Safety Data Sheet

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

Trade name: Dairyland Brand Turboline® Chlorinated Pipeline Detergent

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

- **1.1 Product identifier**
- **Trade name:** Dairyland Brand Turboline® Pipeline Detergent ST-110, ST-111, ST-112, ST-113
- **Article number:** UM20
- **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** Alkaline cleaner for dairy pipelines and other CIP applications.
- **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**


GHS05 corrosion

Skin Corr. 1B, Eye Dam. 1 H314 + H318 Causes severe skin burns and serious eye damage.


GHS07

Acute Tox, Oral, 4 H302 Harmful if swallowed.

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


C; Corrosive
R34: Causes burns.


Xi; Irritant
R37: Irritating to respiratory system.


Xn; Irritant
R22: Harmful if swallowed.

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- **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.

- -

- **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


GHS07

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  Potassium Hydroxide and Sodium Hypochlorite
- **Hazard statements**
  H302 Harmful if swallowed
  H314+H318 Causes severe burns and serious eye damage.
- **Precautionary statements**

P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves / protective clothing / eye protection.
P260	Do not breathe mist or vapor.
P264	Wash hands thoroughly after handling
P303+P361+P353+ P310 +P363	IF ON SKIN (or hair): Remove/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+ P310	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.
P310	Immediately call a POISON CENTER / doctor.
P304+P340+P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center / doctor.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

• Dangerous components:		
CAS: 1310-58-3	Potassium hydroxide (K(OH))	20-25%
CAS: 7681-52-9	Sodium hypochlorite	3-5%
CAS: 1312-76-1	Potassium Silicate	10-15%
CAS: 9003-04-07	Poly (acrylic acid, sodium salt) solution	3-5%

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

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4 First-aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
  Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or physician.
- **After skin contact:**
  Immediately take off contaminated clothing.
  Rinse skin with water/shower.
  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 with plenty of water for at least 15 minutes. Then consult a doctor.
- **After swallowing:**
  Rinse out mouth and then drink plenty of water.
  Do not induce vomiting; call for medical help immediately.
  If vomiting occurs, keep head low so that stomach content does not get into the lungs.
- **4.2 Most important symptoms and effects, both acute and delayed**
  Caustic effect on skin and mucous membranes.
  Breathing difficulty
  Headache
  Dizziness
  Cramp
  Gastric or intestinal disorders.
  Coughing
  Nausea
- **Hazards**
  Danger of gastric perforation.
  Danger of severe eye injury.
  Danger of impaired breathing.
  Danger of disturbed cardiac rhythm.
- **4.3 Indication of any immediate medical attention and special treatment needed**
  Medical supervision for at least 48 hours.
  If necessary oxygen respiration treatment.
  Later observation for pneumonia and pulmonary edema.

5 Fire-fighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
  Formation of chlorine and other toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
  Wear self-contained respiratory protective device.
  Wear fully protective suit.
- **Additional information** No further relevant information available.

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6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  Use respiratory protective device against the effects of fumes/dust/aerosol.
  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:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Send for recovery or disposal in suitable receptacles.
  Dispose contaminated material as waste according to item 13.
  Clean the affected area carefully; suitable cleaners are:
  Warm water.
- **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**
  Use only in well ventilated areas.
  Prevent formation of aerosols.
  Avoid splashes or spray in enclosed areas.
- **Information about fire - and explosion protection:** No special measures required.
- **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.
- **Information about storage in one common storage facility:**
  Store away from foodstuffs.
  Store away from oxidizing agents.
  Do not store together with acids.
- **Further information about storage conditions:**
  Keep out of reach of children.
  Store in cool, dry conditions in well sealed receptacles.
  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**

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• Ingredients with limit values that require monitoring at the workplace:

Ingredient	Exposure Limits
sodium hypochlorite	0.5 ppm, 8 hour, TWA as chlorine 1.0 ppm, 15 minute, STEL as chlorine (ACGIH) 1.0 ppm, ceiling limit as chlorine (OSHA)
potassium hydroxide	2 mg/m³, PEL (OSHA) 2 mg/m³, TLV (ACGIH)

• **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.
Do not inhale gases / fumes / aerosols.
Clean skin thoroughly immediately after handling the product.
• **Respiratory protection:**
General room ventilation is typically adequate.
Not required under normal conditions of use.
Use suitable respiratory protective device when aerosol or mist is formed.
For spills, respiratory protection may be advisable.
• **Protection of hands:**

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.

Safety glasses

• **Body protection:** Alkaline resistant protective clothing
• **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.

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9 Physical and chemical properties

• 9.1 Information on basic physical and chemical properties	
• General Information	
• Appearance:	
Form:	Liquid
Color:	Pale yellow
• Odor:	Chlorine beach
• Odor threshold:	Not determined.
• pH-value at 20 °C:	14.0 for concentrate
• Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
• Flash point:	Not applicable.
• Flammability (solid, gaseous):	Not applicable.
• 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 at 20 °C:	23 hPa
• Density at 20 °C:	1.280 g/cm³
• Relative density	Not determined.
• Vapor density	Not determined.
• Evaporation rate	Not determined.
• Solubility in / Miscibility with water:	Fully miscible.
• Partition coefficient (n-octanol/water):	Not determined.
• Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
• 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:
No decomposition if used and stored according to specifications.

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- **10.3 Possibility of hazardous reactions**
  Reacts with strong oxidizing agents.
  Toxic fumes may be released if heated above the decomposition point.
  Reacts with strong acids.
  Reacts with aluminum, brass, bronze, copper, lead, tin, zinc, or other alkali-sensitive metals or alloys.
- **10.4 Conditions to avoid**
  Store away from oxidizing agents.
  Do not mix with strong acids.
  Keep away from heat and direct sunlight.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
  Carbon monoxide and carbon dioxide
  Nitrogen oxides (NOx)
  Oxides of potassium and phosphorous
  Chlorine gas will be liberated if material is mixed with acids.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** >No LC/LD50 data on mixture.

• LD/LC50 values relevant for classification:		
1310-58-3 Potassium hydroxide		
Oral	LD50	214 mg/kg (rat)

- **Primary irritant effect:** CORROSIVE.
- **on the eye:** Strong caustic effect.
- **on the skin:** Caustic effect on skin and mucous membranes.
- **Ingestion:** Causes burns and serious damage to mouth, throat, and stomach.
- **Inhalation:** May cause corrosive effects to nose, throat, and respiratory system.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  Contains no reportable ACGIH, IARC, NTP, or OSHA carcinogens.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** biodegradable
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxical effects:**
- **Remark:** After neutralization a reduction of the harming action may be recognized
- **Additional ecological information:**
- **General notes:**
  Must not reach sewage water or drainage ditch undiluted or unneutralized.
  Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.
This statement was deduced from the properties of the single components.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Water Hazard Class (Self-classification) in the concentrate.

- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary.

14 Transport information

• **14.1 UN-Number** • **DOT-AIR, ADR, ADN, IMDG, IATA**	NA1760
• **14.2 UN proper shipping name** • **DOT**	NA1760, compound, cleaning, liquid, (containing potassium hydroxide solution), 8, PG II.
• **14.3 Transport hazard class(es)** • **DOT**  • **Class** • **Label**	 8 Corrosive. 8
• **14.4 Packing group** • **DOT, ADR, IMDG, IATA**	II
• **14.5 Environmental hazards:** • **Marine pollutant:**	No
• **14.6 Special precautions for user** • **Danger Code:** • **EMS Number** • **Segregation groups**	Warning: Corrosive Substances 80 F-A,S-B Alkalis
• **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
• **Transport/Additional information:**	Not applicable.

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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):
None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):
All ingredients are listed.

• 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.

• STATE RIGHT-TO-KNOW:

7732-18-5	water
1310-58-3	potassium hydroxide
7681-52-9	sodium hypochlorite
9003-04-07	poly(acrylic acid, sodium salt) solution
1312-76-1	potassium silicate

• 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.

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• 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%)

None of the ingredients is listed.

• 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

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

R22 Harmful if swallowed.
R36 Irritating to eyes.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.

SDS File Name: UM20 DB Turboline Pipeline Detergent 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 Labeling 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)
LD50: Lethal dose, 50 percent

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