

SAFETY DATA SHEET

SP7360 System Saver® Scale Inhibitor Pellets

Section 1. Identification

GHS product identifier

: SP7360 System Saver® Scale Inhibitor Pellets

Other means of identification

: Scale Inhibitor Pellets

Polyacrylic Acid/ Organophosphonate

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

: 12/22/2016.

For Chemical Emergency Spill, Leak Fire, Exposure or

: Call CHEMTREC Day or Night

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

Accident:

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

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 26.7%

GHS label elements

Section 2. Hazards identification

Hazard pictograms

Signal word

: Warning

Hazard statements

: H319 - Causes serious eye irritation.

Precautionary statements

General

: P103 - Read label before use.

P102 - Keep out of reach of children.

P101 - If medical advice is needed, have product container or label at hand.

Prevention

: P280 - Wear protective gloves: >8 hours (breakthrough time) nitrile rubber. Wear eye

or face protection.

P264 - Wash hands thoroughly after handling.

Response

: P391 - Collect spillage.

P301 + P310 + P330 - IF SWALLOWED: Immediately call a POISON CENTER or

physician. Rinse mouth.

P302 + P352 + P362 + P364 - IF ON SKIN: Wash with plenty of soap and water. Take

off contaminated clothing and wash it before reuse.

P332 + P313 - If skin irritation occurs: Obtain medical attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Obtain medical attention.

Storage

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

Disposal

: P501 - 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. Inhalation.

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 causes damage to the following organs: skin.

Contains material which may cause damage to the following organs: upper respiratory

tract, eyes.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Chemical name

: Not available.

Other means of

: Scale Inhibitor Pellets

identification

Polyacrylic Acid/ Organophosphonate

CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	%	CAS number	
Modified Poly Carboxylic Acid	10 - 30	6419-19-8	

Section 3. Composition/information on ingredients

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

Eye 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.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. If adverse health effects persist or are severe, obtain medical attention. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. If irritation or symptoms persists, obtain medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air 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. If adverse health effects persist or are severe, obtain medical attention. 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

Eye contact : May cause eye irritation.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion: Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion: No specific data.

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Section 4. First aid measures

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

<u>Name</u> <u>Result</u>

Not available.

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

Notes to physician

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

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 nitrogen oxides phosphorus oxides

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

Remark : Not available.

Remark : Not available.

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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

Ingredient name	Exposure limits		
Modified Poly Carboxylic Acid	AIHA WEEL (United States, 10/2011). TWA: 10 mg/m³ 8 hours.		

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.

Eye/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

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 : Pink

Odor : Alcohol-like.
Odor threshold : Not available.
pH : Not applicable.

Melting point : 60°C (140°F)

Boiling point : Not available.

Flash point : Not available.

Burning time : Not available.

Burning rate : Not available.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive

(flammable) limits

: Not available.

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

Density : 1 (lbs/gal)

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.

SADT : Not available.

Viscosity : Not available.

Type of aerosol : Not applicable.

Heat of combustion : Not available.

Ignition distance : Not applicable.

Enclosed space ignition -

Time equivalent

Not applicable.Not applicable.

Enclosed space ignition -

Deflagration density

: Not applicable.

Flame height : Not applicable.
Flame duration : Not applicable.

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.

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Section 10. Stability and reactivity

Conditions to avoid

: Contact with incompatible materials. All sources of heat, high humidity, and moisture can cause product to melt.

Incompatible materials

: Strong acids, alkalis, oxidizers.

Hazardous decomposition

products

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

should not be produced.

Section 11. Toxicological information

Information	on toxical	logical	offects
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Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Modified Poly Carboxylic	LD50 Dermal	Rabbit	>6310 mg/kg	-
Acid	LD50 Oral	Rat	2100 mg/kg	-,

Conclusion/Summary

: Not available.

Irritation/Corrosion

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Product/ingredient name	Result	Species	Score	Exposure	Observation
Modified Poly Carboxylic Acid	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-

Skin : Not available. : Not available. **Eyes** : Not available. Respiratory

Sensitization

Product/ingredient name Species Result Route of exposure

Not available.

: Not available. Skin : Not available. Respiratory

Mutagenicity

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

: Not available. Conclusion/Summary

Carcinogenicity

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

Conclusion/Summary : Not available.

Product/ingredient name

Not available.

Reproductive toxicity

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Section 11. Toxicological information

Species Product/ingredient name Maternal **Fertility** Development Dose **Exposure** toxicity toxin

Not available.

Conclusion/Summary

: Not available.

Teratogenicity

Product/ingredient name

Result

Species

Dose

Exposure

Not available.

Conclusion/Summary

: Not available.

Specific target organ toxicity (single exposure)

Name

Route of Category

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, Inhalation.

Potential acute health effects

Eye contact

: May cause eye irritation.

Inhalation

: Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Skin contact

: No known significant effects or critical hazards.

Ingestion

: Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eve contact

: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation

: No specific data.

Skin contact

: No specific data.

Ingestion

: No specific data.

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

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

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Section 11. Toxicological information

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary

Carcinogenicity

Mutagenicity

Teratogenicity

Fertility effects

: Not available.

General

: No known significant effects or critical hazards.

Developmental effects

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
⊘ ral	7164.3 mg/kg

Interactive effects : Not available.

Other information : Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name

Result

Species

Exposure

Not available.

Conclusion/Summary

. Not available.

Persistence and degradability

Not available.

Product/ingredient name

Not available.

Conclusion/Summary

: Not available.

12/22/2016.

Product/ingredient name

Not available.

Section 12. Ecological information

Bioaccumulative potential			
Product/ingredient name	LogPow	BCF	Potential
Modified Poly Carboxylic Acid	-3.53	22	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: 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.

Waste stream

: Not available.

RCRA classification

: Not available.

Section 14. Transport information

Regulatory information	UN/NA Number	Proper shipping name	Hazard PG* Class(es)
			DC* - Dooking group

DOT Classification

PG* : Packing group

Not regulated.

Additional information

Emergency Response Guide (ERG): Not available.

Label

TDG Classification

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Section 14. Transport information

Not regulated.

Additional information

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Label

IMDG Class

Not regulated.

Marine pollutant notes:

: Not available.

Additional information

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Label

IATA-DGR Class

Not regulated.

Additional information

Label

Section 15. Regulatory information

U.S. Federal regulations

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

Not determined.

Clean Water Act (CWA) 311: Ammonium chloride

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs)

: Not listed

Clean Air Act Section 602

: Not listed

Class I Substances

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

: Not listed

DEA List II Chemicals (Essential Chemicals)

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SARA 302/304

Composition/information on ingredients

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Section 15. Regulatory information

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification

: Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	(acute) health	Delayed (chronic) health hazard
Modified Poly Carboxylic Acid	10 - 30	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.

Not available.

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

China

Europe Japan

Malaysia

WHMIS (Canada)

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

Canadian lists

Canadian NPRI

: None of the components are listed.

(Pollution Release)

CEPA Toxic substances

Mone of the components are listed.

Canada inventory-DSL / NDSL

Not determined.

International lists

National inventory Australia Canada

Not determined. Not determined. : Not determined. Not determined. Not determined. : Not determined.

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Section 15. Regulatory information

New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : Not determined.

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 : 12/22/2016.

Version : 1.04

Date of previous issue : 9/2/2015.

Previous Validation Date : 9/2/2015.

Prepared by : Jacam Regulatory Department

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.

Date of issue/Date of revision

Indicates information that has changed from previously issued version.

Section 16. Other information

Notice to reader

This Safety Data Sheet ("SDS") is a mandatory disclosure pursuant to 29 CFR § 1910.1200 and related rules and regulations. Therefore, it is not intended, nor shall it serve to create, any rights, obligations, liabilities, and remedies, of any kind whatsoever, between Jacam Chemicals 2013, LLC and related entities ("Jacam") and any users of this SDS ("Users").

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