



SAFETY DATA SHEET

Water Flakes® Neutral Cleaner

Section 1. Identification

GHS product identifier : Water Flakes® Neutral Cleaner
Other means of identification : FP60 ST-791, ST-800
Product type : Solid.
Relevant identified uses of the substance or mixture and uses advised against
Product use : Cleaner
Area of application : Industrial applications, Professional applications.

Product dilution information : 0.5 wt. oz. (14 g) per 3 gallons of water.

Supplier/Manufacturer : **STEARNS PACKAGING CORPORATION**
4200 Sycamore Avenue (53714)
PO Box 3216
Madison, WI 53704-0216
Telephone no.: 800-655-5008
Fax no.: 608-246-5149
Website: www.stearnspkg.com
e-mail address of person responsible for this SDS : stearns@stearnspkg.com
Emergency telephone number (with hours of operation) : CHEM-TEL : 800-255-3924

Section 2. Hazards identification

	Product as SOLD	Product AT USE DILUTION
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).	Not classified.
Classification of the substance or mixture	: EYE IRRITATION – Category 2A Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 48.1%	Not classified.
GHS Label elements		
Hazard pictograms	: 	None
Signal word	: Warning	None
Hazard statements	: Causes serious eye irritation.	The mixture does not meet the criteria for classification.
Precautionary statements		
General	: Keep out of the reach of children.	Keep out of the reach of children.
Prevention	: Wear eye protection. Wash hands thoroughly after handling.	Observe good industrial hygiene practices.
Response	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.	Rinse hands after handling.
Storage	: No storage precautions necessary.	No storage precautions necessary.
Disposal	: No disposal precautions necessary.	Unused product or its solutions may be poured down the drain. Never pour unused product or its solutions down an outdoor drain.
Hazards not otherwise classified	None known.	None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : FP60 ST-791, ST-800

CAS number/other identifiers

CAS number : Not applicable.
Product code : Not available.

Ingredient name	Other names	%	CAS number
citric acid	citric acid	10 - 30	77-92-9
sodium carbonate	sodium carbonate	10 - 30	497-19-8
alcohols, C9-11, ethoxylated	alcohol ethoxylate	<3	68439-46-3

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 and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

	Product as SOLD	Product AT USE DILUTION
Eye contact	: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. Then consult a doctor.	No known effect after eye contact. Rinse with water for a few minutes. If irritation persists, get medical attention.
Inhalation	: Supply fresh air; consult doctor in case of complaints.	No special measures required. Treat symptomatically.
Skin contact	: Brush off loose particles from skin. Immediately rinse with water. If skin irritation continues, consult a doctor.	No known effect after skin contact. Rinse with water for a few minutes.
Ingestion	: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.	Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

No known effect after eye contact. Rinse with water for a few minutes. If irritation persists, get medical attention.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

Inhalation : Adverse symptoms may include the following:
 respiratory tract irritation
 coughing

Skin contact : Adverse symptoms may include the following:
 irritation
 redness

Ingestion : No specific data.

Treat symptomatically.

Section 4. First aid measures

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

Notes to physician	Product as SOLD : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	Product AT USE DILUTION Treat symptomatically.
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.	

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/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 mode.
Remark	: Dust explosion class: St1

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Product as SOLD : 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.	Product AT USE DILUTION Use personal protective equipment as required. Avoid contact of large amounts of spilled material and run off with soil and surface waterways. Use a water rinse for final clean-up.
For emergency responders	: If specialized 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".	

Section 6. Accidental release measures

	Product as SOLD	Product AT USE DILUTION
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).	Avoid discharge into storm water drains, water courses, or onto the ground.
<u>Methods and materials for containment and cleaning up</u>		
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.	Small Spills: Wipe up with absorbent material. Use a water rinse for final clean-up.
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.	Large Spills: Flush area with water. Prevent entry into waterways. Discharge collected material per Section 13 of the SDS.

Section 7. Handling and storage

Precautions for safe handling

	Product as SOLD	Product AT USE DILUTION
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.	No special measures required.
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.	Wash hands thoroughly after handling.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Product as SOLD

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. Store locked up. 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. Keep from freezing.

Product AT USE DILUTION

Keep out of reach of children.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

Product as SOLD

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

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.

Product AT USE DILUTION

No exposure limits noted for ingredient(s).

No biological exposure limits noted for the ingredient(s).

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. Ensure that eyewash stations and safety showers are close to the workstation location.

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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.

No protective equipment is needed under normal conditions.

Section 8. Exposure controls/personal protection

	Product as SOLD	Product AT USE DILUTION
<u>Skin protection</u>	:	
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. Recommended: Neoprene gloves. Rubber gloves.	No protective equipment is needed under normal conditions.
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.	No protective equipment is needed under normal conditions.
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.	No protective equipment is needed under normal conditions.
Respiratory protection	: Use a properly fitted, air-purifying or air-fed 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.	No protective equipment is needed under normal conditions.

Section 9. Physical and chemical properties

	Product as SOLD	Product AT USE DILUTION
Appearance		
Physical state	: Solid. [Granular solid.]	Liquid.
Color	: Orange.	Faint orange.
Odor	: Pine.	Pine.
Odor threshold	: Not available.	Not available.
pH	: Not applicable.	6.2 to 7.2
Boiling point	: Not available.	Not available.
Flash point	: Not available.	Not available.
Evaporation rate	: Not available.	Not available.
Flammability (solid, gas)	: Not applicable.	Not applicable.
Lower and upper explosive (flammable) limits	: Not available.	Not available.

Section 9. Physical and chemical properties

	Product as SOLD	Product AT USE DILUTION
Vapor pressure	: Not available.	Not available.
Vapor density	: Not available.	Not available.
Relative density	: 1.112	1.0
Solubility	: Easily soluble in the following materials: cold water and hot water.	Complete
Solubility in water	: Not available.	Not available.
Partition coefficient: n-octanol/water	: Not available.	Not available.
Auto-ignition temperature	: Not available.	Not available.
Decomposition temperature	: Not available.	Not available.
SADT	: Not available.	Not available.
Viscosity	: Not available.	Not available.

Section 10. Stability and reactivity

	Product as SOLD
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.
	: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: Keep from freezing. Keep away from heat.
Incompatible materials	: Reactive or incompatible with the following materials: acids.
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
citric acid	LD50 Oral	Rat	3 g/kg	-
sodium carbonate	LD50 Oral	Rat	4090 mg/kg	-
alcohols, C9-11, ethoxylated	LD50 Oral	Rat	>2000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
citric acid	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
sodium carbonate	Skin - Moderate irritant	Rabbit	-	0.5 Milliliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Severe irritant	Rabbit	-	50 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
alcohols, C9-11, ethoxylated	Skin – Irritant	Rabbit	-	-	-
	Eyes - Severe irritant	Rabbit	-	-	-

Section 11. Toxicological information

Product as SOLD		Product AT USE DILUTION
<u>Sensitization</u>	: Not available.	Non-toxic at use-dilution.
<u>Mutagenicity</u>	: Not available.	
<u>Carcinogenicity</u>	: Not available.	
<u>Reproductive toxicity</u>	: Not available.	
<u>Teratogenicity</u>	: Not available.	
<u>Specific target organ toxicity (single exposure)</u>	: Not available.	
<u>Specific target organ toxicity (repeated exposure)</u>	: Not available.	
<u>Aspiration hazard</u>	: Not available.	
Information on the likely routes of exposure	: Not available.	
<u>Potential acute health effects</u>		
<u>Eye contact</u>	: Causes serious eye irritation.	Direct contact with eyes may cause temporary irritation. Not applicable. No adverse effects due to skin contact are expected. Non-toxic at use-dilution.
<u>Inhalation</u>	: May cause respiratory irritation.	
<u>Skin contact</u>	: Causes skin irritation.	
<u>Ingestion</u>	: Irritating to mouth, throat and stomach.	
<u>Symptoms related to the physical, chemical and toxicological characteristics</u>		
<u>Eye contact</u>	: Adverse symptoms may include the following: pain or irritation watering redness	No specific data.
<u>Inhalation</u>	: Adverse symptoms may include the following: respiratory tract irritation coughing	
<u>Skin contact</u>	: Adverse symptoms may include the following: Irritation redness	
<u>Ingestion</u>	: No specific data.	
<u>Delayed and immediate effects and also chronic effects from short and long term exposure</u>		
<u>Short term exposure</u>		
<u>Potential immediate effects</u>	: Not available.	Not available.
<u>Potential delayed effects</u>	: Not available.	
<u>Long term exposure</u>		
<u>Potential immediate effects</u>	: Not available.	Not available.
<u>Potential delayed effects</u>	: Not available.	
<u>Potential chronic health effects</u>	Not available.	
<u>General</u>	: No known significant effects or critical hazards.	No known significant effects or critical hazards. No known significant effects or critical hazards.
<u>Carcinogenicity</u>	: No known significant effects or critical hazards.	

Section 11. Toxicological information

Mutagenicity	Product as SOLD : No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Product AT USE DILUTION No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2452.7 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
citric acid	Acute LC50 160000 µg/l Marine water	Crustaceans - Carcinus maenas- Adult	48 hours
sodium carbonate	Acute EC50 242000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute LC50 176000 µg/l Fresh water	Crustaceans - Amphipoda	48 hours
	Acute LC50 265000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
alcohols, C9-11, ethoxylated	Acute LC50 8.5 mg/l Fresh water	Fish – Fathead Minnow (Pimephales promelas)	96 hours
	Acute EC50 5.3 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Not available.

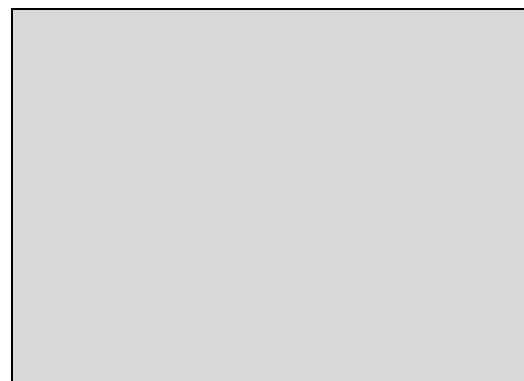
Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
citric acid	-1.8	-	low

Section 13. Disposal considerations

Product as SOLD	Product AT USE DILUTION
Mobility in soil	
Soil/water partition coefficient (K_{oc})	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

Product AT USE DILUTION



Section 13. Disposal considerations

Disposal methods

Product as SOLD

: 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.

Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

Section 14. Transport information

Product as SOLD

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	Cleaning Compounds, NOI, powder	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Product AT USE DILUTION

Not intended for transport

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b):** Not determined.
Product as SOLD

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 (Precursor Chemicals)

Not listed

DEA List II Chemicals (Essential Chemicals)

Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

Product AT USE DILUTION

Not listed

Not listed

Not listed

Not listed

Not listed

Product as SOLD

SARA 304 RQ : Immediate (acute) health hazard

SARA 311/312 : Not regulated.

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Product AT USE DILUTION

Not regulated.

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
citric acid	10 - 30	Yes.	No.	No.	Yes.	No.
sodium carbonate	10 - 30	No.	No.	Yes.	Yes.	No.
alcohols, C9-11, ethoxylated	1 - 5	No.	No.	No.	Yes.	No.

SARA 313 : Not applicable.

State regulations

Massachusetts

: The following components are listed:
 SODIUM SULFATE (SOLUTION);
 PRECIPITATED SILICA

New York

: None of the components are listed.

New Jersey

: The following components are listed:
 SILICA, AMORPHOUS, PRECIPITATE & GEL

Pennsylvania

: The following components are listed:
 SODIUM SULFATE (SOLUTION);
 PRECIPITATED SILICA

Not regulated.

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer and birth defects or other reproductive harm

Section 16. Other information

Product as SOLD

Hazardous Material Information System (U.S.A.)

Health	2
Flammability	0
Physical hazards	0

4=Very High; 3=High; 2=Moderate; 1=Slight; 0=Insignificant

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Product as SOLD

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



Product AT USE DILUTION

Hazardous Material Information System (U.S.A.)

Health	0
Flammability	0
Physical hazards	0

4=Very High; 3=High; 2=Moderate; 1=Slight; 0=Insignificant

Product AT USE DILUTION



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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.

MSDS File Name	: FP60 Water Flakes Neutral Cleaner SDS
NSF Certified	: C1; 7/8/05
DfE Certified	: Yes
History	
Date of issue/Date of revision	: 02/05/2015
Date of previous issue	: 08/14/2014
Version	: 2
Prepared by	: JBE/JER
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labeling 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	: HCS (U.S.A.)- Hazard Communication Standard International transport regulations

 Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.