

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : PBW Tablets

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Cleaner

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Five Star Chemicals & Supply, LLC.
6870 W. 52nd Ave. Suite 205
Arvada, CO 80002
T (303) 287-0186

Distributor

Five Star Chemicals & Supply, LLC
Olympisch Stadion 24-28
1076 DE Amsterdam - The Netherlands
T +31.20.854.6030

1.4. Emergency telephone number

Emergency number : International (Infotrac): +1 (352) 323-3500

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning
Hazard statements (CLP) : H319 - Causes serious eye irritation.
Precautionary statements (CLP) : P280 - Wear protective gloves, eye protection.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available :

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According to REACH Regulation (EC) No. 1907/2006 as amended by UK REACH Regulations SI-2019/758

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Disodium carbonate	CAS-No.: 497-19-8 EC-No.: 207-838-8 EC Index-No.: 011-005-00-2 REACH-no: 01-2119485498-19	30 – 40	Eye Irrit. 2, H319
Citric acid	CAS-No.: 77-92-9 EC-No.: 201-069-1 REACH-no : 01-2119457026-42	10 – 20	Eye Irrit. 2, H319
Sodium percarbonate	CAS-No.: 15630-89-4 EC-No.: 239-707-6 REACH-no: 01-2119457268-30	10 – 20	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 (ATE=1034 mg/kg bodyweight) Eye Dam. 1, H318
Sodium lauryl sulphate	CAS-No.: 68955-19-1 EC-No.: 273-257-1 REACH-no: Not registered. Below 1 ton.	1 – 3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412

Specific concentration limits

Name	Product identifier	Specific concentration limits
Sodium lauryl sulphate	CAS-No.: 68955-19-1 EC-No.: 273-257-1	(10 ≤C < 20) Eye Irrit. 2, H319 (20 ≤C < 100) Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.
First-aid measures after eye contact	: 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 advice/attention.
First-aid measures after ingestion	: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: Dust may cause respiratory tract irritation.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

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Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Oxides of sulfur. Oxides of sodium.

5.3. Advice for firefighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Avoid release to the environment.

Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Good housekeeping is important to prevent accumulation of dust. When using do not eat, drink or smoke.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Cleaner

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Not applicable

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide readily accessible eye wash stations and safety showers. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Safety eyewear complying with an approved standard such as the European Standard EN166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear suitable gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. 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.

8.2.2.4. Thermal hazards

Thermal hazard protection:

Use personal protective equipment as required.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid (granular powder)
Colour	: White.
Odour	: None
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: >100 °C
Flammability	: Not Combustible
Oxidising properties	: None
Explosive limits	: None
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not applicable
pH	: 9.6 – 10 (1% solution)
Viscosity, kinematic	: Not applicable
Solubility	: Water: Soluble
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Oxides of sodium. Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified.

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Acute toxicity (dermal) : Not classified.
Acute toxicity (inhalation) : Not classified.

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ATE CLP (oral)	5442.105 mg/kg
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Disodium carbonate (497-19-8)

LD50 oral rat	4090 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE CLP (oral)	4090 mg/kg bodyweight

Citric acid (77-92-9)

LD50 oral rat	3 g/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	3000 mg/kg bodyweight

Sodium percarbonate (15630-89-4)

LD50 oral rat	1034 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE CLP (oral)	1034 mg/kg bodyweight

Sodium lauryl sulphate (68955-19-1)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
LD50 dermal rabbit	> 10000 mg/kg

Skin corrosion/irritation : Not classified.
pH: 9.6 – 10

Additional information : Based on available data, the classification criteria are not met.

Serious eye damage/irritation : Causes serious eye irritation.
pH: 9.6 – 10

Respiratory or skin sensitisation : Not classified.

Additional information : Based on available data, the classification criteria are not met.

Germ cell mutagenicity : Not classified.

Additional information : Based on available data, the classification criteria are not met.

Carcinogenicity : Not classified.

Additional information : Based on available data, the classification criteria are not met.

Reproductive toxicity : Not classified.

Additional information : Based on available data, the classification criteria are not met.

STOT-single exposure : Not classified.

Additional information : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Not classified.

Additional information : Based on available data, the classification criteria are not met.

Aspiration hazard : Not classified.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Not classified.

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Disodium carbonate (497-19-8)

LC50 - Fish [1]	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 - Fish [2]	310 – 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Citric acid (77-92-9)

LC50 - Fish [1]	1516 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
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Sodium percarbonate (15630-89-4)

LC50 - Fish [1]	70.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	4.9 mg/l (Exposure time: 48 h - Species: Daphnia pulex)

Sodium lauryl sulphate (68955-19-1)

LC50 - Fish [1]	1.3 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	2.8 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	20 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	14 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	42 mg/l (Species: Desmodesmus subspicatus)

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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Disodium carbonate (497-19-8)

BCF - Fish [1]	(no bioaccumulation)
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Citric acid (77-92-9)

Partition coefficient n-octanol/water	-1.72 (at 20 °C)
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Sodium percarbonate (15630-89-4)

BCF - Fish [1]	(no bioaccumulation)
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : No other effects known

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : The generation of waste should be avoided or minimized wherever possible. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR

14.1. UN number or ID number

UN-No. (ADR) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

Overland transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant EU provisions transposed through retained EU law

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance.

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Not determined

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Indication of changes:

None.

Abbreviations and acronyms

°C – Degrees Celsius
°F – Degrees Fahrenheit
ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road.
ACGIH – American Conference of Governmental Industrial Hygienists
ATE – Acute Toxicity Estimate
BCF – Bioconcentration Factor
BEI – Biological Exposure Index
CAS – Chemical Abstracts Service
CLP – Regulation (EC) No 1272/2008 on the Classification, Labeling and Packaging of substances and mixtures.
CMR – Carcinogen, Mutagen, Reproductive toxin
cP – centipoise (unit of dynamic viscosity)
cSt – centistokes (unit of kinematic viscosity)
DNEL – Derived No-effect Level
DMEL – Derived Minimal Effect Level
EC50 – Half maximal effective concentration
ECHA – European Chemicals Agency
EC-No. – European Community number
EU – European Union
GHS – Globally Harmonized System of Classification and Labelling of Chemicals
h – Hours
IATA – International Air Transport Association
IC50 – Inhibition concentration
IDLH – Immediately Dangerous to Life or Health
IMDG – International Maritime Dangerous Goods
IOELV – Indicative Occupational Exposure Limit Value
KIFS – Swedish Chemicals Agency's (KemI's) Code of Statutes
kPa – kilopascal
Koc – Adsorption Coefficient
Kow – Octanol-Water Partition Coefficient
LC50 – Median Lethal Concentration
LD50 – Median Lethal Dose
LOAEL – Lowest Observed Adverse Effect level
mg/l – Milligram per liter
mg/kg – Milligram per kilogram
mg/m³ – Milligram per cubic meter
Min – Minutes
NIOSH – National Institute for Occupational Safety and Health
NOEC – No Observed Effect Concentration
NO(A)EL – No Observed (Adverse) Effect Level
N.O.S. – Not Otherwise Specified
OEL – Occupational Exposure Limit
PBT - Persistent, Bioaccumulative and Toxic
PCN – Poison Centre Notification
PNEC – Predicted No Effect Concentration
ppm – Parts per million
PVC – Polyvinyl chloride
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID – European Agreement concerning the International Carriage of Dangerous Goods by Rail
SDS – Safety Data Sheet
STEL – Short Term Exposure Limit
STOT – Specific Target Organ Toxicity
SVHC – Substance of Very High Concern (CMR, vPvB, PBT)
TDI – Tolerable Daily Intake
TLV – Threshold Limit Value
TWA – Time Weighted Average

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According to REACH Regulation (EC) No. 1907/2006 as amended by UK REACH Regulations SI-2019/758

Abbreviations and acronyms

UFI – Unique Formulation Identifier
UN – United Nations
vPvB - Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK – Wassergefährdungsklasse – German water quality classification

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Sol. 2	Oxidising Solids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Eye Irrit. 2	H319	Specific concentration limits
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Safety Data Sheet (SDS), EU - Nexreg Annex II 2021

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