

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 12/8/2015

SECTION 1: IDENTIFICATION

Product Identifier Product Form: Mixture Product Name: Klinger Formula 765 Product Code: 5333

Intended Use of the Product

Use of the Substance/Mixture: Chlorinated alkaline foam cleaner for use in meat, poultry, and food processing plants. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

Bortek Industries, Inc. 4713 Old Gettysburg Road Mechanicsburg, PA 17055

800-626-7835

Emergency Telephone Number

: 1-800-424-9300 (CHEMTREC) Emergency number

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or	<u>Mixture</u>
Classification (GHS-US)	
Met. Corr. 1 H290	
Skin Corr. 1A, BH314	
Eye Dam. 1 H318	
STOT SE 3 H335	
Aquatic Acute 1 H400	
Aquatic Chronic 1 H410	
Label Elements	
GHS-US Labeling	
Hazard Pictograms (GHS-US)	
Signal Word (GHS-US)	GHS05 GHS07 GHS09 : Danger
- · ·	-
Hazard Statements (GHS-US)	: H290 - May be corrosive to metals
	H314 - Causes severe skin burns and eye damage
	H318 - Causes serious eye damage H335 - May cause respiratory irritation
	H400 - Very toxic to aquatic life
	H410 - Very toxic to aquatic life with long lasting effects
Precautionary Statements (GHS-US)	
riecautionaly Statements (GHS-05)	P260 - Do not breathe vapors, mist, spray
	P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
	P264 - Wash hands, forearms, and other exposed areas thoroughly after handling
	P271 - Use only outdoors or in a well-ventilated area
	P273 - Avoid release to the environment
	P280 - Wear protective gloves, protective clothing, eye protection, face protection,
	respiratory protection
	P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
	P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated
	clothing. Rinse skin with water/shower
	P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position
12/8/2015	EN (English US)

Version: 1.0

Safety Data Sheet

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

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

P310 - Immediately call a POISON CENTER or doctor/physician

- P312 Call a POISON CENTER/doctor/physician if you feel unwell
- P321 Specific treatment (see section 4)

P363 - Wash contaminated clothing before reuse

- P390 Absorb spillage to prevent material damage
- P391 Collect spillage
- P403+P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- P406 Store in corrosive resistant/... container with a resistant inner liner

P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Corrosive vapors.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

<u>Mixture</u>

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	70-90	Not classified
Sodium hydroxide	(CAS No) 1310-73-2	5-10	Met. Corr. 1, H290
			Skin Corr. 1A, H314
			Eye Dam. 1, H318
			Aquatic Acute 3, H402
Sodium hypochlorite	(CAS No) 7681-52-9	1-5	Met. Corr. 1, H290
			Skin Corr. 1B, H314
			Eye Dam. 1, H318
			STOT SE 3, H335
			Aquatic Acute 1, H400
			Aquatic Chronic 1, H410
Lauryldimethylamine oxide	(CAS No) 1643-20-5	1-5	Skin Corr. 1B, H314
			Eye Dam. 1, H318
			Aquatic Acute 1, H400

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of 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). IF exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Corrosive. Causes burns. Causes serious eye damage. Irritation of respiratory tract.

Inhalation: May cause respiratory irritation. Inhalation may cause immediate severe irritation progressing quickly to chemical burns.

Safety Data Sheet

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

Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.

Eye Contact: Causes serious eye damage.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Not available

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures. Contains sodium hypochlorite which may act as an oxidizer in some cases intensifying a fire.

Explosion Hazard: Product is not explosive.

Reactivity: Thermal decomposition generates : Corrosive vapors. If the product is involved in a fire, it can release toxic chlorine gases, and explosive hydrogen gas. When heated to decomposition, emits toxic fumes. Ammonium or nitrogen containing compounds can react with the sodium hypochlorite in this product releasing toxic chlorine gas. May be corrosive to metals.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: May liberate toxic gases. Sodium oxides. Chlorine gas. Nitrogen oxides. Carbon oxides (CO, CO₂). Explosive hydrogen gas.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not allow product to spread into the environment. Do NOT breathe (vapors, mist, spray). Do not get in eyes, on skin, or on clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

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. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Contact competent authorities after a spill. Absorb spillage to prevent material damage.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals. When heated to decomposition, emits toxic fumes. May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition. Ammonium or nitrogen containing compounds can react with the sodium hypochlorite in this product releasing toxic chlorine gas. Contains sodium hypochlorite which may act as an oxidizer in some cases intensifying a fire.

Safety Data Sheet

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

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. May be corrosive to metals.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high or low temperatures, direct sunlight, heat, incompatible materials.

Incompatible Materials: Strong acids, Strong oxidizers.

Special Rules on Packaging: Keep only in original container.

Specific End Use(s)

Chlorinated alkaline foam cleaner for use in meat, poultry, and food processing plants. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Sodium hydroxide (131	10-73-2)	
Mexico	OEL Ceiling (mg/m ³)	2 mg/m ³
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
USA IDLH	US IDLH (mg/m ³)	10 mg/m ³
Ontario	OEL Ceiling (mg/m ³)	2 mg/m ³
Québec	PLAFOND (mg/m³)	2 mg/m ³

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Alarm detectors should be used when toxic gases may be released.

Personal Protective Equipment: Protective clothing. Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection. Face shield.



Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosionproof clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Thermal Hazard Protection: Wear suitable protective clothing.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties				
Physical State	: Liquid			
Appearance	: Clear,Pale-y	ellow green/		
Odor	: Chlorine			
Odor Threshold	: Not availab	le		
рН	: >13			
Relative Evaporation Rate (butylacetate=1)	: Not availab	le		
Melting Point	: Not availab	le		
Freezing Point	: Not availab	le		
Boiling Point	: 104.4 °C (22	19.92°F)		

Safety Data Sheet

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

Flash Point	:	None
Auto-ignition Temperature	:	None
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Specific Gravity	:	1.13
Solubility	:	Complete.
Partition coefficient: n-octanol/water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Thermal decomposition generates : Corrosive vapors. If the product is involved in a fire, it can release toxic chlorine gases. Explosive hydrogen gas. When heated to decomposition, emits toxic fumes. Ammonium or nitrogen containing compounds can react with the sodium hypochlorite in this product releasing toxic chlorine gas. May be corrosive to metals.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Heat. Combustible materials. Incompatible Materials: Incompatible Materials: Strong acids. Strong oxidizers. Metals. May be corrosive to metals. Phosphorus. Nitrogen containing compounds, ammonium compounds.

Hazardous Decomposition Products: Carbon oxides (CO, CO2). Thermal decomposition generates : Corrosive vapors. Toxic gases. Chlorine gas. Hydrogen gas. Nitrogen oxides. Sodium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

pH: Not available

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: Not available

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation. Inhalation may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/Injuries After Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage. : Contact may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/Injuries After Ingestion: Contact may cause immediate severe irritation progressing quickly to chemical burns. **Information on Toxicological Effects - Ingredient(s)**

LD50 and LC50 Data:

Safety Data Sheet

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

Water (7732-18-5)			
LD50 Oral Rat			> 90000 mg/kg
Sodium hypochlorite (7681-52-9))		
LD50 Oral Rat			8200 mg/kg
LD50 Dermal Rabbit			> 10000 mg/kg
Sodium hypochlorite (7681-52-9))		
IARC Group	1		3
SECTION 12: ECOLOGICAL II			
		IATION	
Toxicity Ecology - General: Very toxic to	aquatic	ife with long lasting of	forts
	aquatic		
Sodium hydroxide (1310-73-2) LC50 Fish 1		40 mg/l	
		40 mg/l	
Sodium hypochlorite (7681-52-9	9)		
LC50 Fish 1			g/l (Exposure time: 96 h - Species: Pimephales promelas [flow-
EC50 Daphnia 1		through])	Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2			Exposure time: 48 h - Species: Daphila magna [Static])
EC50 Daphnia 2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Lauryldimethylamine oxide (164	13-20-5	0.000 (0.000 0.044)	
ErC50 (algae)	.5 20-5	0.11 mg/l (72 hour)	
Persistence and Degradabilit	v	0111 116/1 (72 11001)	
Klinger Formula 765	<u>L</u>		
Persistence and Degradability		May cause long-tern	n adverse effects in the environment.
Bioaccumulative Potential		, 0	
Klinger Fomula 765			
Bioaccumulative Potential		Not established.	
Mobility in Soil Not available			
Other Adverse Effects			
Other Information: Avoid releas	e to the	environment	
SECTION 13: DISPOSAL CON			
			in accordance with all local, regional, national, provincial, territorial
and international regulations.			
-	materia	l is hazardous to the a	quatic environment. Keep out of sewers and waterways.
SECTION 14: TRANSPORT IN	IFORN	ATION	
14.1 In Accordance with DOT			
Proper Shipping Name	: COR	ROSIVE LIQUID, BASIC,	INORGANIC, N.O.S. (Sodium hydroxide, sodium hypochlorite)
Hazard Class	: 8		
Identification Number	: UN3	266	
Label Codes : 8			8
Packing Group : III			
Marine Pollutant : Marine pollutant			
ERG Number	·		
14.2 In Accordance with IMD	G		
Proper Shipping Name	: COR	ROSIVE LIQUID, BASIC,	INORGANIC, N.O.S. (Sodium hydroxide, sodium hypochlorite)
Hazard Class : 8			
Identification Number	: UN3	266	
Packing Group : III			
Label Codes	: 8		
12/8/2015		EN (English US)	6/5

Safety Data Sheet

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

EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Marine pollutant	: Marine pollutant
14.3 In Accordance with IA	ΤΑ
Proper Shipping Name	: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide, sodium hypochlorite)
Packing Group	: 111
Identification Number	: UN3266
Hazard Class	: 8
Label Codes	: 8
ERG Code (IATA)	: 8L
14.4 In Accordance with TE)G
Proper Shipping Name	: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide, sodium hypochlorite)
Packing Group	: 111
Hazard Class	: 8
Identification Number	: UN3266
Label Codes	: 8

SECTION 15: REGULATORY INFORMATION

US	Federal	Regulations

Klinger Formula 765		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
Water (7732-18-5)		
Listed on the United States TSCA (Toxic Substances Control Act)	inventory	
Sodium hydroxide (1310-73-2)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Sodium hypochlorite (7681-52-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Lauryldimethylamine oxide (1643-20-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

US State Regulations

Sodium hydroxide (1310-73-2)

- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Acute
- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New York Occupational Exposure Limits TWAs
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Sodium hypochlorite (7681-52-9)

U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - New Jersey - Special Health Hazards Substances List

Safety Data Sheet

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

U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances		
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List		
U.S Pennsylvania - RTK (Right to Know) List		
U.S Texas - Effects Screening Levels - Long Term		
U.S Texas - Effects Screening Levels - Short Term		
Lauryldimethylamine oxide (1643-20-5)		
U.S Texas - Effects Screening Levels - Long Term		
U.S Texas - Effects Screening Levels - Short Term		

Canadian Regulations

Klinger Formula 765		
WHMIS Classification	Class E - Corrosive Material	
Water (7732-18-5)		
Listed on the Canadian DSL (D	pomestic Substances List) inventory.	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria	
Sodium hydroxide (1310-73-2	2)	
Listed on the Canadian DSL (D	omestic Substances List) inventory.	
Listed on the Canadian Ingred	lient Disclosure List	
WHMIS Classification Class E - Corrosive Material		
Sodium hypochlorite (7681-5	2-9)	
Listed on the Canadian DSL (D	omestic Substances List) inventory.	
Listed on the Canadian Ingred	lient Disclosure List	
WHMIS Classification Class C - Oxidizing Material		
	Class E - Corrosive Material	
Class F - Dangerously Reactive Material		
Lauryldimethylamine oxide (1643-20-5)		
Listed on the Canadian DSL (Domestic Substances List) inventory.		
Listed on the Canadian Ingredient Disclosure List		
WHMIS Classification	Class E - Corrosive Material	
Class D Division 2 Subdivision B - Toxic material causing other toxic effects		
T I: I I I I I	ad in accordance with the baserd criteria of the Controlled Breducts Degulations (CDD) and the CDC	

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision c	late
------------	------

: 12/8/2015

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT SE 3	Specific target organ toxicity (single exposure) Category 3

Safety Data Sheet

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

	H290	May be corrosive to metals	
	H302	Harmful if swallowed	
	H314	Causes severe skin burns and eye damage	
	H318	Causes serious eye damage	
	H335	May cause respiratory irritation	
	H400	Very toxic to aquatic life	
	H402	Harmful to aquatic life	
	H410	Very toxic to aquatic life with long lasting effects	
NFPA	Health Hazard	: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.	
		: 0 - Materials that will not burn.	
-		: 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.	
HMIS	III Rating		
		: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given	
Flammability :		: 0 Minimal Hazard	
-		: 1 Slight Hazard	
-		aration of This Document	
Bortek Industries, Inc.			
	4713 Old Gettysburg Road Mechanicsburg, PA 17055		
	-		
	26-7835	r surrent knowledge and is intended to describe the product for the purposes of health safety and	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2