

Safety Data Sheet

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

ADVANTAGE[®]

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

Product identifier

Product form : Mixture

Product name : Dual Action Suds N' Break- 7145, 71415, 71455

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 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318 Aquatic Acute 3 H402

Full text of H-statements: see section 16

Label elements

GHS-US labelling

Hazard pictograms (GHS-US)





Signal word (GHS-US)

Hazard statements (GHS-US) H290 - May be corrosive to metals H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage H402 - Harmful to aquatic life

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 P270 - Do not eat, drink or smoke when using this product

P273 - Avoid release to the environment

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

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 P301 - IF SWALLOWED: Rinse mouth, Call a POISON CENTER or doctor/physician

Other hazards

No additional information available

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2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
potassium hydroxide, conc=30-55%, aqueous solution	(CAS No) 1310-58-3	35 - 70	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
sodium hydroxide, conc=50%, aqueous solution	(CAS No) 1310-73-2	15 - 40	Skin Corr. 1A, H314

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 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.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

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. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : 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.

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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 : Comply with applicable regulations.

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

IISE

Incompatible products : Acids. Strong oxidizing agents.
Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 25 (5 - 42) °C

Packaging materials : Do not store in metal containers.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Dual Action Suds N' Break- 7145, 71415, 71455		
ACGIH	Not applicable	
OSHA	Not applicable	

potassium hydroxide, conc=30-55%, aqueous solution (1310-58-3)		
ACGIH	Not applicable	
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.

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 : 13.5

Melting point : No data available

Freezing point : $<= 0 \, ^{\circ}\text{C}$ Boiling point : $>= 100 \, ^{\circ}\text{C}$ Flash point : None

Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : No data available Explosive limits : No data available

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Explosive properties : No data available
Oxidising properties : No data available
Vapour pressure : No data available
Relative density : No data available
Relative vapour density at 20 °C : No data available

Density : >= 1.375 (1.365 - 1.385) g/ml

Solubility : Soluble in water.

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

• tetrasodium ethylenediaminetetracetate: 103 g/100ml • potassium hydroxide, conc=30-55%,

aqueous solution: miscible • sodium hydroxide, conc=50%, aqueous solution

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 : <= 10 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

Carcinogenicity

Reproductive toxicity

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. May be corrosive to metals.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Dual Action Suds N' Break- 7145, 71415, 71455		
ATE US (oral)	718.236 mg/kg bodyweight	
potassium hydroxide, conc=30-55%, aqueous solution (1310-58-3)		
LD50 oral rat	333 mg/kg (Rat; Literature study)	
ATE US (oral)	333.000 mg/kg bodyweight	
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 13.5	
Serious eye damage/irritation	: Causes serious eye damage. pH: 13.5	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	

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: Not classified

: Not classified

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Specific target organ toxicity (single exposure) : 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. Harmful if swallowed.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life.

12.2. Persistence and degradability

Dual Action Suds N' Break- 7145, 71455		
Persistence and degradability Not established.		
potassium hydroxide, conc=30-55%, aqueous solution (1310-58-3)		
Persistence and degradability	Biodegradability: not applicable. Low potential for adsorption in soil.	
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)		
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.	

12.3. Bioaccumulative potential

Dual Action Suds N' Break- 7145, 71415, 71455		
Bioaccumulative potential	Not established.	
potassium hydroxide, conc=30-55%, aqueous solution (1310-58-3)		
Bioaccumulative potential	Does not contain bioaccumulative component(s).	
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)		
Bioaccumulative potential	Does not contain bioaccumulative component(s).	

12.4. Mobility in soil

No additional information available

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

13.1. Waste treatment methods

Waste disposal recommendations : Dis

: Dispose of contents/containers in hazardous or special waste collection point, an approved 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. (Sodium Hydroxide, Potassium Hydroxide), 8, II

UN-No.(DOT)

: UN3266 Corrosive liquid, basic, inorganic, n.o.s (Sodium hydroxide, Potassium hydroxide), 8, II

Proper Shipping Name (DOT) : UN1760, UN3266

: Corrosive liquids, n.o.s.

Transport hazard class(es) (DOT)

Sodium Hydroxide, Potassium Hydroxide

: 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

DOT Special Provisions (49 CFR 172.102)

: G - Identifies PSN requiring a technical name

: 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)

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

section is exceeded.

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

Additional information

Other information : Less than 32 ounces ORMD, greater than 32 ounces UN1760.

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

potassium hydroxide, conc=30-55%, aqueous solution (1310-58-3)	
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 List of Lists)	1000 lb

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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 List of Lists)	1000 lb

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

potassium hydroxide, conc=30-55%, 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

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 : 07/25/2016 Other information : None.

Full text of H-statements:

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
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H290	May be corrosive to metals
H302	Harmful if swallowed
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

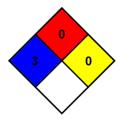
given.

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



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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 - 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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