MATERIAL SAFETY DATA SHEET

PRODUCT: PARTWELL ULTRA KRAZI GLUE ACTIVATOR
REF: AD0011
DATE OF ISSUE:
SUPPLIER: Partwell Cutting Technology Specialists
Bridge Works, Stanley Street, Blackburn, Lancs. BB1 3BW
Tel: 01254 671875 Fax: 01254 674823

COMPOSITION

<table>
<thead>
<tr>
<th>Substance</th>
<th>% Weight</th>
<th>CAS. No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alipatic hydrocarbons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containing n-hexane)</td>
<td>F: R11; Xn: R65</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(F: R11 R62 Xn: R65, 48/20 Xi: R38 R67 N:R51/53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;95</td>
<td>64742-49-0</td>
<td>265-151-9</td>
</tr>
<tr>
<td></td>
<td>(&lt;3)</td>
<td>(110-54-3)</td>
<td>(203-777-6)</td>
</tr>
<tr>
<td>Aromatic armine</td>
<td>T: R23/24/25 R33 R52/52</td>
<td>&lt;1</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

HAZARD IDENTIFICATION

HIGHLY FLAMMABLE
HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED
Keep out of reach of children
Keep container in well ventilated place
Keep away from sources of ignition – NO SMOKIMG
Do not breathe vapor/spray
Avoid contact with skin
If swallowed, do not induce vomiting:- seek medical advice immediately and show this container or label
If the activator is sprayed:- use only in well ventilated areas

FIRST AID MEASURES

INHALATION Remove to fresh air and rest. If not breathing, give artificial respiration. If recovery is not rapid call for prompt medical attention
SKIN AND EYE CONTACT
SKIN: Remove contaminated clothing wash skin with soap/cleanser and rise with plenty of water. If irritation persists obtain medical attention
EYE: Irrigate with water for at least 15 minutes. Take care not to wash chemical from one eye to the other. If there is discomfort get prompt medical attention
INGESTION: Do not induce vomiting. Beware of aspiration if vomiting occurs. Give nothing by mouth. Seek medical attention immediately

FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHINGS: Alcohol resistant foam Dry powder Carbon dioxide
UNSUITABLE EXTINGUISHERS: Direct water jets
HAZARDOUS DECOMPOSITION: Possible risk of explosion. Toxic fumes are produced in fire – CO and CO2
SPECIAL PROCEDURES: Do not breathe decomposition products and fumes
Use approved self-contained breathing apparatus
Wear fire retardant clothing
Use water spray to cool containers
Prevent runoff from fire control and entering waterways
Large fires should only be dealt with by trained personnel

**ACCIDENTAL RELEASE MEASURES**

**EXPOSURE CONTROLS:** Remove all sources of ignition. Ventilate area.
Evacuate all personnel. Use barriers to prevent unauthorized entry into contaminated areas.
Do not allow spills or water runoff to enter drains and watercourses.

**PERSONNEL PRECAUTIONS:** Wear suitable respiratory protection for large spillages and in confined spaces, e.g. EN405 FFA2 or EN140 A2.
Wear rubber gloves
Wear chemical restrictant overalls and boots
Use eye protection such as goggles to BS EN 166 Chemical grade

**DISPOSAL CONSIDERATIONS:** Absorb inert material such as sand or absorbent granules. Scoop up and place in accordance with local regulations.

**HANDLING AND STORAGE**

**HANDLING:** Avoid skin and eye contact. Do not breathe vapor – ensure adequate ventilation and/or use local extraction.
Wear gloves, eye protection. Wear suitable protective clothing if handling large quantities.
Ensure water for eye washing is available. Wash hands after use.
Keep away from sources of ignition. Beware of distant ignition. Beware of static discharges.

**STORAGE:** Store in tightly closed labeled containers. Store away from ignition sources. Store in a cool, dry, well-ventilated place out of direct sunlight.

**EXPOSURE CONTROLS/PERSONAL PROTECTION**

**OCCUPATIONAL EXPOSURE LIMIT:** OES for aliphatic hydrocarbons is 250ppm (1000mg/m³) 8hr TWA (UK solvent industry association)
Wear rubber gloves. After skin contact wash with plenty of water.
Wear suitable eye protection such as BS EN 166
Use in well ventilated areas. Use mechanical ventilation if airborne level is above OES. If excessive inhalation in a poorly ventilated area is likely then use a respirator with filter type A.

**PHYSICAL & CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, almost colourless to pale yellow liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Light, paraffinic</td>
</tr>
<tr>
<td>pH</td>
<td>n/e</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>60-90°C</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>n/e</td>
</tr>
<tr>
<td>Flammability</td>
<td>highly flammable</td>
</tr>
<tr>
<td>Auto flammability</td>
<td>&gt;400°C</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>LEL 1.0%; UEL 7.3%</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>none</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>~19kPa at 20°C</td>
</tr>
</tbody>
</table>
Relative density 0.70
Solubility in water insoluble. Soluble in most organic compounds
Vapour density n/e
Viscosity n/e
n-Octanol/water partition coefficient (log POW) ~4
EVAPORATION RATE (nBuAc = 1) 7.6 (n/e = not established)

STABILITY & REACTIVITY
Stable at normal temperatures
Conditions to avoid: sources of ignition, high temperature, direct sunlight
Materials to avoid: strong oxidizing agents

TOXICOLOGICAL INFORMATION
Oral expected to be low toxicity LD50 >2,000mg/kg
Inhalation low toxicity, LC50>5g/l
Skin expected to be low toxicity LD50 >2,000mg/kg
Acute effects ingestion – Nausea, narcosis.
Inhalation – mild irritation of nose and throat. Nausea. Narcosis at high concentration
Skin – mild irritation. Products can be absorbed through the skin, which can lead to prolonged narcosis. Prolonged or repeated contact can cause skin drying or cracking
Eyes – not expected to cause irritation
Repeated over exposure may cause damage to CNS

ECOLOGICAL INFORMATION
Ecotoxicity Fish – slightly toxic, 10<LC/EC/IC50 ≤100mg/l
Invertebrates – toxic, 1< LC/EC/IC50 ≤10mg/l
Algae – slightly toxic, 10 <LC/EC/IC50 /EC/IC50 ≤10mg/l
Bioaccumulative potential has the potential to be bioaccumulate
Persistence readily biodegradable. Oxidizes rapidly by photo-chemical reactions in air.
Integrated environmental half-life expected to be <10 days
Mobility insoluble in water – floats on surface. Product is volatile and so will partition to the air phase.

DISPOSAL CONSIDERATIONS
Do not discharge into drains or watercourses
Beware of vapors remaining in ‘empty’ containers that may ignite
Dispose through properly licensed contractors under nation and local legislation
Dispose of in accordance with the Special Waste Regulations 1996

TRANSPORT INFORMATION
UN No. 1268
IMO Class 3 Packing Group II
Iata/icao Class 3 Packing Group II
ADR/RID Class 3 Item 3°b
HazChem Code 3YE/33 Transport Name (UK Road) Petroleum Distillates

REGULATORY INFORMATION
RISK & SAFETY:

R11  HIGHLY FLAMMABLE
R65  HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED
S2   keep out of reach of children
S9   keep in a well ventilated area
S16  keep away from sources of ignition
S23  do not breathe vapor/spray
S24  avoid contact with skin
S62  if swallowed, do not induce vomiting:- seek medical advice immediately and show this container or label

(If the applicator is sprayed:-   S51   use only in well-ventilated areas)

OTHER REGULATIONS

Health & Safety at Work etc Act 1974
Control of Substance Hazardous to Health Regulations 1994
Environmental Protection Act 1990
Special Waste Regulations 1996

This safety data sheet is complied with reference to The Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP2), which implement the Council Directive 61/548/EEC (The Dangerous Substances Directive) and 88/379/EEC (The Dangerous Preparations Directive), and subsequent amending regulations, up to and including the Chemicals (Hazard Information and Packaging for Supply) Regulations 2000 (CHIP2000), which implements the 26th ATP of 67/548/EEC.