# Material Safety Data Sheet (MSDS)

*Purpose:* The Material Safety Data Sheet provides essential information on the potential hazards (health, fire, reactivity, and environmental) and how to work safely with chemical products. It is an important component of product stewardship and workplace safety.

## 1. Product and Company Information

**Product Name:** {productName}

**Product Code:** {productCode}

**Manufacturer:** {manufacturer}

**Address:** {manufacturerAddress}

**Emergency Contact Number:** {emergencyContact}

## 2. Composition/Information on Ingredients

|  |  |  |
| --- | --- | --- |
| **Component Name** | **CAS Number** | **Concentration (%)** |
| {#ingredients}{componentName} | {casNumber} | {concentration}{/ingredients} |

## 3. Hazards Identification

**Signal Word:** {signalWord}

**Hazard Statements:**

{#hazardStatements}

* {statement}

{/hazardStatements}

**Precautionary Statements:**

{#precautionaryStatements}

* {statement}

{/precautionaryStatements}

## 4. First Aid Measures

{firstAidMeasures}

## 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** {extinguishingMedia}

**Special Protective Equipment for Firefighters:** {fireProtectiveEquipment}

## 6. Accidental Release Measures

{spillCleanupProcedures}

## 7. Handling and Storage

**Handling Precautions:** {handlingPrecautions}

**Storage Requirements:** {storageRequirements}

## 8. Exposure Controls/Personal Protection

|  |  |  |
| --- | --- | --- |
| **Chemical** | **ACGIH TLV** | **OSHA PEL** |
| {#exposureLimits}{chemical} | {acgihTlv} | {oshaPel}{/exposureLimits} |

**Engineering Controls:** {engineeringControls}

**Personal Protective Equipment:**

{#ppe}

* {equipment}

{/ppe}

## 9. Physical and Chemical Properties

**Appearance:** {appearance}

**Odor:** {odor}

**Boiling Point:** {boilingPoint}

**Melting Point:** {meltingPoint}

**Flash Point:** {flashPoint}

**Specific Gravity:** {specificGravity}

## 10. Stability and Reactivity

**Chemical Stability:** {chemicalStability}

**Conditions to Avoid:** {conditionsToAvoid}

**Incompatible Materials:** {incompatibleMaterials}

**Hazardous Decomposition Products:** {hazardousDecomposition}

## 11. Toxicological Information

{toxicologicalEffects}

## 12. Ecological Information

{ecologicalData}

## 13. Disposal Considerations

{disposalMethods}

## 14. Transport Information

**UN Number:** {unNumber}

**Proper Shipping Name:** {shippingName}

**Transport Hazard Class:** {transportClass}

**Packing Group:** {packingGroup}

## 15. Regulatory Information

{regulatoryInfo}

## 16. Other Information

**Date of Preparation:** {preparationDate}

**Revision Date:** {revisionDate}

{additionalNotes}