Paragon IH

Task Exposure Assessment (TEA)

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| **User Information** | | | |
| **TEA Number:** |  | **Date:** |  |
| **Company Name:** |  | | |
| **Department Name:** |  | **Section Name:** |  |
| **Location:** |  | **Building Name:** |  |

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| **Chemical Table** | | | |
| **Chemical Name (SDS):** |  | | |
| **Chemical Manufacturer:** |  | **Chemical/Manf. ID:** |  |
| **Product Category:** |  | **Molecular Weight (g/mol):** |  |
| **Boiling Point (°F):** |  | **Flash Point (°F):** |  |
| **Freezing Point (°F):** |  | **Melting Point (°F):** |  |
| **Solubility (%):** |  | **Vapor Pressure (mm/Hg):** |  |
| **Evaporation Rate:** |  | **pH:** |  |
| **Upper Flammability (%)** |  | **Lower Flammability (%):** |  |
| **Vapor Density:** |  | **Specific Gravity:** |  |
| **Health Hazard:** |  | | |

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| **Constituents Table** | | | | | | | |
| **CAS#** | **Constituent Name** | **Physical State** | **% of chemical** | **Exposure Limits** | | | |
| 71-43-2 | Benzene | Vapor | 20 | **ACGIH TLV** | **ACGIH STEL** | **ACGIH CL** | **BEI** |
| 0.5 ppm | 1.0 ppm | NA |  |
| **OSHA PEL** | **OSHA STEL** | **OSHA CL** | **OSHA EL** |
|  |  |  |  |
| **NIOSH REL** | **NIOSH IDLH** | **Odor Threshold** | **OSHA Standard** |
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| **Health Hazard** | **OSHA Air Sampling Method** | **NIOSH Air Sampling Method** | **Bulk Sampling Method** |
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| **Work Conditions Table** | | | | |
| **Work Site** | **No. of Workers** | **Space Volume** | **Room Ventilation In** | **Room Ventilation Out** |
| Confined Space | 2 | 1000 ft3 | 1000 cfm | 200 cfm |
| **Temperature** | **Humidity** | **Wind Direction** | **Wind Speed** | **Atm. Pressure** |
| 70 °F | 50 % | North | 5 mph | 760 mmHg |
| **Work Position** | **Employee Position** | **Distance from Breathing Zone** | **Frequency of Exposure** | **Duration of Exposure Per Day** |
| All Position (Circumferential) | All Position (Circumferential) | < 0.5 ft | Daily | 4 to 8 hours |

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| **Task Table** |
| **Material Fabrication** |
| Shield Metal Arc Welding   * Generation Rate (rods/hour) <Enter> * Type of Metal Being Welded(Will Enter More at a Later Time) <Enter> * Thickness of the material (inches) <Enter> * Width of weld area (inches) <Enter> * Length of weld area (inches) <Enter> * Pipe Diameter (inches) <Enter> * Number of Passes <Enter> * Welding Machine Amperage <Enter> * Other <Enter Comments> |

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| **Chemical Risk Ranking** | | | | | | |
| **Chemical Name** | **Chemical/Manf. ID** | **Flash Point** | **Vapor Pressure** | **Evaporation Rate** | **pH** | **Health Hazard** |
|  |  | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 |

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| **Constituent Risk Ranking** | | | | | | | | |
| **Constituent Name** | **CAS #** | **Flash Point** | **Vapor Pressure** | **Evaporation Rate** | **pH** | **Gas and Vapor** | **Mist/**  **Particulate** | **Health Hazard** |
|  |  | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 |
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| **Task Risk Ranking** | | | | |
| **Work Site** | **Space Volume** | **Frequency of Exposure** | **Duration** | **Task Type** |
| Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 | Need a rating scale from green, amber to red for 1 to 5 |

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| **Local Exhaust Ventilation** | | | | | | | | | |
| **Parameters** | **Slot Hood Without Flange** | **Slot Hood With Flange** | **Plain Opening Hood** | **Flanged Opening Hood** | | **Plain Multiple Slot Hood** | **Flange Multiple Slot Hood** | **Canopy Hood** | **Booth** |
| Size |  |  |  |  | |  |  |  |  |
| Hood Capture Velocity |  |  |  |  | |  |  |  |  |
| Hood Flow Rate |  |  |  |  | |  |  |  |  |
| Duct Velocity |  |  |  |  | |  |  |  |  |
| **General Dilution** | | | | | | | | | |
| **Recommended Air Changes per Hour** | | | | | **Recommendation** | | | | |
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| **Protective Gloves** | | | | | | | | | | | | |
| **Constituent** | **CAS #** | **Butyl Rubber** | **Natural Rubber** | **Neoprene Rubber** | **Nitrile Rubber** | **Polyethylene (PE)** | **Polyvinylalcohol (PVAL)** | **Polyvinylchloride (PVC)** | **Viton ®** | **Viton ®/Butyl Rubber** | **Barrier ® (PE/PA/PE** | **Silver Shield/4H® (PE/EVAL/PE** |
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| **Chosen Glove** | |  |  |  |  |  |  |  |  |  |  |  |

Notes: Recommendations are NOT valid for very thin chemicals gloves (0.3 mm or less). This information is based on technical data that the manufacturer believes to be reliable. It is subject to revision as additional knowledge and experience are acquired. There can be no guarantee of the results as applications can be different and no liability or obligation can be assumed. A > sign indicates greater than. A blank cell indicates the fabric has not been tested.

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| **Protective Clothing** | | | | | | | | | | | | | | | | | |
| **Constituent** | **CAS #** | **Trellchem®HPS** | **Trellchem®VPS** | **Tychem® QC** | **Tychem® SL (Saranex®)** | **Tychem® TF** | **Tychem® TP** | **Tychem® C3** | **Tychem® RC** | **Tychem® TR** | **Tychem® RF** | **Tychem® CPF3** | **Tychem® F** | **Tychem® BR/LV** | **Tychem® Responder** | **Tychem® TK** | **Tychem® TF** |
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| **Chosen Clothing** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note: This information is based on technical data that the manufacturer believes to be reliable. It is subject to revision as additional knowledge and experience are acquired. There can be no guarantee of the results as applications can be different and no liability or obligation can be assumed. A > sign indicates greater than. A blank cell indicates the fabric has not been tested.

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| **Respiratory Protection** | | | | | | | | | | | |
| **Constituent** | **CAS#** | **Air Purifying Respirator** | | | **Powered Air Purifying Respirator** | | | **Supplied Air** | | | **SCBA** |
| **Quarter Dust Mask** | **Half Face** | **Full Face** | **Half Face** | **Full Face** | **Helmet/Hood** | **Half Face Continuous Flow/Pressure Demand** | **Full Face Continuous Flow/Pressure Demand** | **Helmet/**  **Hood Continuous Flow** |
| Benzene |  | NA | 5 ppm | 25 ppm | 5 ppm | 25 ppm | 50 ppm | 100 ppm | 500 ppm | 1000 ppm | 10,000 ppm |
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| **Chosen Respirator** | |  |  |  |  |  |  |  |  |  |  |

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| **Direct Reading Exposure Monitoring** | | | | | | | | | | |
| **Constituent** | **CAS #** | **Ionization**  **Potential** | **PID CF** | | | **LFL** | **UFL** | **LEL CF** | **Colorimetric Tube/Chip** | **Other** |
| **9.8** | **10.6** | **11.7** |
| Benzene |  |  |  |  |  |  |  |  |  |  |
| Toluene |  |  |  |  |  |  |  |  |  |  |
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| **Exposure Data** | | | | |
| **Constituent** | **CAS #** | **Modeled**  **Exposure Results** | **Predictive**  **Exposure Results** | **Objective Data Exposure Results** |
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