

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 06/12/15

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Version: 2.0

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

1.1. Product identifier

Trade name : BWT-849 STEAMLINE TREATMENT

Product form : Mixture

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

Use of the substance/mixture : Steamline Treatment

1.3. Details of the supplier of the safety data sheet

Kriss Premium Products, Inc.
3400 East 42nd Street
Minneapolis, MN 55406

1.4. Emergency telephone number

Emergency number : INFORMATION: 612-722-8485
CHEMTREC: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 4 H227
Acute Tox. 4 (Dermal) H312
Skin Corr. 1A H314
Repr. 2 H361

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05



GHS07



GHS08

Signal word (GHS-US) : **Danger**

Hazard statements (GHS-US) : H227 - Combustible liquid
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, open flames, sparks. - No smoking
P260 - Do not breathe mist, spray, vapours
P264 - Wash skin and clothing thoroughly after handling
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a doctor if you feel unwell
P321 - Specific treatment (see first aid instructions on this label)
P370+P378 - In case of fire: Use Carbon dioxide, dry chemical, foam to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to licensed waste handling facility

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

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3.2. Mixture

Name	Product identifier	%
Diethylaminoethanol	(CAS No) 100-37-8	10 - 15
Cyclohexylamine	(CAS No) 108-91-8	1 - 5

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. Get medical attention immediately.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries : Causes severe skin burns and eye damage. Harmful if swallowed. Suspected of damaging fertility. Suspected of damaging the unborn child.
- Symptoms/injuries after inhalation : May cause headache, nausea and irritation of respiratory tract.
- Symptoms/injuries after skin contact : Harmful in contact with skin.
- Symptoms/injuries after eye contact : Causes serious eye burns.
- Symptoms/injuries after ingestion : Severe irritation or burns to the mouth, throat, oesophagus, and stomach.
- Chronic symptoms : No data available.

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

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Alcohol-resistant foam. Dry powder.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible liquid. Heating may cause a fire.
- Explosion hazard : Product is not explosive.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe mists. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diethylaminoethanol (100-37-8)	
ACGIH TWA (ppm)	2 ppm
OSHA PEL (TWA) (mg/m ³)	50 mg/m ³
OSHA PEL (TWA) (ppm)	10 ppm
Cyclohexylamine (108-91-8)	
ACGIH TWA (ppm)	10 ppm
OSHA PEL (TWA) (mg/m ³)	40 mg/m ³ Vacated
OSHA PEL (TWA) (ppm)	10 ppm Vacated

8.2. Exposure controls

Appropriate engineering controls

: Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

: Gloves. Protective goggles. Face shield. Protective clothing. Respiratory protection of the dependent type.



Hand protection

: Protective gloves made of rubber.

Eye protection

: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection

: Corrosionproof clothing.

Respiratory protection

: An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Color	: Amber.
Odor	: Slight.
Odor Threshold	: No data available
pH	: 11.8 (1% solution)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 107 °C (225 °F)
Flash point	: > 60 °C (141 °F)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 18 mm Hg
Relative vapour density at 20 °C	: No data available

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Relative density	: 1.06
Solubility	: Water: Complete
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

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 recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Sparks. Heat. Open flame.

10.5. Incompatible materials

Strong acids. Strong oxidizing agents. Soft metals (aluminum, copper, brass).

10.6. Hazardous decomposition products

Nitrogen oxides. Ammonia. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Dermal: Harmful in contact with skin.

Diethylaminoethanol (100-37-8)	
LD50 oral rat	1300 mg/kg (Source: IUCLID)
LD50 dermal rabbit	1260 µl/kg (Source: NLM_CIP)
ATE CLP (oral)	500.000 mg/kg bodyweight
ATE CLP (dermal)	1100.000 mg/kg bodyweight
ATE CLP (gases)	4500.000 ppmv/4h
ATE CLP (vapours)	11.000 mg/l/4h
ATE CLP (dust,mist)	1.500 mg/l/4h

Cyclohexylamine (108-91-8)	
LD50 oral rat	156 mg/kg
LD50 dermal rat	277 mg/kg
LC50 inhalation rat (ppm)	1000 ppm 16 h (vapor)
ATE CLP (oral)	11.000 mg/kg bodyweight
ATE CLP (dermal)	1100.000 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 11.8 (1% solution)

Serious eye damage/irritation : Not classified
pH: 11.8 (1% solution)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Cyclohexylamine (108-91-8)	
IARC group	3 - Not classifiable

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure) : Not classified

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Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause headache, nausea and irritation of respiratory tract.
Symptoms/injuries after skin contact	: Harmful in contact with skin.
Symptoms/injuries after eye contact	: Causes serious eye burns.
Symptoms/injuries after ingestion	: Severe irritation or burns to the mouth, throat, oesophagus, and stomach.
Chronic symptoms	: No data available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No data available.

12.2. Persistence and degradability

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Persistence and degradability	No data available.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	No information available.
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12.4. Mobility in soil

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Ecology - soil	No data available.
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12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : UN3267 Corrosive liquid, basic, organic, n.o.s. (Contains Diethylaminoethanol, Cyclohexylamine), 8, II

UN-No.(DOT) : 3267

DOT NA no. : UN3267

Proper Shipping Name (DOT) : Corrosive liquid, basic, organic, n.o.s.

Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters", 52 - Stow "separated from" acids

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Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

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All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
Diethylaminoethanol (100-37-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Cyclohexylamine (108-91-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	10000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	10000 lb

15.2. International regulations

CANADA

No additional information available.

15.3. US State regulations

California Proposition 65

WARNING! This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

Diethylaminoethanol (100-37-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
Cyclohexylamine (108-91-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	
Diethylaminoethanol (100-37-8)				
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List				
Cyclohexylamine (108-91-8)				
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List				

SECTION 16: Other information

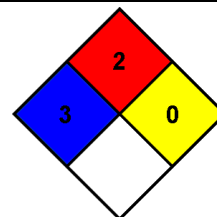
Indication of changes : Revision 2.0
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Other information : Author. BN.

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NFPA health hazard	: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA fire hazard	: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health	: 3
Flammability	: 2
Physical	: 0
Personal Protection	:

We believe that the information contained on this Material Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily adequate in every circumstance. These suggestions should not be confused with or followed in violation of applicable laws, regulations, rules or insurance requirements. The seller makes no warranty expressed or implied concerning the accuracy or any results obtained from the use of any information and no warranty expressed or implied concerning the use of the products. The buyer assumes all risks of the use and/or handling.