enthone

Safety Data Sheet

Safety Data Sheet

Section 1. Identification

Product name	: ENTHONE® 50-201AR
Product code	: 135642
Uses advised against	: Consumer, private households, general public
Product type	: Liquid.
Date of issue/Date of revision	: April 13 2015.

Manufacturer - Supplier	Telephone no.:	Fax no.	Emergency phone:
Enthone Inc 350 Frontage Road West Haven, CT 06516	Tel: (203) 934-8611	Fax:(203) 799-8179	UNITED STATES AND CANADA: Tel: 800-424-9300 INTERNATIONAL, CALL Tel: +1 703-527-3887 (collect calls accepted) Enthone Chemtrec #7827
Enthone OMI deMexico S.A. de C.V. Norte 59 No. 896 Col. Industrial Vallejo Mexico, D.F. 02300 Mexico	Tel: 52 55 5078 3904	Fax: 52 555 567 6326	Tel: 01 800 002 1400 Tel: (55) 5559 1588
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Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 1

GHS label elements Hazard pictograms



: Danger

Signal word

Continued on next page

Section 2. Hazards identification

Hazard statements	 Combustible liquid. Harmful if inhaled. Causes serious eye irritation. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.
Precautionary statements	
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. Keep away from flames and hot surfaces No smoking. Use only outdoors or in a well- ventilated area. Avoid release to the environment. Do not breathe vapor. Wash hands thoroughly after handling.
Response	: Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
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.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
barium sulfate	10-20	7727-43-7
Inorganic cadmium compounds	10-20	-
Glycol Ether	10-20	-
Glycol Ether	1-10	-
Ethyl acetate	1-10	-
zinc Salt	1-10	-
petroleum solvent naphtha	1-10	-
Inorganic filler	0.1-1.0	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Get medical attention.

Section 4. First aid measures

Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that mists 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. Get medical attention. If necessary, call a poison center or physician. 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	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: 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. Get medical attention. 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.
Most important symptoms/ef	fects, acute and delayed
Potential acute health effect	<u>s</u>

: Causes serious eye irritation.
: Harmful if inhaled.
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
<u>ms</u>
: Adverse symptoms may include the following: pain or irritation watering redness
: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
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Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
al attention and special treatment needed, if necessary
: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
: No specific treatment.
: No action shall be taken involving any personal risk or without suitable training. If it is suspected that mists 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.

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

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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. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides 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, protec	tive 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. Avoid breathing 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Methods and materials for co	entainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and

mall spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and
explosion-proof equipment. 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. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. 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. Avoid release to the environment. 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. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
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) 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
barium sulfate	ACGIH TLV (United States, 4/2014). Notes: The value is for total
	dust containing no asbestos and < 1% crystalline silica.
	TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction
	ACGIH TLV (United States, 2001).
	TWA: 10 mg/m ³ 8 hours.
	NIOSH REL (United States, 10/2013).
	TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction
	TWA: 10 mg/m ³ 10 hours. Form: Total
	OSHA PEL (United States, 2/2013).
	TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
	TWA: 15 mg/m ³ 8 hours. Form: Total dust

Section 8. Exposure controls/personal protection

Inorganic cadmium compounds	OSHA PEL (United States, 2006).
inorganic caumum compounds	TWA: 0.005 mg/m ³ 8 hours. Form: As Cadmium
	ACGIH TLV (United States, 4/2014).
	TWA: 0.01 mg/m ³ , (as Cd) 8 hours. Form: Inhalable fraction
	ACGIH TLV (United States, 4/2014). Notes: as Cd
	TWA: 0.002 mg/m ³ , (as Cd) 8 hours. Form: Respirable fraction
Glycol Ether	ACGIH TLV (United States, 4/2014). Absorbed through skin.
	STEL: 909 mg/m ³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 606 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
	NIOSH REL (United States, 10/2013). Absorbed through skin.
	STEL: 900 mg/m ³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 600 mg/m ³ 10 hours.
	TWA: 100 ppm 10 hours.
	OSHA PEL (United States, 2/2013). Absorbed through skin.
	TWA: 600 mg/m ³ 8 hours.
Ethyl acetate	TWA: 100 ppm 8 hours. AIHA WEEL (United States, 10/2011).
	TWA: 50 ppm 8 hours.
petroleum solvent naphtha	Manufacturer (United States, 2/2006).
peroleum solvent haphtha	TWA: 100 ppm 8 hours.
Inorganic filler	OSHA PEL (United States, 2/2013).
	TWA: 15 mg/m ³ 8 hours. Form: Total dust
	ACGIH TLV (United States, 4/2014). Notes: Substance identified
	by other sources as a suspected or confirmed human carcinogen.
	1996 Adoption Substances for which the TLV is higher than the
	OSHA Permissible Exposure Limit (PEL) and/or the NIOSH
	Recommended Exposure Limit (REL). See CFR 58(124) :
	36338-33351, June 30, 1993, for revised OSHA PEL. Refers to
	Appendix A Carcinogens.
	TWA: 10 mg/m ³ 8 hours.
Appropriate engineering	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or
	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any
Appropriate engineering : controls	other engineering controls to keep worker exposure to airborne contaminants below any
	other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas,
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controls Environmental exposure : controls Individual protection measures Hygiene measures :	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. 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. 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal 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	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Yellow.
Odor	: Mild.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: 173.89°C (345°F)
Flash point	: Closed cup: 71.11°C (160°F) [Pensky-Martens.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.42
Solubility	: Not available.
VOC	: 415.4 g/l
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
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	:	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.
Incompatibility with various substances	1	Reactive or incompatible with the following materials: oxidizing materials, acids and moisture.
Hazardous decomposition products	1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Other Hazardous decomposition products	:	carbon oxides (CO, CO_2), nitrogen oxides (NO, NO_2 etc.), sulfur oxides (SO ₂ , SO ₃ etc.), metal oxides
Hazardous polymerization	1	Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Routes of entry	: Dermal contact. Eye contact. Ir	halation. Inge	estion.	
Acute toxicity				
Product/ingredient name	Result	Species	Dose	Exposure
Inorganic cadmium compounds	LD50 Oral	Rat	7080 mg/kg	-
Glycol Ether	LD50 Dermal LD50 Oral	Rabbit Rat	15000 mg/kg 11000 mg/kg	-
Ethyl acetate	LD50 Dermal LD50 Oral	Rabbit Rat	>5 g/kg 8532 mg/kg	-
zinc Salt	LC50 Inhalation Dusts and mists LD50 Oral	Rat Rat	>5040 mg/m³ >2000 mg/kg	4 hours -
petroleum solvent naphtha	LC50 Inhalation Vapor LD50 Dermal LD50 Oral	Rat Rabbit Rat	>590 mg/m³ >2000 mg/kg 3200 mg/kg	4 hours - -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Glycol Ether	Eyes - Moderate irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Glycol Ether	Eyes - Mild irritant	Human	-	8 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
petroleum solvent naphtha	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-
Inorganic filler	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Sensitization

Not available.

Mutagenicity

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Product/ingredient name	Test	Experiment	Result
Inorganic cadmium compounds	-	Experiment: In vitro Subject: Mammalian-Animal Cell: Germ Experiment: In vitro Subject: Mammalian-Human Cell: Germ	Positive Positive

Carcinogenicity

No applicable toxicity data

Additional information:

Classification

Product/ingredient name	OSHA	IARC	NTP
Inorganic cadmium compounds Inorganic filler	+	1 2B	Known to be a human carcinogen.
	-	20	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Inorganic cadmium compounds	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
petroleum solvent naphtha	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	:	Routes of entry anticipated: Oral, Dermal, Inhalation.
Potential acute health effects		
Eye contact	1	Causes serious eye irritation.
Inhalation	1	Harmful if inhaled.
Skin contact	1	No known significant effects or critical hazards.
Ingestion	1	No known significant effects or critical hazards.
Symptoms related to the phys Eye contact Inhalation	:	Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Section 11. Toxicological information

Skin contact	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effec	ts	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
General	:	May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	:	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	Suspected of damaging the unborn child.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
	70094.2 mg/kg 10.95 mg/l

Section 12. Ecological information

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Product/ingredient name	Result	Species	Exposure
barium sulfate	Acute EC50 634 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 32000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
Inorganic cadmium compounds	Acute LC50 11 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 108 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
Glycol Ether	LC50 110 mg/l	Fish	96 hours
Glycol Ether	EC50 >969 mg/l	Algae	96 hours
Ethyl acetate	Acute EC50 500 mg/l	Daphnia	48 hours
-	Acute LC50 161 mg/l	Fish	96 hours
zinc Salt	Acute LC50 >30000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1826000 µg/l Fresh water	Fish - Pimephales promelas - Neonate	96 hours
	Chronic NOEC 1 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days

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Section 12. Ecological information

Inorganic filler	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours
		dubia - Neonate	
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex -	48 hours
		Neonate	
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Inorganic cadmium compounds	-	1345	high
Glycol Ether	0.76	3.2	low
Glycol Ether	0.004	-	low
Ethyl acetate	1.2	-	low
zinc Salt	-	60960	high
petroleum solvent naphtha	2.8 to 6.5	99 to 5780	high
Inorganic filler	-	352	low

Mobility in soil

Other adverse effects

Soil/water partition	: Not available.
coefficient (Koc)	

: 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. Vapor 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

	DOT Classification	TDG Classification	Mexico Classification	UN	IMDG	ΙΑΤΑ
UN number	Not regulated.	UN3082	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Inorganic cadmium compounds)				
Continued on ne	kt page				Enthone SD	S GHS America

		THONE® 50-201A 5642	R			Enthone <i>Page: 12/14</i> April 13 2015.
Section 14.	Transp	ort informa	ation			
Transport hazard class(es)	-	9	9	9	9	9
		× ×	¥2	¥2	¥2	¥2
Packing group	-					
Environmental hazards	No.	Yes.	Yes.	Yes.	Yes.	Yes.
Additional information - TDG Classification	The produc	t is not regulated a	s a dangerous go	od when transpor	ted by road or rai	l.
Additional information - Mexico Classification	The enviror ≤5 kg.	mentally hazardou	s substance mark	t is not required w	/hen transported i	in sizes of ≤5 L or
Additional information - UN Classification	The enviror ≤5 kg.	mentally hazardou	s substance marł	t is not required w	vhen transported i	in sizes of ≤5 L or
Additional information - IMDG Classification	The marine	pollutant mark is n	ot required when	transported in siz	tes of ≤5 L or ≤5 k	kg.
Additional information - IATA Classification	The enviror ≤5 kg.	mentally hazardou	s substance mark	t is not required w	vhen transported i	in sizes of ≤5 L or

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

Continued on next page	Enthone SDS GHS America
SARA 311/312	
No products were found.	
Composition/information	on ingredients
SARA 302/304	
United States inventory (TSCA 8b)	: All components are listed or exempted.
	TSCA 12(b) one-time export notification: No products were found. TSCA 12(b) annual export notification: No products were found.
J.S. Federal regulations	 TSCA 5(a)2 proposed significant new use rule (SNUR): No products were found. TSCA 5(a)2 final significant new use rule (SNUR): No products were found.

Section 15. Regulatory information

Classification

: Fire hazard

Immediate (acute) health hazard Delayed (chronic) health hazard

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Inorganic cadmium compounds Glycol Ether Glycol Ether zinc Salt		10-20 10-20 1-10 1-10
Supplier notification	Inorganic cadmium compounds Glycol Ether zinc Salt		10-20 10-20 1-10

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

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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WHMIS (Canada)

: Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). Class D-2A: Material causing other toxic effects (Very toxic).

Canada

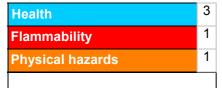
: At least one component is not listed in DSL but all such components are listed in NDSL.

International lists

National inventory

Section 16. Other information

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



Procedure used to derive the classification

Classification	Justification
Flam. Liq. 4, H227	On basis of test data
Acute Tox. 4, H332	Calculation method
Eye Irrit. 2A, H319	Calculation method
Carc. 1B, H350	Calculation method
Repr. 2, H361 (Fertility)	Calculation method
Repr. 2, H361 (Unborn child)	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Acute 2, H401	Calculation method
Aquatic Chronic 1, H410	Calculation method
History	

<u>Instory</u>	
Date of issue/Date of revision	: April 13 2015.
Date of previous issue	: No previous validation.
Version	: 1

Continued on next page

ENTHONE® 50-201AR	
135642	

Section 16. Other information

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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 = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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