



Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS HCS 2012

Trade name: Chlorinated Hytron® Automatic Dishwasher Detergent

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

- **1.1 Product identifier**

- **Trade name:** Chlorinated Hytron® Automatic Dishwasher Detergent (HOUSEHOLD FORMULA) ST-464

- **Article number:** DP12

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

No further relevant information available.

- **Application of the substance / the preparation** Machine dish washing agent

- **1.3 Details of the supplier of the Safety Data Sheet**

Stearns Packaging Corporation
4200 Sycamore Avenue (53714)
PO Box 3216
Madison, WI 53704-0216
Phone: 800-655-5008
Email: stearns@stearnspkg.com
Website: www.stearnspkg.com

- **1.4 Emergency telephone number:**

ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazards identification

- **2.1 Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008**

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

R35: Causes severe burns.



Xn; Harmful

R22: Harmful if swallowed.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

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• **2.2 Label elements**

• **Labeling according to Regulation (EC) No 1272/2008**

The product is classified and labeled according to the CLP regulation.

• **Hazard pictograms**



GHS05

• **Signal word** Danger

• **Hazard-determining components of labelling:**

disodium metasilicate

• **Hazard statements**

H314 +H318 Causes severe skin burns and serious eye damage.

• **Precautionary statements**

P280 Wear protective gloves / protective clothing / eye protection.
P260 Do not breathe dust.
P264 Wash hands thoroughly after handling.
P303+P361+P353+ P310 +P363 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center doctor. Wash contaminated clothing before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center / doctor.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a poison center / doctor.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

3 Composition/information on ingredients

• **3.2 Mixtures**

• **Description:** Mixture of substances listed below with nonhazardous additions.

| • Dangerous components: | | |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------|------|
| CAS: 497-19-8 EINECS: 207-838-8 Index number: 011-005-00-2 | Sodium Carbonate ----- Eye Irrit. 2A, H319 | <30% |
| CAS: 6834-92-0 EINECS: 229-912-9 Index number: 014-010-00-8 | disodium metasilicate ----- Skin Corr. 1B, H314 STOT SE 3, H335 | <10% |
| CAS: 68479-09-4 | P(AA/NaHSO3)Na salt ----- Skin Irrit. 2, H315; Eye Irrit. 2A, H319 | <2% |
| CAS: 9036-19-5 | Polyethylene glycol octylphenyl ether ----- Eye Dam. 1, H318 | <1% |



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| | | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| CAS: 51580-86-0 EINECS: 220-767-7 | Sodium dichloroisocyanurate dihydrate  Xi R22, R31, R36/37  Eye Irrit. 2A, H319, Acute Tox. 4, Oral, H302; STOT SE 3, H335 | <1% |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|

• **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

• 4.1 Description of first aid measures

• General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• **After inhalation:** Supply fresh air; consult doctor in case of complaints.

• After skin contact:

Brush off loose particles from skin.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

Seek immediate medical help for blistering or open wounds.

• After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. Then consult a doctor.

• After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

Danger of severe eye injury.

Gastric or intestinal disorders.

Strong caustic effect on skin and mucous membranes.

• Hazards

Danger of gastric perforation.

Danger of severe eye injury.

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

Treat skin and mucous membrane with antihistamine and corticoid preparations.

If necessary oxygen respiration treatment.

5 Fire-fighting measures

• 5.1 Extinguishing media

• Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• **For safety reasons unsuitable extinguishing agents:** None.

• 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Sulphur dioxide (SO₂)

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

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- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** No further relevant information available.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid formation of dust.
Product forms slippery surface when combined with water.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
Clean the affected area carefully; suitable cleaners are:
Weak acid solution
Warm water
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
Use only in well ventilated areas.
Thorough dedusting.
- **Information about fire - and explosion protection:**
The product is not flammable.
Dust can combine with air to form an explosive mixture.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Avoid storage near extreme heat, ignition sources or open flame.
Unsuitable material for receptacle: aluminium.
Protect from humidity and water.
- **Information about storage in one common storage facility:**
Do not store together with acids.
Store away from oxidizing agents.
Protect from humidity and water.
Store away from foodstuffs.

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- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
This product is hygroscopic.
Protect from freezing.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Use suitable respiratory protective device when high concentrations are present.
For spills, respiratory protection may be advisable.
- **Protection of hands:**
Use gloves constructed of chemical resistant material such as heavy nitrile rubber.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Contact lenses should not be worn without eye protection.
- **Limitation and supervision of exposure into the environment**
No further relevant information available.
- **Risk management measures**
See Section 7 for additional information.
No further relevant information available.



Safety Glasses

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9 Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

• General Information

• Appearance:

Form: Granulate

Color: White

• Odor: Odorless

• Odor threshold: Not determined.

• pH-value: Not applicable.

• Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

• Flash point: Not applicable.

• Flammability (solid, gaseous): Not determined.

• Ignition temperature: Not determined.

• Decomposition temperature: Not determined.

• Self-igniting: Product is not self-igniting.

• Danger of explosion: Product does not present an explosion hazard.

• Explosion limits:

Lower: Not determined.

Upper: Not determined.

• Vapor pressure: Not applicable.

• Density: 1.05 g/cm³

• Relative density: Not determined.

• Vapor density: Not applicable.

• Evaporation rate: Not applicable.

• Solubility in / Miscibility with water: Soluble.

• Partition coefficient (n-octanol/water): Not determined.

• Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

• 9.2 Other information: No further relevant information available.

10 Stability and reactivity

• 10.1 Reactivity: Not determined.

• 10.2 Chemical stability

• Thermal decomposition / conditions to be avoided:

Can decompose slowly with localized heating above 150 °C.

To avoid thermal decomposition do not overheat.

Keep away from heat and direct sunlight.

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• **10.3 Possibility of hazardous reactions**

Exothermic reaction with acids.

As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.

Reacts with certain metals.

• **10.4 Conditions to avoid** Moisture.

• **10.5 Incompatible materials:** No further relevant information available.

• **10.6 Hazardous decomposition products:** Possible in traces.

11 Toxicological information

• **11.1 Information on toxicological effects**

• **Acute toxicity:** Calculated oral toxicity LD50: 6,730 mg/kg (Rat)

• **LD/LC50 values relevant for classification:**

6834-92-0 disodium metasilicate

| | | |
|------|------|------------------|
| Oral | LD50 | 1280 mg/kg (rat) |
|------|------|------------------|

Sodium dichloroisocyanurate dihydrate

| | | |
|------|------|------------------|
| Oral | LD50 | 1671 mg/kg (rat) |
|------|------|------------------|

• **Primary irritant effect:**

• **on the skin:** Strong caustic effect on skin and mucous membranes.

• **on the eye:** Strong caustic effect.

• **Sensitization:** No sensitizing effects known.

• **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

• **12.1 Toxicity**

• **Aquatic toxicity:** The product contains materials that are harmful to the environment.

• **12.2 Persistence and degradability** No further relevant information available.

• **12.3 Bioaccumulative potential** No further relevant information available.

• **12.4 Mobility in soil** No further relevant information available.

• **Additional ecological information:**

• **General notes:**

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.

Water Hazard Class (Self-classification) in the the dilution of application.

• **12.5 Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

• **12.6 Other adverse effects** No further relevant information available.

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13 Disposal considerations

• 13.1 Waste treatment methods

• Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

• Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

• **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

• 14.1 UN-Number

• DOT, ADR, ADN, IMDG, IATA N/A

• 14.2 UN proper shipping name

• DOT, ADR, ADN, IMDG, IATA Cleaning Compounds, NOI, powder.

• 14.3 Transport hazard class(es)

• DOT

• Class N/A

• 14.4 Packing group

• DOT, ADR, IMDG, IATA N/A

• 14.5 Environmental hazards:

• Marine pollutant: No

• 14.6 Special precautions for user Not applicable.

• 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

• UN "Model Regulation": Cleaning Compounds, NOI, powder.

15 Regulatory information

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

• United States (USA)

• SARA

• Section 313 (Specific toxic chemical listings):

| | |
|-----------|--------------------------|
| 7758-29-4 | pentasodium triphosphate |
|-----------|--------------------------|

• TSCA (Toxic Substances Control Act):

All ingredients are listed.

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• **Proposition 65 (California):**

• **Chemicals known to cause cancer:**

None of the ingredients is listed.

• **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

• **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

• **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

• **Carcinogenic Categories**

• **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

• **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

• **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

• **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

• **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

• **Canada**

• **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

• **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

• **Canadian Ingredient Disclosure list (limit 1%)**

| | |
|-----------|-----------------------|
| 497-19-8 | Sodium Carbonate |
| 6834-92-0 | disodium metasilicate |

• **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• **Relevant phrases**

H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.

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H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

R34 Causes burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R37 Irritating to respiratory system.
R41 Risk of serious damage to eyes.

• **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 0

MSDS File Name: DP12 HYTRON-HOUSEHOLD FORMULA SDS

• **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

• **Sources**

SDS Prepared by:

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