

SAFETY DATA SHEET

FOR INDUSTRIAL USE ONLY

Cascophen™ AG-5635Q

Section 1. Product and company identification

GHS product identifier : Cascophen™ AG-5635Q
MSDS Number : 000000006346
Product type : Phenol Resorcinol Formaldehyde Resin
Material uses : Wood Adhesives, Composites, Laminates or Related Board Products

Manufacturer/Supplier/Importer : Hexion Inc.
180 East Broad Street
Columbus, Ohio
43215 USA

Contact person : 4information@hexion.com

Telephone : For additional health and safety or regulatory information, call
1 888 443 9466.

Emergency telephone number : For Emergency Medical Assistance
Call Health & Safety Information Services
1-866-303-6949

For Emergency Transportation Information
CHEMTREC US Domestic (800) 424-9300
CHEMTREC International (703) 527-3887
CANUTEC CA Domestic (613) 996-6666

Part of the CASCO® Brand of Adhesives and Resins from Hexion Inc.

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY:inhalation - Category 4
SKIN CORROSION - Category 1B
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITISATION - Category 1
GERM CELL MUTAGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
[blood system, central nervous system (CNS), eyes, respiratory tract] -
Category 1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED
EXPOSURE [cardiovascular system, eyes, gastrointestinal tract, heart,
kidneys, liver, lungs, skin, spleen, thyroid] - Category 1

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

- : H227 Combustible liquid.
- H332 Harmful if inhaled.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.
- H341 Suspected of causing genetic defects.
- H370 Causes damage to organs: (blood system, central nervous system (CNS), eyes, respiratory tract)
- H372 Causes damage to organs through prolonged or repeated exposure: (cardiovascular system, eyes, gastrointestinal tract, heart, kidneys, liver, lungs, skin, spleen, thyroid)

Precautionary statements

General

: Not applicable.

Prevention

- : Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Wear protective gloves.
- Wear eye or face protection.
- Wear protective clothing.
- Keep away from flames and hot surfaces. - No smoking.
- Use only outdoors or in a well-ventilated area.
- Do not breathe vapor.
- Do not eat, drink or smoke when using this product.
- Wash hands thoroughly after handling.
- Contaminated work clothing must not be allowed out of the workplace.

Response

- : Get medical attention if you feel unwell.
- IF exposed:
- Call a POISON CENTER or physician.
- IF INHALED:**
- Remove person to fresh air and keep comfortable for breathing.
- Immediately call a POISON CENTER or physician.
- IF SWALLOWED:**
- Immediately call a POISON CENTER or physician.
- Rinse mouth.
- Do NOT induce vomiting.
- IF ON SKIN (or hair):**
- Take off immediately all contaminated clothing.
- Rinse skin with water or shower.
- Wash contaminated clothing before reuse.
- Immediately call a POISON CENTER or physician.
- IF ON SKIN:**
- Wash with plenty of soap and water.
- Wash contaminated clothing before reuse.
- If skin irritation or rash occurs:
- Get medical attention.
- 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 or physician.

- Storage** : Store locked up.
Store in a well-ventilated place.
Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% by weight	CAS number
Phenol	5 - 10	108-95-2
Resorcinol	5 - 10	108-46-3
Ethanol	3 - 5	64-17-5
Sodium Hydroxide	3 - 5	1310-73-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes.

Ingestion

- Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first aid personnel** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO2, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical

- : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

- : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters

- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13 of SDS). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see section 8 of SDS). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material,

kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous. Do not reuse container. Take precautionary measures against electrostatic discharges. Follow US NFPA 30, “Flammable & Combustible Liquids Code,” AS1940 or other national, state and local codes on safe handling of flammable liquids. Train workers in the recognition and prevention of hazards associated with the storage, handling and transfer of flammable liquids in the plant.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Ethanol	OSHA PEL 1989 (1989-03-01) TWA 1,900 mg/m3 1,000 ppm OSHA PEL (1993-06-30) TWA 1,900 mg/m3 1,000 ppm NIOSH REL (1994-06-01) TWA - TLV and PEL 1,900 mg/m3 1,000 ppm ACGIH TLV (2008-11-24) STEL 1,000 ppm
Sodium Hydroxide	ACGIH TLV (1994-09-01) CEIL 2 mg/m3 OSHA PEL 1989 (1989-03-01) CEIL 2 mg/m3 OSHA PEL (1993-06-30) TWA 2 mg/m3 NIOSH REL (1994-06-01) CEIL 2 mg/m3
Phenol	ACGIH TLV (1996-05-18)

	<p>TWA 19 mg/m³ 5 ppm Notes: Absorbed through skin. OSHA PEL 1989 (1989-03-01) TWA 19 mg/m³ 5 ppm Notes: Absorbed through skin. OSHA PEL (1993-06-30) TWA 19 mg/m³ 5 ppm Notes: Absorbed through skin. NIOSH REL (1994-06-01) TWA - TLV and PEL 19 mg/m³ 5 ppm Notes: Absorbed through skin. CEIL 60 mg/m³ 15.6 ppm Notes: Absorbed through skin.</p>
Resorcinol	<p>ACGIH TLV (1996-05-18) TWA 45 mg/m³ 10 ppm STEL 90 mg/m³ 20 ppm OSHA PEL 1989 (1989-03-01) TWA 45 mg/m³ 10 ppm STEL 90 mg/m³ 20 ppm NIOSH REL (1994-06-01) TWA - TLV and PEL 45 mg/m³ 10 ppm STEL 90 mg/m³ 20 ppm</p>

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid
Color : Clear, reddish-brown

Odor : Slight alcoholic
Odor threshold : Not available

pH : 10.0 - 10.6

Melting point/ Freezing point : 0 °C (32 °F)

Boiling point : 102 °C (216 °F)

Flash point : Pensky-Martens Closed Cup: 65 °C (149 °F) (ASTM D 93)

Burning time : Not available
Burning rate : Not available
Evaporation rate : 0.6 ((n-Butyl acetate=1))

Flammability (solid, gas) : Not available
Lower and upper explosive : **Lower:** Not available

(flammable) limits	Upper: Not available
Vapor pressure	: 50 mm Hg @ 25 °C (77 °F)
Vapor density	: Not available
Relative density	: 1.1804
Solubility	: Not available
Solubility in water	: Slightly
Partition coefficient: n-octanol/water	: Not available
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not available
SADT	: Not available
Viscosity	: Dynamic: 2,100 - 2,900 cPs (Brookfield)
	Kinematic: Not available

Other information

The SDS is not to be used as a specification sheet. For Specific technical information on the product listed above, a sales specification sheet should be obtained from your Hexion representative.

Section 10. Stability and reactivity

Reactivity	: Normally stable, but will polymerize at high temperatures with some evolution of heat.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Strong oxidizer, Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials acids
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethanol				
	LD50 Oral	Rat	7,000 mg/kg	-
	LD50 Oral	Rat	7,000 mg/kg	-
	LC50 Inhalation	Rat	124.7 mg/l	4 h
	LC50 Inhalation	Rat	5.9 mg/l	6 h
Phenol				
	LD50 Oral	Rat	317 mg/kg	-
	LC50 Inhalation	Rat	0.9 mg/l	8 h
	LD50 Dermal	Rabbit	630 mg/kg	-
Resorcinol				
	LD50 Oral	Rat	510 mg/kg	-
	LD50 Dermal	Rabbit	2,830 mg/kg	-
Cascophen(TM) AG-5635Q				
	LD50 Oral	Rat	> 2,001 mg/kg	-
	LC50 Inhalation	Rat		1 h
	LD50 Dermal	Rabbit	> 2,001 mg/kg	-

Conclusion/Summary : Not available

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Ethanol	Skin - Mild irritant	Rabbit			-
	Skin - Moderate irritant	Rabbit		24 hrs	-
	eyes - Severe irritant	Rabbit			-
	eyes - Mild irritant	Rabbit		24 hrs	-
	eyes - Moderate irritant	Rabbit		0.001 hrs	-
	eyes - Moderate irritant	Rabbit			-
Phenol	Skin - -	Rat	> 4		-
	eyes - Cornea opacity	Rabbit	> 3		-
Resorcinol	Skin - Moderate irritant	Rabbit		24 hrs	-
	Skin - Severe irritant	Rabbit			-
	eyes - Severe irritant	Rabbit			-

Conclusion/Summary

Skin : Not available
eyes : Not available

Respiratory : Not available

Sensitization

Conclusion/Summary

Skin : Not available
Respiratory : Not available

Mutagenicity

Conclusion/Summary : Not available

Carcinogenicity

Conclusion/Summary : Not available

Reproductive toxicity

Conclusion/Summary : Not available

Teratogenicity

Conclusion/Summary : Not available

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Phenol	Category 1		eyes
Resorcinol	Category 3 Category 1		Respiratory tract irritation central nervous system (CNS) blood system
Sodium Hydroxide	Category 1		respiratory tract
Ethanol	Category 3 Category 1		Respiratory tract irritation Narcotic effects central nervous system (CNS)

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Phenol	Category 2		gastrointestinal tract kidneys eyes heart lungs liver skin
Ethanol	Category 1		liver
Resorcinol	Category 2 Category 1		cardiovascular system thyroid

	Category 2		spleen liver kidneys
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Aspiration hazard

Not available

Information on likely routes of exposure : Not available

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Harmful if inhaled.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available
- Potential delayed effects** : Not available

Long term exposure

- Potential immediate effects** : Not available
- Potential delayed effects** : Not available

Potential chronic health effects

Conclusion/Summary : Not available

General : Causes damage to organs through prolonged or repeated exposure:
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : Suspected of causing genetic defects.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (vapors)	46.92 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ethanol			
	Acute LC50 42,000 µg/l Fresh water	Fish - Fish	96 h
	Acute LC50 100 mg/l Fresh water	Fish - Fathead minnow	96 h
	Acute EC50 2,000 µg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 100 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 20,000 mg/l Fresh water	Aquatic plants - Green Flagellate	96 h
	Acute EC50 10,000 mg/l Fresh water	Aquatic plants - Algae	96 h
	Acute EC50 10,000 mg/l Fresh water	Aquatic plants - Diatom	96 h
	Acute No-observable-effect-concentration 4.995 mg/l Marine water	Aquatic plants - Algae	4 d
	Acute No-observable-effect-concentration 50 mg/l Marine water	Aquatic plants - Algae	3 d
	Chronic No-observable-effect-concentration 0.375 mg/l Fresh water	Fish - Fish	84 d
	Chronic No observable effect concentration < 6,300 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Chronic No-observable-effect-concentration 100 mg/l Fresh water	Aquatic invertebrates. Daphnia	21 d
Phenol			
	Acute LC50 8.9 mg/l Fresh water	Fish - Rainbow trout,donaldson trout	96 h
	Acute No-observable-effect-concentration 0.077 mg/l Fresh water	Fish - Carp	60 d
	Acute EC50 3.1 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute No-observable-effect-concentration 0.16 mg/l Fresh water	Aquatic invertebrates. Water flea	16 d
	Acute EC50 61.1 mg/l Fresh water	Aquatic plants - Microalgae	96 h
	Acute EC50 21 mg/l Fresh water	Micro-organism - Soil organisms	24 h
	Chronic No-observable-effect-concentration 2.2 mg/l Fresh water	Aquatic invertebrates. Water flea	2 d
resorcinol			
	Acute LC50 26.8 mg/l Fresh water	Fish - Fish	96 h
	Acute EC50 1 mg/l	Aquatic invertebrates. Daphnia	48 h

Conclusion/Summary : Not available

Persistence/degradability

Conclusion/Summary : Not available

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Ethanol	-0.35	-	low
Phenol	1.5	17.5	low
Resorcinol	0.8	-	low

Mobility in soil

Soil/water partition coefficient (KOC) : Not available

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International transport regulations

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
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CFR	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Sodium Hydroxide)	Class 8 III	Phenol, Sodium Hydroxide
TDG	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Sodium Hydroxide)	Class 8 III	
IMO/IMDG	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Sodium Hydroxide)	Class 8 III	Phenol, Sodium Hydroxide
IATA (Cargo)	3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Sodium Hydroxide)	Class 8 III	Phenol, Sodium Hydroxide

*PG : Packing group

Special precautions for user : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

United States

U.S. Federal regulations : **United States - TSCA 12(b) - Chemical export notification:** None required.
United States - TSCA 5(a)2 - Final significant new use rules: Not listed
United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed
United States - TSCA 5(e) - Substances consent order: Not listed
SARA 311/312 Classification - Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

SARA 313

		Product name	CAS number
Form R - Reporting requirements	:	Phenol	108-95-2
	:	Phenol	108-95-2
Supplier notification	:	Phenol	108-95-2

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

California Prop. 65: : WARNING: This product contains a chemical known to the State of California to cause cancer., WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or

other reproductive harm.

United States inventory (TSCA 8b) : All components are listed or exempted.

International regulations

International lists :

- Australia inventory (AICS):** Not determined.
- Canada inventory:** All components are listed or exempted.
- Japan inventory:** Not determined.
- China inventory (IECSC):** Not determined.
- Korea inventory:** Not determined.
- New Zealand Inventory (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.
- United States inventory (TSCA 8b):** All components are listed or exempted.
- Taiwan inventory (CSNN):** Not determined.

Section 16. Other information

Hazardous Material Information System III (U.S.A.) :

Health	*	3
Flammability		2
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Full text of abbreviated H statements : Not applicable.

History

Date of printing : 02/07/2019
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Version : 12.0
Prepared by : Product Safety Stewardship
Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- UN = United Nations

References : Not available

Notice to reader

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