Printing date 04/05/2017 Reviewed on 04/05/2017

1 Identification

· Product identifier

· Trade name: STAUF CCO-640 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



X 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 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.

(Contd. on page 2)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part A

(Contd. of page 1)

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

Avoid release to the environment. Refer to special instructions/Safety data sheets

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0Reactivity = 0

· WHMIS-ratings (scale 0 - 4)



Health = 0
 Fire = 0
 Reactivity = 0

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

3 Composition/information on ingredients

- · 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.

(Contd. on page 3)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part A

(Contd. of page 2)

· 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.

(Contd. on page 4)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part A

· Protection of hands:

(Contd. of page 3)



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: According to product specification

Odor: CharacteristicOdour 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: Not determined. Not determined.

• Vapor pressure: Not determined.

• **Density at 20 °C (68 °F):** 1.44 g/cm³ (12.017 lbs/gal)

Relative density
Vapour density
Evaporation rate
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 $^{\circ}$ C (68 $^{\circ}$ F): 2000 mPas Kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 % VOC Content: 0.00 %

(Contd. on page 5)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part A

Other information

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:
- · 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:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- Remark: Harmful to fish

(Contd. on page 6)

(Contd. of page 4)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part A

(Contd. of page 5)

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 II of

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.

(Contd. on page 7)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part A

(Contd. of page 6)

· 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:
- · 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 04/05/2017 / -
- · Abbreviations and acronyms:

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

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

119

Printing date 04/05/2017 Reviewed on 04/05/2017

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

· Classification of the substance or mixture



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

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



Irritant

May cause sensitization by skin contact.

· Information concerning particular hazards for human and environment:

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: Incozol 2
- · Risk phrases:

May cause sensitization by skin contact.

Safety phrases:

Do not breathe gas/fumes/vapour/spray.

Avoid contact with skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Do not empty into drains.

Wear suitable gloves and eye/face protection.

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

(Contd. on page 2)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part B

(Contd. of page 1)

· Special labeling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 1 Reactivity = 0

· WHMIS-ratings (scale 0 - 4)



Health = 0
 Fire = 1
 Reactivity = 0

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

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

165101-57-5 Incozol 2

2.5-10%

· 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. Use fire fighting measures that suit the environment.

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

(Contd. on page 3)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part B

(Contd. of page 2)

· 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.

(Contd. on page 4)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part B

· Protection of hands:

(Contd. of page 3)



Protective gloves

- · 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 chemical properties
- · General Information

· Appearance:

Form: Fluid

Color: According to product specification

Odor: CharacteristicOdour threshold: Not determined.pH-value: Not determined.

· Change in condition

Boiling point/Boiling range:

· Flash point:

· Flammability (solid, gaseous):

· Ignition temperature:

· Decomposition temperature:

Undetermined.

203 °C (397 °F)

Not applicable.

180 °C (356 °F)

Not determined.

· **Auto igniting:** Product is not selfigniting.

• **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

 Lower:
 0.9 Vol %

 Upper:
 9.5 Vol %

 • Vapor pressure at 20 ℃ (68 °F):
 0.007 hPa

• **Density at 20 °C (68 °F):** 1.13 g/cm³ (9.43 lbs/gal)

Relative density
Vapour density
Evaporation rate
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 ℉): 500 mPas Kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 % VOC Content: 0.00 %

(Contd. on page 5)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part B

(Contd. of page 4)

· Other information

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: 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:
- · 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.

(Contd. on page 6)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part B

· Other adverse effects No further relevant information available.

(Contd. of page 5)

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 II of

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.

- · 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.

(Contd. on page 7)

Printing date 04/05/2017 Reviewed on 04/05/2017

Trade name: STAUF CCO-640 Part B

· Canadian Ingredient disclosure list

(Contd. of page 6)

· 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 04/05/2017 / -
- · Abbreviations and acronyms:

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

US