acc. to OSHA HCS

Printing date 04/18/2017

Reviewed on 04/18/2017

1 Identification

· Product identifier

- · Trade name: STAUF CCO-650 Part A
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Details of the supplier of the safety data sheet
- · Distributor:

STAUF USA, LLC. 11121 Hwy 70 Suite 102 Arlington, TN 38002, USA Phone 1-901-820-0007 Fax 1-901-820-0101

2 Hazard(s) identification

· Classification of the substance or mixture



Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

🗶 Irritant

May cause sensitization by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Information concerning particular hazards for human and environment:
 The product has to be labelled due to the calculation precedure of the "General Classif
- The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:



Xi Irritant

- Hazard-determining components of labeling: tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate
- Risk phrases: May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- Safety phrases: Do not breathe gas/fumes/vapour/spray. Avoid contact with skin. Do not empty into drains. Wear suitable gloves.

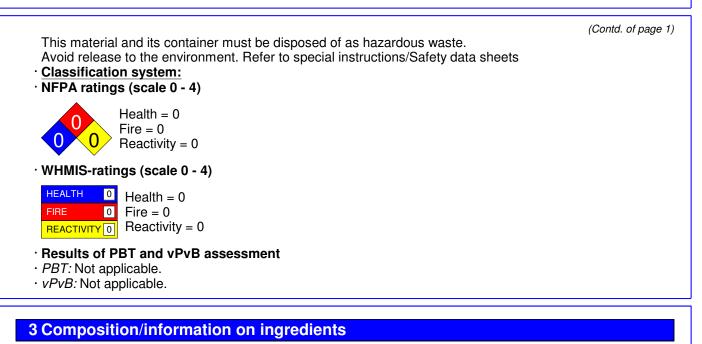
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Trade name: STAUF CCO-650 Part A



· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

	· · · · • • • • • • • • • • • • • • • •	
136210-30-5	tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate	25-50%
623-91-6	diethyl fumarate	≤ 2.5%
• Additional information: For the wording of the listed risk phrases refer to section 16.		

4 First-aid measures

- · Description of first aid measures
- After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: Do not induce vomiting; immediately call for medical help.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• Special hazards arising from the substance or mixture No further relevant information available.

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Trade name: STAUF CCO-650 Part A

Advice for firefighters

· Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation Wear protective clothing. · Environmental precautions:
- Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
- **Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
- · Breathing equipment:
- Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

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Trade name: STAUF CCO-650 Part A

· Protection of hands:



Protective gloves

- Material of gloves Strong gloves
 Eye protection: Goggles recommended during refilling.
 Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and	chemical properties	
 General Information Appearance: Form: 	Fluid	
Color: • Odor:	According to product specification Characteristic	
Odour threshold:	Not determined.	
· pH-value:	Not determined.	
 Change in condition Boiling point/Boiling range: 	Undetermined.	
· Flash point:	Not applicable.	
 Flammability (solid, gaseous): 	Not applicable.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
 Danger of explosion: 	Product does not present an explosion hazard.	
• Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapor pressure:	Not determined.	
 Density at 20 ℃ (68 °F): Relative density Vapour density Evaporation rate 	1.44 g/cm ³ (12.017 lbs/gal) Not determined. Not determined. Not determined.	
 Solubility in / Miscibility with Water: 	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity: Dynamic at 20 ℃ (68 ℉): Kinematic:	2000 mPas Not determined.	
• Solvent content: Organic solvents: VOC Content:	0.0 % 0.00 %	
		(Contd. on page 5)

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· Other information

No further relevant information available.

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10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- \cdot **Possibility of hazardous reactions** No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:
- 623-91-6 diethyl fumarate
- Oral LD50 1780 mg/kg (rat)
- · Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
- The product shows the following dangers according to internally approved calculation methods for preparations:
- Irritant
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)
- None of the ingredients is listed.
- · NTP (National Toxicology Program)
- None of the ingredients is listed.
- · OSHA-Ca (Occupational Safety & Health Administration)
- None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- Behavior in environmental systems:
- \cdot Bioaccumulative potential No further relevant information available.
- \cdot Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- Remark: Harmful to fish

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Trade name: STAUF CCO-650 Part A

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Additional ecological information:

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

· vPvB: Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- **Recommendation:** If product has aged or solidified conventional means of disposal are acceptable.
- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information	
· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
· DOT, ADR, ADN, IMDG, IATA	Void
 Transport hazard class(es) 	
· DOT, ADR, ADN, IMDG, IATA	
·Class	Void
 Packing group 	
· DOT, ADR, IMDG, IATA	Void
 Environmental hazards: 	
 Marine pollutant: 	No
 Special precautions for user 	Not applicable.
Transport in bulk according to Annex I	lof
MARPOL73/78 and the IBC Code	Not applicable.
• UN "Model Regulation":	-

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

- · Section 355 (extremely hazardous substances):
- None of the ingredient is listed.
- · Section 313 (Specific toxic chemical listings):
- None of the ingredients is listed.
- · TSCA (Toxic Substances Control Act):
 - All ingredients are listed.

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Trade name: STAUF CCO-650 Part A

	(Contd. of page 6)
Proposition 65	(Conta. of page o)
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
· Canadian Ingredient disclosure list	
• Limit 0,1%	
None of the ingredients is listed.	
· Limit 1%	
None of the ingredients is listed.	
Cancerogenity categories	
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
• TLV (Threshold Limit Value established by ACGIH)	
None of the ingredients is listed.	
• MAK (German Maximum Workplace Concentration)	
None of the ingredients is listed.	
• NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· Product related hazard informations:	

· Safety phrases: Keep out of the reach of children.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Technical Department

- · Contact: Wolfgang Stauf, Phone 901-820-0007, Email wolfgang.stauf@staufusa.com
- Date of preparation / last revision 04/18/2017 / -
- Abbreviations and acronyms: Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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1 Identification

· Product identifier

- · Trade name: STAUF CCO-640 Part B
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Details of the supplier of the safety data sheet
- · Distributor:

STAUF USA, LLC. 11121 Hwy 70 Suite 102 Arlington, TN 38002, USA Phone 1-901-820-0007 Fax 1-901-820-0101

2 Hazard(s) identification

<u>Classification of the substance or mixture</u>
 The product is not classified according to the Olabelly Llargerized Custom (

- The product is not classified according to the Globally Harmonized System (GHS).
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Information concerning particular hazards for human and environment: The product does not have to be labelled due to the calculation procedure of the "General Classification"
- guideline for preparations of the EU" in the latest valid version.
- Classification system:
- The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.

- · Safety phrases:
- Do not empty into drains.

This material and its container must be disposed of as hazardous waste.

- · Special labeling of certain preparations:
- Contains isocyanates. See information supplied by the manufacturer.
- Classification system:
- NFPA ratings (scale 0 4)



· WHMIS-ratings (scale 0 - 4)

HEALTH0Health = 0FIRE1Fire = 1REACTIVITY0Reactivity = 0

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

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Reviewed on 04/18/2017

Trade name: STAUF CCO-640 Part B

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void
- Additional information: For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complications.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 Ensure adequate ventilation
 Wear protective clothing.

 Environmental precautions:
 Do not allow product to reach sewage system or any water course.
 Inform respective authorities in case of seepage into water course or sewage system.
 Do not allow to enter sewers/ surface or ground water.

 Methods and material for containment and cleaning up:
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

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Trade name: STAUF CCO-640 Part B

Reviewed on 04/18/2017

(Contd. of page 2)

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.

· Conditions for safe storage, including any incompatibilities

- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Wash hands before breaks and at the end of work.
- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands: Not required.
- · Material of gloves Butyl rubber, BR
- · Eye protection: Goggles recommended during refilling.
- · Body protection: Protective work clothing

9 Physical and chemical properties

 Information on basic physical and General Information Appearance: 	chemical properties
Form: Color: • Odor: • Odour threshold:	Fluid According to product specification Characteristic Not determined.
· pH-value:	Not determined.
 Change in condition Boiling point/Boiling range: 	Undetermined.
· Flash point:	203 °C (397 °F)
 Flammability (solid, gaseous): 	Not applicable.
· Ignition temperature:	180 ℃ (356 °F)
Decomposition temperature:	Not determined.

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Trade name: STAUF CCO-640 Part B

		(Contd. of page 3)
· Auto igniting:	Product is not selfigniting.	
[.] Danger of explosion:	Product does not present an explosion hazard.	
• Explosion limits: Lower: Upper:	0.9 Vol % 9.5 Vol %	
· Vapor pressure at 20 °C (68 °F):	0.007 hPa	
• Density at 20 °C (68 °F): • Relative density • Vapour density • Evaporation rate	1.13 g/cm ³ (9.43 lbs/gal) Not determined. Not determined. Not determined.	
 Solubility in / Miscibility with Water: 	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/water): Not determined.	
· Viscosity: Dynamic at 20 ℃ (68 ℉): Kinematic:	500 mPas Not determined.	
 Solvent content: Organic solvents: VOC Content: Other information 	0.0 % 0.00 % No further relevant information available.	

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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Trade name: STAUF CCO-640 Part B

(Contd. of page 4)

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)
- None of the ingredients is listed.
- · NTP (National Toxicology Program)
- None of the ingredients is listed.
- · OSHA-Ca (Occupational Safety & Health Administration)
- None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

4 Transport information		
· UN-Number		
· DOT, ADR, ADN, IMDG, IATA	Void	
 UN proper shipping name 		
· DOT, ADR, ADN, IMDG, IATA	Void	
 Transport hazard class(es) 		
· DOT, ADR, ADN, IMDG, IATA		
· Class	Void	
· Packing group		
· DOT, ADR, IMDG, IATA	Void	
 Environmental hazards: 		
 Marine pollutant: 	No	
 Special precautions for user 	Not applicable.	
		(Contd. on page

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<u>Transport in bulk according to Annex II of</u> <u>MARPOL73/78 and the IBC Code</u> <u>UN "Model Regulation":</u> -	(Contd. of page 5)
15 Regulatory information	
 Safety, health and environmental regulations/legislation specific for the subst Sara 	ance or mixture
Section 355 (extremely hazardous substances):	
None of the ingredient is listed.	
Section 313 (Specific toxic chemical listings):	
None of the ingredients is listed.	
TSCA (Toxic Substances Control Act):	
None of the ingredients is listed.	
· Proposition 65	
· Chemicals known to cause cancer:	
None of the ingredients is listed.	
 Chemicals known to cause reproductive toxicity for females: 	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
Canadian Ingredient disclosure list	
· Limit 0,1%	
None of the ingredients is listed.	
· Limit 1%	
None of the ingredients is listed.	
· Cancerogenity categories	
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
TLV (Threshold Limit Value established by ACGIH)	
None of the ingredients is listed.	
• MAK (German Maximum Workplace Concentration)	
None of the ingredients is listed.	
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
 Product related hazard informations: 	
 Hazard symbols: The product is not subject to identification regulations according to directives on haz 	ardous materials.
 Safety phrases: Keep out of the reach of children. Chemical safety assessment: A Chemical Safety Assessment has not been carrie 	ed out.

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Reviewed on 04/18/2017

Trade name: STAUF CCO-640 Part B

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department
- · Contact: Wolfgang Stauf, Phone 901-820-0007, Email wolfgang.stauf@staufusa.com
- Date of preparation / last revision 04/18/2017 / -