

Safety Data Sheet

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

Revision date: 10/15/2015

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

Product identifier

Product form : Mixture

Product name : Heavy Duty Oven & Grill- 6322, 6324, 6326

Product code

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

Details of the supplier of the safety data sheet

Advantage Chemical, LLC Temecula, CA, 92590 T 1-855-238-2436

Emergency telephone number

Emergency number : 1-800-424-9300 ChemTrec

SECTION 2: Hazards identification

Classification of the substance or mixture

GHS-US classification

Met. Corr. 1 H290 Skin Corr. 1A H314 H318 Eye Dam. 1

Full text of H-statements: see section 16

Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Precautionary statements (GHS-US) P234 - Keep only in original container

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P264 - Wash hands, forearms and face thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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 P363 - Wash contaminated clothing before reuse P390 - Absorb spillage to prevent material damage

P405 - Store locked up

P406 - Store in Original container or corrosive resistant container with a resistant inner liner P501 - Dispose of contents/container to a licensed hazardous waste facility in accordance with

state and local agencies

Other hazards

No additional information available

Unknown acute toxicity (GHS-US)

Not applicable

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
sodium hydroxide, conc=50%, aqueous solution	(CAS No) 1310-73-2	5 - 25	Skin Corr. 1A, H314
disodium metasilicate	(CAS No) 6834-92-0	1 - 10	Skin Corr. 1A, H314
potassium hydroxide, conc=50%, aqueous solution	(CAS No) 1310-58-3	1 - 10	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Aquatic Acute 3, H402
2-aminoethanol	(CAS No) 141-43-5	1 - 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314
2-butoxyethanol	(CAS No) 111-76-2	1	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311

Full text of H-statements: see section 16

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 : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

First-aid measures after 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.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor/physician.

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

Symptoms/injuries : Causes severe skin burns and eye damage.

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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Reactivity : Thermal decomposition generates : Corrosive vapours.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering 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

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spill

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Absorb spillage to prevent material damage.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.

Precautions for safe handling : Avoid contact with skin, eyes and clothing.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.

Storage conditions : Keep only in original container in a cool well ventilated area. Keep container closed when not in

use.

Incompatible products : Strong bases. Strong acids.

Not applicable

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Storage temperature : 25 (5 - 42) °C

Packaging materials : polyethylene. Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ACCIL

OSHA

Heavy Duty Oven & Grill- 6322, 6324, 6326

ACGIH	Not applicable	
OSHA	Not applicable	
2-butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (ppm)	20 ppm

disodium metasilicate (6834-92-0)	
ACGIH	Not applicable
OSHA	Not applicable

potassium hydroxide, conc=50%, aqueous solution (1310-58-3)		
ACGIH	ACGIH Ceiling (mg/m³) 2 mg/m³	
OSHA	Not applicable	

2-aminoethanol (141-43-5)		
ACGIH	ACGIH TWA (ppm)	3 ppm
ACGIH	ACGIH STEL (ppm)	3 ррт
OSHA	Not applicable	

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

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Eye protection : Chemical goggles or face shield.
Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

 Physical state
 : Liquid

 Colour
 : brown

 Odour
 : characteristic

 Odour threshold
 : No data available

 pH
 : 13 (12.5 - 14)

 Melting point
 : No data available

 Freezing point
 : <= 0 °C</td>

 Boiling point
 : >= 100 °C

Boiling point : >= 100
Flash point : None

Relative evaporation rate (butylacetate=1) : No data available : No data available Flammability (solid, gas) Explosive limits No data available Explosive properties : No data available Oxidising properties No data available : No data available Vapour pressure : No data available Relative density Relative vapour density at 20 °C : No data available

Density : >= 1.12 (1.11 - 1.13) g/ml

Solubility : Soluble in water.

Water: Solubility in water of component(s) of the mixture :

• 2-butoxyethanol: Complete • tetrasodium ethylenediaminetetracetate: 103 g/100ml • disodium metasilicate: > 18 g/100ml • potassium hydroxide, conc=50%, aqueous solution: 121 g/100ml (25 °C) • 2-aminoethanol: Complete • sodium hydroxide, conc=50%, aqueous

solution: Complete

Log Pow : No data available
Log Kow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information

VOC content : <= 32.4

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. metals. May be corrosive to metals.

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10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

pH: 13 (12.5 - 14) Serious eye damage/irritation : Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)	2-butoxyethanol (111-76-2)	
LD50 dermal rabbit 435 mg/kg bodyweight (435 mg/kg bodyweight; Rabbit; Rabbit; Experimental value, 435 mg/kg bodyweight; Rabbit; Rabbit; Rabbit; Experimental value) LC50 inhalation rat (mg/l) 2,17 mg/l/4h (2,35 mg/l/4h; Rat; Rat; Experimental value) LC50 inhalation rat (ppm) 450-486, Rat ATE US (oral) 530.000 mg/kg bodyweight ATE US (oral) 435.000 mg/kg bodyweight ATE US (uspours) 2,170 mg/l/4h ATE US (uspours) 2,170 mg/l/4h ATE US (ust,mist) 2,170 mg/l/4h ATE US (oral) 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity) Potassium hydroxide, conc=50%, aqueous solution (1310-58-3) LD50 oral rat 333 mg/kg (Rat) ATE US (oral) 333.000 mg/kg bodyweight 2-aminoethanol (141-43-5) LD50 oral rat 1720 mg/kg (Rat) LD50 odermal rabbit 1018 mg/kg (Rabbit) ATE US (oral) 1720.000 mg/kg (Rabbit) ATE US (oral) 1720.000 mg/kg bodyweight ATE US (oral) 1018.000 mg/kg	LD50 oral rat	530 mg/kg (1746 mg/kg bodyweight; Rat; Rat; Experimental value)
bodyweight; Rabbit; Rabbit; Experimental value) LC50 inhalation rat (mg/l)	LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value,Rat; Experimental value)
Rat; Rat; Experimental value; Experimental value) LC50 inhalation rat (ppm)	LD50 dermal rabbit	
ATE US (oral) 530.000 mg/kg bodyweight ATE US (dermal) 435.000 mg/kg bodyweight ATE US (vapours) 2.170 mg/l/4h ATE US (dust,mist) 2.170 mg/l/4h disodium metasilicate (6834-92-0) LD50 dermal rat > 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity) potassium hydroxide, conc=50%, aqueous soution (1310-58-3) LD50 oral rat 333 mg/kg (Rat) ATE US (oral) 333.000 mg/kg bodyweight 2-aminoethanol (141-43-5) LD50 oral rat 1720 mg/kg (Ratb) LD50 oral rat 1018 mg/kg (Rabbit) ATE US (oral) 1018 mg/kg (Rabbit) ATE US (oral) 1720.000 mg/kg bodyweight ATE US (dermal) 1018.000 mg/kg bodyweight Skin corrosion/irritation Causes severe skin burns and eye damage.	LC50 inhalation rat (mg/l)	
ATE US (dermal)	LC50 inhalation rat (ppm)	450-486,Rat
ATE US (vapours) 2.170 mg/l/4h ATE US (dust,mist) 2.170 mg/l/4h disodium metasilicate (6834-92-0) LD50 dermal rat > 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity) potassium hydroxide, conc=50%, aqueous solution (1310-58-3) LD50 oral rat 333 mg/kg (Rat) ATE US (oral) 333.000 mg/kg bodyweight 2-aminoethanol (141-43-5) LD50 oral rat 1720 mg/kg (Rat) LD50 dermal rabbit 1018 mg/kg (Rabbit) ATE US (oral) 1720.000 mg/kg bodyweight ATE US (oral) 1720.000 mg/kg bodyweight ATE US (dermal) 1018.000 mg/kg bodyweight Skin corrosion/irritation : Causes severe skin burns and eye damage.	ATE US (oral)	530.000 mg/kg bodyweight
ATE US (dust,mist) 2.170 mg/l/4h	ATE US (dermal)	435.000 mg/kg bodyweight
disodium metasilicate (6834-92-0) LD50 dermal rat > 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity) potassium hydroxide, conc=50%, aqueous solution (1310-58-3) LD50 oral rat 333 mg/kg (Rat) ATE US (oral) 333.000 mg/kg bodyweight 2-aminoethanol (141-43-5) LD50 oral rat 1720 mg/kg (Rat) LD50 dermal rabbit 1018 mg/kg (Rabbit) ATE US (oral) 1720.000 mg/kg bodyweight ATE US (oral) 1720.000 mg/kg bodyweight ATE US (dermal) 1018.000 mg/kg bodyweight Skin corrosion/irritation Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Not classified Germ cell mutagenicity Not classified 2-butoxyethanol (111-76-2)	ATE US (vapours)	2.170 mg/l/4h
D50 dermal rat > 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)	ATE US (dust,mist)	2.170 mg/l/4h
potassium hydroxide, conc=50%, aqueous solution (1310-58-3) LD50 oral rat 333 mg/kg (Rat) ATE US (oral) 333.000 mg/kg bodyweight 2-aminoethanol (141-43-5) LD50 oral rat 1720 mg/kg (Rat) LD50 dermal rabbit 1018 mg/kg (Rabbit) ATE US (oral) 1720.000 mg/kg bodyweight ATE US (dermal) 1018.000 mg/kg bodyweight ATE US (dermal) 1018.000 mg/kg bodyweight Skin corrosion/irritation Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Not classified Germ cell mutagenicity Not classified 2-butoxyethanol (111-76-2)	disodium metasilicate (6834-92-0)	
LD50 oral rat 333 mg/kg (Rat) 333.000 mg/kg bodyweight	LD50 dermal rat	> 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
ATE US (oral) 2-aminoethanol (141-43-5) LD50 oral rat LD50 dermal rabbit ATE US (oral) ATE US (oral) ATE US (oral) ATE US (dermal) Skin corrosion/irritation Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Not classified Carcinogenicity Not classified 2-butoxyethanol (111-76-2)	potassium hydroxide, conc=50%, aqueous so	olution (1310-58-3)
LD50 oral rat 1720 mg/kg (Rat) LD50 dermal rabbit 1018 mg/kg (Rabbit) ATE US (oral) 1720.000 mg/kg bodyweight ATE US (dermal) 1018.000 mg/kg bodyweight Skin corrosion/irritation : Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation : Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)	LD50 oral rat	333 mg/kg (Rat)
LD50 oral rat LD50 dermal rabbit ATE US (oral) ATE US (dermal) Skin corrosion/irritation Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Carcinogenicity 1018 mg/kg (Rabbit) 1018 mg/kg bodyweight 1018 nog washed 1	ATE US (oral)	333.000 mg/kg bodyweight
LD50 dermal rabbit ATE US (oral) ATE US (dermal) Skin corrosion/irritation Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Carcinogenicity Carcinogenicity Carcinogenicity 1018 mg/kg (Rabbit) 1720.000 mg/kg bodyweight 1018.000 mg/kg bodyweight 24 amage. pH: 13 (12.5 - 14) Not classified Carcinogenicity Not classified 2-butoxyethanol (111-76-2)	2-aminoethanol (141-43-5)	
ATE US (oral) ATE US (dermal) 1018.000 mg/kg bodyweight Skin corrosion/irritation Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Not classified Germ cell mutagenicity Not classified 2-butoxyethanol (111-76-2)	LD50 oral rat	1720 mg/kg (Rat)
ATE US (dermal) 1018.000 mg/kg bodyweight Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation Not classified Carcinogenicity Not classified 2-butoxyethanol (111-76-2)	LD50 dermal rabbit	1018 mg/kg (Rabbit)
Skin corrosion/irritation : Causes severe skin burns and eye damage. pH: 13 (12.5 - 14) Serious eye damage/irritation : Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)	ATE US (oral)	1720.000 mg/kg bodyweight
pH: 13 (12.5 - 14) Serious eye damage/irritation : Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)	ATE US (dermal)	1018.000 mg/kg bodyweight
Serious eye damage/irritation : Causes serious eye damage. pH: 13 (12.5 - 14) Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)	Skin corrosion/irritation	: Causes severe skin burns and eye damage.
pH: 13 (12.5 - 14) Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)		pH: 13 (12.5 - 14)
Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)	Serious eye damage/irritation	: Causes serious eye damage.
Germ cell mutagenicity : Not classified Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)		pH: 13 (12.5 - 14)
Carcinogenicity : Not classified 2-butoxyethanol (111-76-2)	Respiratory or skin sensitisation	: Not classified
2-butoxyethanol (111-76-2)	Germ cell mutagenicity	: Not classified
	Carcinogenicity	: Not classified
IARC group 3 - Not classifiable	2-butoxyethanol (111-76-2)	
	IARC group	3 - Not classifiable

Reproductive toxicity
Specific target organ toxicity (single exposure)

: Not classified: Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and

symptoms

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

SECTION 12: Ecological information

12.1. Toxicity

LC50 fish 1 116 ppm (96 h; Cyprinodon variegatus; Nominal concentration	tion)

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2-butoxyethanol (111-76-2)		
EC50 Daphnia 1	1700 mg/l (48 h; Daphnia sp.; Nominal concentration)	
LC50 fish 2	1341 ppm (96 h; Lepomis macrochirus)	
EC50 Daphnia 2	1720 mg/l (24 h; Daphnia magna)	
TLM fish 1	100 - 1000,96 h; Pisces	
TLM other aquatic organisms 1	100 - 1000,96 h	
Threshold limit algae 1	900 mg/l (168 h; Scenedesmus quadricauda)	
Threshold limit algae 2	35 mg/l (192 h; Microcystis aeruginosa)	
disodium metasilicate (6834-92-0)		
LC50 fish 1	210 mg/l (96 h; Brachydanio rerio)	
EC50 Daphnia 1	216 mg/l (96 h; Daphnia magna; GLP)	
LC50 fish 2	2320 mg/l (96 h; Gambusia affinis)	
EC50 Daphnia 2	632 mg/l (96 h; Lymnaea sp.)	
Threshold limit algae 1	207 mg/l (72 h; Scenedesmus subspicatus; GLP)	
potassium hydroxide, conc=50%, aqueous solution (1310-58-3)		
LC50 fish 1	28.6 mg/l (24 h; Pisces; Pure substance)	
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)	
LC50 fish 2	80 mg/l (96 h; Gambusia affinis; Pure substance)	
Threshold limit other aquatic organisms 1	100 - 1000,96 h	
2-aminoethanol (141-43-5)		
LC50 fish 1	150 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)	
EC50 Daphnia 1	140 mg/l (24 h; Daphnia magna)	
LC50 fish 2	329.16 mg/l (96 h; Lepomis macrochirus)	
TLM fish 1	100 - 1000,96 h; Pisces	
TLM other aquatic organisms 1	100 - 1000,96 h	
Threshold limit algae 1	0.97 mg/l (192 h; Scenedesmus quadricauda; Inhibitory)	
Threshold limit algae 2	35 mg/l (72 h; Algae)	

Heavy Duty Oven & Grill- 6322, 6324, 6326	
Persistence and degradability	Not established.
2-butoxyethanol (111-76-2)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.71 g O₂/g substance
Chemical oxygen demand (COD)	2.20 g O₂/g substance
ThOD	2.305 g O₂/g substance
BOD (% of ThOD)	0.31 % ThOD
disodium metasilicate (6834-92-0)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
potassium hydroxide, conc=50%, aqueous s	solution (1310-58-3)
Persistence and degradability	Biodegradability: not applicable. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
2-aminoethanol (141-43-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.

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2-aminoethanol (141-43-5)	
Biochemical oxygen demand (BOD)	0.80 g O₂/g substance
Chemical oxygen demand (COD)	1.34 g O₂/g substance
ThOD	2.49 g O₂/g substance
BOD (% of ThOD)	0.32 % ThOD
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)	

Persistence and degradability Biodegradability: not applicable. No (test)data on mobility of the components available.

Bioaccumulative potential

12101 Diodocumanto potontia		
Heavy Duty Oven & Grill- 6322, 6324, 6326		
Bioaccumulative potential	Not established.	
2-butoxyethanol (111-76-2)		
Log Pow	0.81 (Experimental value; 25 °C,Experimental value; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
disodium metasilicate (6834-92-0)		
Bioaccumulative potential	Bioaccumulation: not applicable.	
potassium hydroxide, conc=50%, aqueous s	potassium hydroxide, conc=50%, aqueous solution (1310-58-3)	
Bioaccumulative potential	Bioaccumulation: not applicable.	
2-aminoethanol (141-43-5)		
Log Pow	-1.91	
Bioaccumulative potential	Bioaccumulation: not applicable.	
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)		
Bioaccumulative potential	Does not contain bioaccumulative component(s).	

Mobility in soil 12.4.

2-butoxyethanol (111-76-2)	
Surface tension	0.027 N/m (25 °C)

2-aminoethanol (141-43-5)	
Surface tension	0.050 N/m

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

: Dispose of contents/containers in hazardous or special waste collection point, an approved Waste disposal recommendations disposal plant, a licensed hazardous waste disposal contractor or authorized waste collection

site in accordance with local, regional and/or international regulation, except for empty clean

containers which can be disposed of as non hazardous waste.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1760 Corrosive liquids, n.o.s., 8, II

: UN1760 UN-No.(DOT)

Proper Shipping Name (DOT) : Corrosive liquids, n.o.s.

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

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Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202 DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are

not authorized.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

. . -

section is exceeded.

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

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

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations 2-butoxyethanol (111-76-2)

	•	•	
listed on the l	Inited Sta	tes TSCA	(Toxic Substances Control Act) inventory
LISTCO OII THE	Office Ota	ics roor	(Toxic oubstances control Act) inventory

SARA Section 313 - Emission Reporting 100 % 2-butoxyethanol (N230 Certain Glycol Ethers)

disodium metasilicate (6834-92-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

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Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's 1000 lb

List of Lists)

2-aminoethanol (141-43-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's 1000 lb

List of Lists)

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

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

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

No additional information available

15.3. US State regulations

2-butoxyethanol (111-76-2)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

potassium hydroxide, conc=50%, aqueous solution (1310-58-3)

- 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

2-aminoethanol (141-43-5)

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

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)

- 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

SECTION 16: Other information

Revision date : 10/15/2015 Other information : None.

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Full text of H-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 3	Hazardous to the aquatic environment — Acute Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 4	Flammable liquids, Category 4
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H227	Combustible liquid
H290	May be corrosive to metals
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H402	Harmful to aquatic life

NFPA health hazard : 3 - Short exposure could cause serious temporary or

residual injury even though prompt medical attention was

given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.

NFPA specific hazard : None

HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection : C

C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

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

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