Example COSHH Risk Assessment for Forestry Operations

<table>
<thead>
<tr>
<th>Job or Process:</th>
<th>Assessment Reference No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site or Contract:</td>
<td>Location:</td>
</tr>
<tr>
<td>Common Name:</td>
<td>Chemical Name:</td>
</tr>
<tr>
<td>Synonym:</td>
<td>Other:</td>
</tr>
</tbody>
</table>

### Hazard Classification:
- Check all that apply:
  - Toxic [ ]
  - Harmful [ ]
  - Corrosive [ ]
  - Irritant [ ]
  - Flammable [ ]
  - Oxidising [ ]
  - Explosive [ ]
  - Env’rment [ ]
  - Comp. Gas [ ]

### Hazardous when:
- Contact with skin [ ]
- Contact with eyes [ ]
- Breathed in [ ]
- Swallowed [ ]
- Other: [ ]

---

The Material Safety Data Sheet (MSDS) must be attached to this risk assessment.

Refer to the MSDS for hazardous chemicals in the substance, hazard classification, exposure limits, dealing with spillage, emergency procedures, first aid, fire etc.

**Eye protection?** Y/N (Specify):

**Overalls/clothing?** Y/N (Specify):

**Gloves?** Y/N (Specify):

**Mask/respirator?** Y/N (Specify):

**Other?** Y/N (Specify):

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**Storage (Where and how):**

Items required in First Aid Kit (Specify):

**Spill Kits (Locations):**

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<table>
<thead>
<tr>
<th>Risk Assessment (substance/process)</th>
<th>Controls to be used</th>
<th>Safe Method of Work</th>
</tr>
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<tbody>
<tr>
<td>Task:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who is at risk?</td>
<td></td>
<td></td>
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**Assessed by:**

**Date:**

---

**OPERATOR/USER/HANDLER**

I confirm I have read the above risk assessment and know the location of the written risk assessment and appropriate MSDS.

**Date**

**Name**

**Signature**

---

**FIRST AIDER**

I confirm I have read the above risk assessment and know the location of the written risk assessment and appropriate MSDS. I am aware of the appropriate first aid for contact with the substance.

**Date**

**Name**

**Signature**

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Page 1 of 1
### Example COSHH Risk Assessment for Forestry Operations

**Job or Process:** Application of urea to control butt rot fungus using hand held applicator  
**Assessment Reference No.:** TD 02

**Site or Contract:** Larchwood Forest  
**Location:** Rushberry PA14 6TB

**Common Name:** Urea  
**Chemical Name:** Carbamyl diAMide  
**Synonym:** Carbamide  
**Other:**

**Hazard Classification:**
- Toxic [ ]
- Harmful [ ]
- Corrosive [ ]
- Irritant [ ]
- Flammable [ ]
- Oxidising [ ]
- Explosive [ ]
- Env’tment [ ]
- Comp. Gas [ ]

**Hazardous when:**
- Contact with skin [X]
- Contact with eyes [X]
- Breathed in [ ]
- Swallowed [ ]
- Other:

---

The Material Safety Data Sheet (MSDS) must be attached to this risk assessment. Refer to the MSDS for hazardous chemicals in the substance, hazard classification, exposure limits, dealing with spillage, emergency procedures, first aid, fire etc.

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**Eye protection?** Y/N (Specify): ARCO EGG 210  
**Direct vent google (323100)**

**Overalls/clothing?** Y/N (Specify):  
**General Workwear**

**Gloves?** Y/N (Specify): ARCO Double  
**Dipped 27CH Green PVC Gauntlet (135200)**

**Mask/respirator?** Y/N (Specify):  
**Other?**

**Storage (Where and how):**
- In Safesite Store

**Items required in First Aid Kit (Specify):**
- Eye Wash  
- Nitrile Gauntlet

**Spill Kits (Locations):**
- In Safesite Store & in Harvesting Machines

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### Risk Assessment (substance/process)

**Task:**
- **At sawmill—decant from IBC to 25L drum**
  - **Who is at risk:** Resin decanting  
  - **How:** Eye splash & Contact with Skin

**Controls to be used:** IBC stored in bunded area

**Safe Method of Work:**
- **Avoid direct contact with eyes & skin by wearing PPE specified above**
- **No Smoking or Drinking during Exposure**
- **Clean up any spillage promptly using spill kit**
- **Wash Hands Thoroughly after handling**
- **Report any adverse incidents to FWML**

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**Task:**
- **Transport 25L drum from sawmill to site in boot of 4x4**
  - **Who is at risk:** Driver  
  - **How:** Spillage containment & clean up if eye splash & contact with Skin

**Controls to be used:** 25L drum secured by ratchet straps in boot  
**Spillage Kit & First Aid Kit in Vehicle**

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**Task:**
- **Decant from 25L drum into knapsack sprayer**
  - **Who is at risk:** Resin decanting  
  - **How:** Eye splash & Contact with Skin

**Controls to be used:** Decant inside Safesite

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**Assessed by:**
- **Tom Davidson & Henry Brown**  
**Date:** 01/03/16

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### OPERATOR/USER/HANDLER

I confirm I have read the above risk assessment and know the location of the written risk assessment and appropriate MSDS.

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</tr>
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<tr>
<td>01/03/16</td>
<td>Henry Brown</td>
<td>H.Brown</td>
<td>01/03/16</td>
<td>Henry Brown</td>
<td>H.Brown</td>
</tr>
</tbody>
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### FIRST AIDER

I confirm I have read the above risk assessment and know the location of the written risk assessment and appropriate MSDS. I am aware of the appropriate first aid for contact with the substance.

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Page 1 of 1
Material Safety Data Sheet
Urea MSDS

Section 1: Chemical Product and Company Identification

Product Name: Urea
Catalog Codes: SLU1063, SLU1132, SLU1093, SLU1182
CAS#: 57-13-6
RTECS: YR6250000
TSCA: TSCA 8(b) inventory: Urea
CH#: Not available.
Synonym: Carbamide
Chemical Name: carbonyldiamide
Chemical Formula: (NH2)2CO or CH4N2O

Contact Information:
Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396
US Sales: 1-800-901-7247
International Sales: 1-281-441-4400
Order Online: Sciencelab.com
CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300
International CHEMTREC, call: 1-703-527-3887
For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Urea: ORAL (LD50): Acute: 8471 mg/kg [Rat]. 11000 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, cardiovascular system. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:**
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or wristband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

### Section 5: Fire and Explosion Data

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not available.

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

**Fire Hazards in Presence of Various Substances:** Slightly flammable to flammable in presence of heat.

**Explosion Hazards in Presence of Various Substances:**
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

### Section 6: Accidental Release Measures

**Small Spill:**
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

### Section 7: Handling and Storage

**Precautions:**
Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice
immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystals solid.)

Odor:
Almost odorless; May gradually develop slight odor of ammonia, especially in presence of moisture.

Taste: Cooling. Saline

Molecular Weight: 60.06 g/mole

Color: White.

pH (1% soin/water): Not available.

Boiling Point: Not available.

Melting Point: 132.7°C (270.9°F)

Critical Temperature: Not available.

Specific Gravity: 1.323 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: 2.07 (Air = 1)

Volatile: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: The product is more soluble in water; log(oil/water) = -2.1

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility: Easily soluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.
Instability Temperature: Not available.

Conditions of Instability: Excess heat, excess dust generation, incompatible materials.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not available.

Special Remarks on Reactivity:
Hygroscopic. Absorbs moisture from air. Reacts violently with Gallium Perchlorate. Reacts with chlorine to form chloramines. It also reacts with the following: sodium hypochlorite, sodium nitrate, calcium hypochlorite, NaNO2, P2Cl5, nitrosyl perchlorate, strong oxidizing agents (permanganate, nitrate, dichromate, chloride)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation, Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 8471 mg/kg [Rat].

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. May cause damage to the following organs: blood, cardiovascular system.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
May cause adverse reproductive effects (ototoxicity) and genetic material (mutagenicity) based on animal studies. Passes through the placental barrier in human and is present in breast milk.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation. Inhalation: Causes irritation of the respiratory tract, nose, and throat, coughing and sneezing. May also affect blood, metabolism and urinary system. Ingestion: Causes digestive (gastrointestinal) tract irritation with nausea, vomiting, and diarrhea. May affect behavior (altered sleep time, change in motor activity), cardiovascular system (heart rate), and the brain. May also affect the blood and may cause tumorigenic effects. Chronic Potential Health Effects: Prolonged exposure may cause adverse reproductive effects. Laboratory experiments on animals have resulted in mutagenic effects. Prolonged exposure or exposure at high concentrations may cause eye damage.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).
**Identification:** Not applicable.
**Special Provisions for Transport:** Not applicable.

Section 15: Other Regulatory Information

**Federal and State Regulations:**
Minnesota: Urea TSCA 8(b) inventory: Urea

**Other Regulations:**

**Other Classifications:**
WHMIS (Canada): Not controlled under WHMIS (Canada).

**DSCL (EEC):**
R36/38- Irritating to eyes and skin. R40- Possible risks of irreversible effects. S24/25- Avoid contact with skin and eyes.

**HMIS (U.S.A.):**
- Health Hazard: 2
- Fire Hazard: 1
- Reactivity: 0
- Personal Protection: E

**National Fire Protection Association (U.S.A.):**
- Health: 2
- Flammability: 1
- Reactivity: 0
- Specific hazard:

**Protective Equipment:**
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/10/2005 08:32 PM

**Last Updated:** 05/21/2013 12:00 PM

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