HIGH AROMATIC WHITE SPIRIT
LOCAL SALES SPECIFICATION
AND SAFETY DATA SHEET

DESCRIPTION & GENERAL USE

HIGH AROMATIC WHITE SPIRIT is an aromatic Hydrocarbon blend. Used as a solvent in enamels, paints, degreasers, polishes, hand cleaners, dry cleaning and as a wash-up solvent in litho and silkscreen printing.

PACKAGING

H A WHITE SPIRIT is available in 200 litre steel drums

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>UNITS</th>
<th>LIMITS</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Aromatics</td>
<td>Vol %</td>
<td>13 – 17 max</td>
<td>GC</td>
</tr>
<tr>
<td>Density</td>
<td>Kg/l</td>
<td>0.752</td>
<td>ASTM D1298</td>
</tr>
<tr>
<td>Flash Point</td>
<td>°C</td>
<td>18</td>
<td>IP 170</td>
</tr>
<tr>
<td>Water Content</td>
<td>Mass %</td>
<td>0.003</td>
<td>ASTM D1364</td>
</tr>
<tr>
<td>Distillation Range</td>
<td>°C</td>
<td></td>
<td>ASTM D1078</td>
</tr>
<tr>
<td>Initial Boiling Point 5%</td>
<td>°C</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td>137</td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td></td>
<td>161</td>
<td></td>
</tr>
<tr>
<td>90%</td>
<td></td>
<td>191</td>
<td></td>
</tr>
<tr>
<td>90%</td>
<td></td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>Final Boiling Point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acidity as CH₃COOH</td>
<td>Mg/Kg</td>
<td>3</td>
<td>ASTM D1613</td>
</tr>
<tr>
<td>Colour</td>
<td>Saybolt</td>
<td>+ 28</td>
<td>ASTM D156</td>
</tr>
<tr>
<td>Residue on Evaporation</td>
<td>Mg/100ml</td>
<td>0.3</td>
<td>ASTM D1353</td>
</tr>
<tr>
<td>Evaporation Rate relative at 90%</td>
<td>n-BuAc = 1</td>
<td>0.188</td>
<td>ASTM D3539</td>
</tr>
<tr>
<td>100%</td>
<td></td>
<td>0.180</td>
<td></td>
</tr>
</tbody>
</table>

Director: B.J. Rodd
HEALTH HAZARD INFORMATION

<table>
<thead>
<tr>
<th>Causes</th>
<th>Symptoms</th>
<th>Emergency and first aid procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation (Breathing)</strong></td>
<td>Causes dizziness, headaches, difficulty in breathing or/and loss of consciousness with a very high vapour concentration.</td>
<td>Keep the person covered and contact a Physician. If breathing has stopped, give artificial respiration. Administer oxygen if necessary.</td>
</tr>
<tr>
<td><strong>Skin Contact / Absorption</strong></td>
<td>Causes irritation to the skin, dissolves fat on the skin and will cause dermatitis after a prolonged period of time. Harmful if absorbed through skin over a long period.</td>
<td>Remove contaminated clothing and shoes. Wash skin gently and thoroughly with soap and water.</td>
</tr>
<tr>
<td><strong>Eye Contact</strong></td>
<td>Irritating to the eyes and causes burning.</td>
<td>Hold eyelids open and flush with plenty of running water for at least 15 minutes. Consult a physician.</td>
</tr>
<tr>
<td><strong>Ingestion (Swallow)</strong></td>
<td>Causes nausea, vomiting and stomach cramps.</td>
<td>Do not induce vomiting. If patient is conscious, give milk or activated carbon. Consult a Physician.</td>
</tr>
<tr>
<td><strong>Acute over-exposure</strong></td>
<td>Loss of consciousness. Chemical pneumonitis is possible.</td>
<td>Explain to Physician the composition of the material.</td>
</tr>
<tr>
<td><strong>Special Fire Fighting Proc.</strong></td>
<td>Extinguishing media: foam, dry chemical, carbon dioxide</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

Hazchem Number: 3Y

UN Number: 1223

IDENTIFICATION OF THE SUBSTANCE
Application: Solvent

COMPOSITION / INFORMATION ON INGREDIENTS
Chemical composition:
Solvent naphtha (petroleum), medium aliph. EINECS No. 265-191-7, Cas No. 64742-88-7

HAZARDS IDENTIFICATION
Flammable
Harmful if swallowed – aspiration hazard
Likely to cause skin irritation
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Director: B.J. Rodd
FIRE FIGHTING MEASURES
For major fires call the Fire Service. Ensure an escape path is always available from any fire.
There is a danger of flashback if sparks or hot surfaces ignite vapour.
Use foam, dry powder or water fog. DO NOT USE water jets.
FIRE IN CONFINED SPACES SHOULD BE DEALT WITH BY TRAINED PERSONNEL WEARING APPROVED
BREATHING APPARATUS.
Combustion Products
Toxic fumes may be evolved on burning or exposure to heat. See stability and Reactivity Section of this Safety Data
Sheet.

ACCIDENTAL RELEASE MEASURES
Any spillage should be regarded as a potential fire risk.
In the event of spillage, remove all sources of ignition and ensure good ventilation.
Wear protective clothing. (See Exposure controls/Personal protection of this safety data sheet)
Spilled material may make surfaces slippery. Clean up spilled material immediately.
Contain and recover spilled material using sand or other suitable inert absorbent material.
Recovery of large spillages should be effected by specialist personnel.
It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage
which may be reasonably anticipated.
Large and uncontained spillages should be smothered with foam to reduce the risk of ignition.
The foam blanket should be maintained until the area is declared safe.
Protect drains from potential spills to minimize contamination. Do not wash product into drainage system.
Vapour is heavier than air and may travel to remote sources of ignition (eg. Along drainage systems, in basements
etc.).
If spillage has occurred in a confined space, ensure adequate ventilation and check that a safe, breathable
atmosphere is present before entry.
In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover
product from the surface. Protect environmentally sensitive areas and water supplies.
In the case of spillage at sea approved dispersants may be used where authorized by the appropriate government /
regulatory authorities.
In the even of spillages contact the appropriate authorities.
Regular surveillance on the location of the spillage should be maintained.

HANDLING AND STORAGE
Storage Conditions
Store and disperse only in well ventilated areas away from heat and sources of ignition.
Store and use only in equipment/containers designed for use with this product.
Containers must be properly labeled and kept closed when not in use.
Do not remove warning labels from containers.
Empty packages may contain some remaining product. Retain hazard warning labels on empty packages as a guide
to the safe handling, storage and disposal of empty packaging.
Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hydrocarbon vapour concentrations of less than 1% of the lower flammability limit and an oxygen concentration of at least 20% volume.
Always have sufficient people standing by outside the tank with appropriate breathing apparatus and equipment to effect a quick rescue.

**Handling Precautions**
- Avoid, as far as reasonably practicable, inhalation of vapour, mists or fumes generated during use.
- Avoid contact with skin and observe good personal hygiene.
- Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.
- Do not siphon product by mouth.
- Whilst using do not eat, drink or smoke.
- Wash hands thoroughly after contact.
- Take all necessary precautions against accidental spillage into soil or water.

**Fire Prevention**
Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability-explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks.
When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure.
Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.
Empty containers represent a fire hazard as they may contain some remaining flammable product and vapour. Never cut, weld, solder or braze empty containers.

**EXPOSURE CONTROLS / PERSONAL PROTECTION:**

**Exposure Limits**
There is no appropriate occupational exposure limit for this material.
If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

**Protective Clothing**
Wear face visor or goggles in circumstances where eye contact can accidentally occur.
If skin contact is likely, wear impervious protective clothing and/or gloves.
Protective clothing should be regularly inspected and maintained; overalls should be dry-cleaned, laundered and preferably starched after use.

**Respiratory Protection**

Director: B.J. Rodd
If operations are such that exposure to vapour, mist or fume may be anticipated, then suitable approved respiratory equipment should be worn. The use of respiratory equipment must be strictly in accordance with the manufacturers’ instructions and any statutory requirements governing its selection and use.

**PHYSICAL & CHEMICAL PROPERTIES**

**Typical Values**

<table>
<thead>
<tr>
<th>Grades: White Spirit</th>
<th>Test Method</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>colourless</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>solvent</td>
<td></td>
</tr>
<tr>
<td>Density @ 15°C</td>
<td>ASTM D 1298</td>
<td>kg/m³</td>
</tr>
<tr>
<td>Boiling Point/range</td>
<td>ASTM D 86</td>
<td>°C</td>
</tr>
<tr>
<td>Flash Point (PMC)</td>
<td>ASTM D 93</td>
<td>°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>solvent</td>
</tr>
<tr>
<td>Density @ 15°C</td>
<td>ASTM D 1298</td>
</tr>
<tr>
<td>Boiling Point/range</td>
<td>ASTM D 86</td>
</tr>
<tr>
<td>Flash Point (PMC)</td>
<td>ASTM D 93</td>
</tr>
</tbody>
</table>

**STABILITY AND REACTIVITY**

**Conditions to Avoid**

Stable at ambient temperatures. Hazardous polymerization reactions will not occur.

**Materials to Avoid**

Avoid contact with strong oxidizing agents.

**Hazardous Decomposition Products**

Thermal decomposition products will vary with conditions. Incomplete combustion will generate smoke, carbon dioxide and hazardous gases, including carbon monoxide.

**TOXICOLOGICAL INFORMATION**

**Eyes**

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs. May be irritating to eyes at high concentrations of vapour, mists or fumes.

**Skin**

Likely to cause skin irritation.

**Ingestion**

Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.

Director: B.J. Rodd
Will injure the lungs if aspiration occurs, eg. During vomiting.

**Inhalation**
May cause irritation to eyes, nose and throat due to exposure to vapour, mists or fumes.

**ECOLOGICAL INFORMATION**

**Mobility**
Spillages may penetrate the soil causing ground water contamination.

**Persistence and degradability**
This product is inherently biodegradable.

**Bioaccumulative potential**
There is no evidence to suggest bioaccumulation will occur.

**Aquatic toxicity**
Toxic to aquatic organisms. May cause long term effects in the aquatic environment. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

**DISPOSAL CONSIDERATIONS**

Dispose via an authorized person/licensed waste disposal contractor in accordance with local regulations. Dispose of product and container carefully and responsibly. Do not dispose of near ponds, ditches, down drains or onto soil. Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packaging and should not be removed.

**TRANSPORT INFORMATION**

ADR/RID: Kerosene, Flammable Liquid, Class 3, Item 31 (c), Hazard Identification No 30
UN: KEROSENE, Flammable liquid, Class 3, Packing Group III, UN Number 1223
IATA/ICAO: Kerosene, Flammable liquid, Class 3, Packing group III
IMO: KEROSENE, Flammable liquid, Class 3.3, Packing group III
EMERGENCY ACTION CODE: Flammable liquid, 3[Y]

**REGULATORY INFORMATION**

**EU Category of Danger**
Flammable
Harmful.
Irritant
Dangerous for the environment

Director: B.J. Rodd
EU Labelling

Symbol: St. Andrew’s Cross, Dead tree and fish
Indication of danger: HARMFUL, DANGEROUS FOR THE ENVIRONMENT, FLAMMABLE

Risk (R) Phrases:
R10 Flammable
R38 Irritating to skin
R65 Harmful: may cause lung damage if swallowed.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety (S) Phrases:
S24 Avoid contact with skin
S23 Do not breathe vapour
S43 In case of fire use foam or dry powder. Never use water jets.
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
S61 Avoid release into the environment. Refer to special instructions / Safety data sheets.

The label must carry the following information: “EC Label”, Substance name, EINECS No, Solvent naphtha (petroleum), medium aliph. EINECS No. 265-191-7, CAS No. 64742-88-7

OTHER INFORMATION

Manufacturers Note:

Although the information contained herein is presented in good faith and is to the best of B&R Products knowledge true and accurate, it is made for informational purposes only and without any warranty whatsoever. Due to the special nature of the product and its applications B&R Products does not accept any responsibility or liability whatsoever which may result from the use of this information.
The information contained herein is not to be construed as a licence to operate under, or a recommendation to infringe, any existing patents, nor should it be confused with any Governmental or international safety codes.