

United States

Material Safety Data Sheet

FOR INDUSTRIAL USE ONLY

1. Product and company identification

Product name	:	Casco-Resin(TM) FUL01BC-T
MSDS Number	:	300000015657
Material uses	:	Wood Adhesives, Composites, Laminates or Related Board Products
Product type	:	Melamine Modified Urea Formaldehyde Resin
Validation date	:	04/02/2013
Print date	:	01/16/2014

**Manufacturer, Importer,
Supplier** Momentive Specialty Chemicals Inc.
180 East Broad Street
Columbus, Ohio
43215 USA

Contact person 4information@momentive.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

The MSDS 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 Momentive representative.

Part of the CASCO® Brand of Adhesives and Resins from Momentive Specialty Chemicals

2. Hazards identification

Emergency overview

Physical state	:	Liquid
Color	:	Colorless/colourless to white
Odor	:	Little or none
Hazard statements	:	NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH

EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

OSHA/HCS status

- :

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Potential acute health effects

- Inhalation** :

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Ingestion** :

Not expected to be harmful under normal conditions of use.
- Skin** :

No known significant effects or critical hazards.
- Eyes** :

No known significant effects or critical hazards.

Potential chronic health effects

- Chronic effects** :

No known significant effects or critical hazards.
- Carcinogenicity** :

No known significant effects or critical hazards.
- Mutagenicity** :

No known significant effects or critical hazards.
- 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.
- Target organs** :

Not available

Over-exposure signs/symptoms

- Inhalation** :

No specific data.
- Ingestion** :

No specific data.
- Skin** :

No specific data.
- Eyes** :

No specific data.
- Medical conditions aggravated by over-exposure** :

None known.

See toxicological information (Section 11)

3. Composition/information on ingredients

There are no 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.

4. First aid measures

- Eye contact** :

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Skin contact** :

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical

Inhalation : attention if symptoms occur.

Ingestion : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.

Protection of first aid personnel : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Notes to physician : No action shall be taken involving any personal risk or without suitable training.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : 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.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

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.

6. Accidental release measures

Personal precautions : 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. Put on appropriate personal protective equipment (see section 8 of SDS).

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 for 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. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. 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). Dispose of via a licensed waste disposal contractor. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

7. Handling and storage

Handling	: <p>Put on appropriate personal protective equipment (see section 8 of SDS). 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.</p>
Storage	: <p>Store in accordance with local regulations. 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. 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.</p>

8. Exposure controls/personal protection

Occupational exposure limits

No exposure standard allocated.

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	: <p>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.</p>
Engineering measures	: <p>No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.</p>
Hygiene measures	: <p>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.</p>

Personal protection

Respiratory	: <p>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.</p>
Hands	: <p>Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a</p>

Eyes : 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 or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin : 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.

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.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid

Color : Colorless/colourless to white

Odor : Little or none

Odor threshold : Not available

pH : 7.6 - 8.4

Melting point/freezing point : -10 °C

Initial boiling point and boiling range : 102 °C

Flash point : Not applicable.

Evaporation rate : 0.3 ((n-Butyl acetate=1))

Flammability (solid, gas) : Not available

Burning time : Not available

Burning rate : Not available

Upper/lower flammability or explosive limits : **Lower:** Not applicable.
Upper: Not applicable.

Vapor pressure : 22 mm Hg @ 25 °C

Vapor density : Not available

Relative density : 1.2000 - 1.3400 @ 25 °C

Solubility(ies) : Not available

Solubility in water : See storage section

Partition coefficient: n-octanol/water : Not available

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available
Viscosity : **Dynamic-:** 55 - 180 cPs @ 25 °C (Brookfield)
Kinematic-: Not available

9.2 Other information

No additional information.

10. Stability and reactivity

Reactivity : Stable under normal conditions.
Chemical stability : The product is stable.
Conditions to avoid : No specific data.
Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials
acids
No specific data.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Conclusion/Summary : Not available

Chronic toxicity

Conclusion/Summary : Not available

Irritation/Corrosion

Conclusion/Summary

Skin : Not available
Eyes : Not available
Respiratory : Not available

Sensitization

Conclusion/Summary

Skin : Not available
Respiratory : Not available

Carcinogenicity

Conclusion/Summary : Not available

Mutagenicity

Conclusion/Summary : Not available

Teratogenicity

Conclusion/Summary : Not available

Reproductive toxicity

Conclusion/Summary : Not available

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Conclusion/Summary : Not available

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Casco-Resin(TM) FUL01BC-T		-		
Remarks:	Biodegradation is expected to be very slow.			

Conclusion/Summary : Not available

Partition coefficient: n-octanol/water : Not available

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

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

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)
CFR		Non-regulated		
TDG		Non-regulated		
IMO/IMDG		Non-regulated		
IATA (Cargo)		Non-regulated		

*PG : Packing group

15.Regulatory information**United States**

HCS Classification	:	Not classified
U.S. Federal regulations	:	<p>United States - TSCA 12(b) - Chemical export notification: None required.</p> <p>United States - TSCA 5(a)2 - Final significant new use rules: Not listed</p> <p>United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed</p> <p>United States - TSCA 5(e) - Substances consent order: Not listed</p> <p>SARA 302 Extremely Hazardous Substances: None required.</p> <p>SARA 302/304/311/312 hazardous chemicals: None required.</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Does not meet any hazard category</p>
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Not listed

California Prop. 65:

WARNING: This product contains less than 0.1% of 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.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Methanol	No.	Yes.	No.	No.
Formaldehyde	Yes.	No.	40 µg/day	No.
Carbonic acid, dilithium salt	No.	Yes.	No.	No.

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

Canada

WHMIS (Canada) : Class D-2A: Material causing other toxic effects (Very toxic).

Canadian lists

Canadian NPRI : None required.

CEPA Toxic substances : None required.

Canada inventory : All components are listed or exempted.

International regulations

International lists : **Australia inventory (AICS)**: All components are listed or exempted.
Japan inventory: Not determined.
China inventory (IECSC): All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan inventory (CSNN): Not determined.
Malaysia Inventory (EHS Register): Not determined.

16. Other information

Label requirements : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

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

Health	-	1
Flammability		0
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.

Other special considerations : Part of the CASCO® Brand of Adhesives and Resins from Momentive Specialty Chemicals

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Version : 3.0

Prepared by : RECTORC

Notice to reader

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Material Safety Data Sheet

FOR INDUSTRIAL USE ONLY

Casco-Resin UF C51BC-T

1. Product and company identification

Product name	Casco-Resin UF C51BC-T
MSDS Number	000000103749
Product Type	Urea Formaldehyde Resin
Product use	Wood Adhesives, Composites, Laminates or Related Board Products
Manufacturer, Importer, Supplier	Momentive Specialty Chemicals Inc. 180 East Broad Street Columbus Ohio 43215 4information@momentive.com
Print date	16-JAN-2014
Telephone	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 For additional health and safety or regulatory information, call 1 888 443 9466 .

The MSDS 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 Momentive representative.

Part of the CASCO® Brand of Adhesives and Resins from Momentive Specialty Chemicals

2. Hazards identification

Form	Liquid
Odor	Little or none
OSHA/HCS status	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Emergency overview	NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
Potential acute health effects	
Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion	Not expected to be harmful under normal conditions of use.
Skin	May cause irritation on prolonged or repeated contact.
Eyes	May cause eye irritation.

Potential chronic health effects

Chronic effects	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
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.
Target organs	Review Section 2 and 11 for any additional assessments.

Note: Residual formaldehyde gas may be released from this product during processing. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. OSHA has listed formaldehyde as a potential human carcinogen. See the OSHA formaldehyde standard 29 CFR 1910.1048 for further details. The International Agency for Research on Cancer (IARC) has classified formaldehyde as carcinogenic to humans.

Over-exposure signs/symptoms

Inhalation	No specific data.
Ingestion	No specific data.
Skin	No specific data.
Eyes	No specific data.
Medical conditions aggravated by over-exposure	None known.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/Information on ingredients

There are no 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.

4. First aid measures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	Move exposed person to fresh air. Keep person warm and at rest. If not

breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. 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. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
Protection of first aid personnel	No action shall be taken involving any personal risk or without suitable training.
Notes to physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Flammability of the product	In a fire or if heated, a pressure increase will occur and the container may burst.
<u>Extinguishing media</u>	
Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	None known.
Special exposure hazards	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.
Hazardous combustion products	Decomposition products may include the following materials: carbon oxides, nitrogen oxides, halogenated compounds, metal oxide/oxides,
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.

6. Accidental release measures

Personal precautions	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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
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).
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). 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.

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling

Put on appropriate personal protective equipment (see section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. 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. 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. Solubility in water of urea resins can vary from infinite to insoluble depending on manufacturing procedure and age. Warm water helps in washing up resins with limited solubility.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

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.

Engineering measures

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to

	the workstation location.
Respiratory	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.
Hands	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.
Eyes	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 or dusts.
Skin	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.
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.

9. Physical and chemical properties

Form	Liquid
Flash point	Not applicable.
Auto-ignition temperature	Not applicable.
Flammable limits	
Lower:	Not applicable.
Upper:	Not applicable.
Color	Clear, colorless/colourless
Odor	Little or none
pH	7.6 - 8.4 @ 25 °C(77 °F)
Boiling point	Approx. 102 °C(216 °F)
Relative density	1.290 - 1.310
Vapor pressure	Approx. 22 mm Hg @ 25 °C(77 °F)
Odor threshold	Not available
Viscosity	Dynamic- 150 - 600 cPs Brookfield
Solubility	Soluble
Partition coefficient:	Not available
n-octanol/water	
Evaporation rate	Approx. 0.3 (n-Butyl acetate=1)
Vapor density	Not available
Typical % solids	62.00 % (m)

10. Stability and reactivity

Stability	Hazardous polymerization may occur under certain conditions of storage or use.
Conditions to avoid	Strong oxidizer,
Materials to avoid	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.

11. Toxicological information

There are no 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.

12. Ecological information

Environmental effects

No known significant effects or critical hazards.

Other adverse effects

No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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)
CFR		Non-regulated		
TDG		Non-regulated		
IMO/IMDG		Non-regulated		
IATA (Cargo)		Non-regulated		

*PG : Packing group

15. Regulatory information

US regulations

HCS Classification Not regulated

U.S. Federal regulations **SARA 311/312 Classification** reactive

SARA 313 - Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

None required.

SARA 302 Extremely Hazardous Substances None required.

State regulations

Massachusetts RTK Substances The following components are listed: Sodium Chloride,

New Jersey RTK Hazardous Substances None required.

Pennsylvania RTK Hazardous Substances The following components are listed: Sodium Chloride,

California Prop. 65: WARNING: This product contains less than 0.1% of 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. Formaldehyde - 50-00-0, Lithium Carbonate - 554-13-2,

Canada
WHMIS (Canada) Not controlled under WHMIS (Canada).

Canadian lists **Canadian NPRI:** None required.

International regulations

Chemical inventories

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

16. Other information

Hazardous Material Information System III (U.S.A.) Health : 1
Flammability: 0
Physical hazards : 0
Chronic :

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.

Prepared by Product Safety & Regulatory Compliance Group, (614)225-4778
Date of issue 20-NOV-2010
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