

## Hydrocarbon Analysis of Reference Standard for Impurities in 1,3-butadiene for ASTM method

### Application Note

AN0050

### SCION GC-FID

#### GC-FID conditions

<b>Injector</b>	LSV 1:10000
<b>Sample</b>	1 $\mu$ L
<b>Column</b>	SCION Al <sub>2</sub> O <sub>3</sub> 50m x 0.32mm x 5 $\mu$ m
<b>Oven</b>	40°C (6 min) to 160°C at 5°C/min
<b>Carrier Gas</b>	Helium, 75kPa
<b>FID</b>	250°C

#### Peak Identification

<b>1</b>	Acetylene	<b>14</b>	Cis-2-butene
<b>2</b>	Cyclopropane	<b>15</b>	Isoprene
<b>3</b>	Propane	<b>16</b>	Pentene-1
<b>4</b>	Propylene	<b>17</b>	Cis-1,3-pentadiene
<b>5</b>	Propadiene	<b>18</b>	Trans-1,3-pentadiene
<b>6</b>	Methylacetylene	<b>19</b>	Cis-2-pentene
<b>7</b>	1-butyne	<b>20</b>	Trans-2-pentene
<b>8</b>	1,2-butadiene	<b>21</b>	3-methyl-1-butene
<b>9</b>	Isobutane	<b>22</b>	Isopentane
<b>10</b>	Butane	<b>23</b>	Pentane
<b>11</b>	Butene-1	<b>24</b>	Benzene
<b>12</b>	Isobutylene	<b>25</b>	Toluene
<b>13</b>	Trans-2-butene	<b>26</b>	1,3-butadiene

