Prolonged Toxicity

LC50, rainbow trout (*Oncorhynchus mykiss*), 96 h: 10 mg/l

Aquatic Invertebrate Acute Toxicity

EC50, water flea *Daphnia magna*, static, 48 h, immobilization: 6.25 mg/l

Aquatic Plant Toxicity

ErC50, green alga *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum*), Growth rate inhibition, 72 h: 4 mg/l

- **Persistence and degradability:**

Degradation is expected in the soil environment within minutes to hours. Chemical degradation (hydrolysis) is expected in the environment. Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method
35 - 78 %	28 d	OECD 301B Test
83.3 %	28 d	OECD 303A Test

Indirect Photo degradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
2.00E-12 cm ³ /s	5.3 d	Estimated.

Chemical Oxygen Demand: 0.1 mg/mg

Theoretical Oxygen Demand: 0.24 mg/mg

- **Bio-accumulative potential:**

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient, n-octanol/water (log Pow): 0.79 Measured

Bioconcentration Factor (BCF): 13; fish; Measured

- **Mobility in soil:**

Mobility in soil: Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient, soil organic carbon/water (Koc): 15 Estimated.

Henry's Law Constant (H): 4.67E-10 atm*m³/mole; 25 °C Estimated.

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- **Additional ecological information:**
 Do not release untreated into natural waters.

The product has not been tested. The statement has been derived from the properties of the individual components.

13 | DISPOSAL CONSIDERATIONS

- **Recommendation:** must not be disposed together with household solid waste. Do not allow product to reach sewage system.
- **Recommendation:** Disposal must be made according to official regulations.

14 | TRANSPORT INFORMATION

- **Land Transport (ADR/RID/ADN):** Not classified as dangerous good under transport regulations
- **Sea Transport (IMDG/IMO):** Not classified as dangerous good under transport regulations
- **Air Transport (IATA/ICAO):** Not classified as dangerous good under transport regulations

15 | REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
 Labeling according to Regulation (EC) No 1272/2008

The substance requires classification or labeling under the CLP regulation.

16 | OTHER INFORMATION

- This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual relationship.
- **Hazard Rating System**

NFPA	Health	Fire	Reactivity
	2	1	1

Recommended Uses and Restrictions

For biocidal applications. For industrial use. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

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