

SAFETY DATA SHEET

WT System Saver® Pellets - Water Treatment

Section 1. Identification

GHS product identifier

: WT System Saver® Pellets - Water Treatment

Other means of identification

: Water Treating Pellets

Product use

: Not available.

Product type

: Solid.

Manufacturer

: Jacam Manufacturing 2013, L.L.C.

P.O.Box 208, 1656 Ave. Q. Sterling, Kansas 67579

Validation date

: 5/21/2015.

For Chemical Emergency
Spill, Leak Fire, Exposure or
Accident:

: Call CHEMTREC Day or Night

Within USA and Canada 800-424-9300 CCN# 11754

Or +1 703-527-3887 (Collect calls accepted)

Direct all other calls to:

Jacam Chemicals 2013, L.L.C. 620-278-3355

Mon - Fri 8 a.m. to 5 p.m. (Closed on major holidays)

Supplier's details

: Jacam Chemicals 2013, L.L.C. P.O. Box 96, 205 S. Broadway

Sterling, Kansas 67579

Section 2. Hazards identification

5/21/2015.

Classification of the substance or mixture

: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 100%

GHS label elements

Section 2. Hazards identification

Hazard pictograms

Signal word

: Warning

Hazard statements

: H319 - Causes serious eye irritation.

Precautionary statements

Prevention

: P280 - Wear eye or face protection: Recommended: chemical splash goggles...

P264 - Wash hands thoroughly after handling.

Response

: 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 attention.

Storage

: Store in accordance with all local, regional, national and international regulations.

Disposal

: Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazards not otherwise

classified

: None known.

Routes of entry

: Dermal contact. Eye contact.

INGESTION: Although not a normal route of entry, ingestion is expected to be harmful. DO NOT TAKE INTERNALLY. FOR INDUSTRIAL USE ONLY.

Target organs

: Contains material which may cause damage to the following organs: liver,

gastrointestinal tract, cardiovascular system, immune system.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Water Treating Pellets

CAS number/other identifiers

CAS number

: Not applicable.

Ingredient name	%	CAS number
Oxyalkylated Resins Alkyltrimethylene Diamine Acetate	60 - 100 10 - 30	9016-45-9 61791-63-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eve contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least

15 minutes. If irritation persists, obtain medical attention.

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Inhalation

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen

tight clothing such as a collar, tie, belt or waistband.

: Flush contaminated skin with plenty of water. Remove contaminated clothing and Skin contact

shoes. If irritation or symptoms persists, obtain medical attention. Wash clothing

before reuse. Clean shoes thoroughly before reuse.

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air Ingestion

and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing

such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

: Causes serious eye irritation. Eye contact

: No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact

: Irritating to mouth, throat and stomach. Ingestion

Over-exposure signs/symptoms

: Adverse symptoms may include the following: Eye contact

> pain or irritation watering

redness

: No specific data. Inhalation : No specific data. Skin contact

: No specific data. Ingestion

Indication of immediate medical attention and special treatment needed, if necessary

: Treat symptomatically. Contact poison treatment specialist immediately if large Notes to physician

quantities have been ingested or inhaled.

: No specific treatment. Specific treatments

: No action shall be taken involving any personal risk or without suitable training. It Protection of first-aiders

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

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Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Additional Vapor Statement : Not available.

Not available.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide carbon monoxide

oxides of nitrogen ammonia

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13

for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

Environmental exposure controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Eve/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: chemical splash goggles.

Skin protection **Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): nitrile rubber

Section 8. Exposure controls/personal protection

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Personal protective equipment (Pictograms)





Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Pellets.]

Color : White.

Odor : Alcohol-like.
Odor threshold : Not available.
pH : Not available.
Melting point : Not available.

Melting point: Not available.Boiling point: Not available.

Flash point : Closed cup: >148.89°C (>300°F) [Pensky-Martens.]

: Not available.

Evaporation rate : Not available.

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames,

sparks and static discharge and heat.

Lower and upper explosive

(flammable) limits

Vapor pressure : Not available.
Vapor density : Not available.

Relative density : 1

Density : Not available.

Solubility : Easily soluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

5/21/2015.

Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: No specific data.

Incompatible materials

: Strong acids, strong oxidizers, strong reducing agents, and alkalies.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Section 11. Toxicological information

Information on toxicological effects						
Acute toxicity						
Product/ingredient name	Result	Species	Dose	Exposure		
Alkyltrimethylene Diamine Acetate	LD50 Oral	Rat	1000 mg/kg	-		

<u>Irritation/Corrosion</u>					
Product/ingredient name	Result	Species	Score	Exposure	Observation
Oxyalkylated Resins	Eyes - Severe irritant	Guinea pig	-	20 milligrams	-
oxyamyiatou i toomio	Eyes - Severe irritant	Mouse	-	20 milligrams	- ,
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Human	-	72 hours 15 milligrams Intermittent	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Sensitization Result Product/ingredient name Route of **Species** exposure Not available.

Mutagenicity Result **Experiment** Product/ingredient name **Test** Not available.

Carcinogenicity **Exposure Species** Dose Product/ingredient name Result Not available.

Section 11. Toxicological information

Product/ingredient name

Not available.

Reproductive toxicity

Product/ingredient name

Maternal toxicity

Fertility

Development Species toxin

Dose

Exposure

Not available.

Teratogenicity

Product/ingredient name

Result

Species

Dose

Exposure

Not available.

Specific target organ toxicity (single exposure)

Name

Category

Route of

Target organs

exposure

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name

Result

Not available.

Information on the likely

ToxKinetics - routes of

exposure

: Routes of entry anticipated: Dermal.

Potential acute health effects

Eye contact

Skin contact

: Causes serious eye irritation.

Inhalation

: No known significant effects or critical hazards. : No known significant effects or critical hazards.

Ingestion

: Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

: Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation

: No specific data. : No specific data.

Skin contact Ingestion

: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure **Short term exposure**

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Section 11. Toxicological information

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

Potential chronic health effects

Not available.

General

: No known significant effects or critical hazards.

Carcinogenicity

: No known significant effects or critical hazards.

Mutagenicity

: No known significant effects or critical hazards.

Teratogenicity

: No known significant effects or critical hazards. : No known significant effects or critical hazards.

Developmental effects Fertility effects

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route

ATE value

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Alkyltrimethylene Diamine Acetate	Acute LC50 1300 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
Oxyalkylated Resins	Acute EC50 12 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 1.23 mg/l Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 0.148 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1300 μg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Chronic NOEC 8 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 35 µg/l Fresh water	Fish - Oryzias latipes - Fry	100 days

Conclusion/Summary

: Not available.

Persistence and degradability

Not available.

Section 12. Ecological information

Product/ingredient name

Not available.

Product/ingredient name

Not available.

Bioaccumulative potential

Product/ingredient name LogPow BCF Potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory UN/NA Proper shipping name information Number	Hazard PG* Class(es)
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DOT Classification

PG* : Packing group

Not regulated.

Additional information

Label

Section 14. Transport information

TDG

Classification

Not regulated.

Additional information

-

Label

IMDG Class

Not regulated.

Marine pollutant notes:

: Not available.

Additional information

-

Label

IATA-DGR Class

Not regulated.

Additional information

Label

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) PAIR: Oxyalkylated Resins

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

All components are listed or exempted.

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances

: Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

DEA List II Chemicals

: Not listed

(Essential Chemicals)

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5/21/2015.

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Section 15. Regulatory information

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%			Sudden release of pressure	Reactive	(acute) health	Delayed (chronic) health hazard
Oxyalkylated Resins	60 - 10	00	No.	No.	No.	Yes.	No.
,							

State regulations

Massachusetts: None of the components are listed.New York: None of the components are listed.New Jersey: None of the components are listed.Pennsylvania: None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : The following components are listed: Nonylphenol and its ethoxylates

(Pollution Release)

CEPA Toxic substances . The following components are listed: Nonylphenol and its ethoxylates

Canada inventory-DSL / NDSL . All components are listed or exempted.

International lists

National inventory

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Europe : All components are listed or exempted.

Section 15. Regulatory information

Japan : All components are listed or exempted.

Malaysia : Not determined.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Normal Package Size(s): Ball: 2" Ball 50/Cooler; 4" Ball 12/Cooler

Dry Product: 50 Lbs/Box

Liquid: 5 Gallon/55 Gallon/Bulk Pellets: 30 Lbs/Cooler; 24 Lbs/Pail Stix: 1 1/4": 50 Each/Cooler

History

Date of issue/Date of revision : 5/21/2015.

<u>Version</u> : 1

Date of previous issue : No previous validation.

Previous Validation Date : No previous validation.

Prepared by : Jacam Regulatory Department

(M)SDS Requests: : SDS@jacam.com

Key to abbreviations : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References : Not available.

Section 16. Other information

Indicates information that has changed from previously issued version.

Notice to reader

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