

**D xxxx – Engine Oil Elastomer Compatibility
Form 1 – Validity Declaration**

Version:
Conducted for:

| | |
|--|-------------|
| | V = Valid |
| | I = Invalid |

| Elastomer Type | Bath Number | Elastomer Batch | Oilcode | CMIR | SOT Date | SOT Time | EOT Date | EOT Time |
|-----------------|-------------|-----------------|---------|------|----------|----------|----------|----------|
| Nitrile | | | | | | | | |
| Polyacrylate | | | | | | | | |
| Fluoroelastomer | | | | | | | | |
| Silicon | | | | | | | | |
| Vamac | | | | | | | | |

| | | | |
|------------------|--|--|--|
| Alternate Codes: | | | |
|------------------|--|--|--|

| |
|--|
| In my opinion this test _____ been conducted in accordance with Test Method D xxxx and the appropriate amendments through the information letter system. The remarks on Form 7 describe any anomalies associated with this test. |
|--|

Submitted By:

_____ Testing Laboratory

_____ Signature

_____ Typed Name

_____ Title

**D xxxx – Engine Oil Elastomer Compatibility
Form 3 – Results Summary – Non-Reference Oil - Vamac**

| | |
|---------------|------|
| Sample Code: | Lab: |
| Lab Oil Code: | |

| Elastomer Type: | | Elastomer Batch Code: | | | |
|----------------------|----------------------|-----------------------|-------------------------|----------------------------|----------------------|
| SOT Time: | | EOT Time: | | Bath Number: | |
| SOT Date: | | EOT Date: | | | |
| Test Temperature, °C | Test Duration, Hours | Volume Change, % | Hardness Change, Points | Tensile Strength Change, % | Elongation Change, % |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Average | | | | | |
| Standard Deviation | | | | | |

**D xxxx – Engine Oil Elastomer Compatibility
Form 5 – Results Summary – Non-Reference Oil - Vamac**

| | |
|---------------|------|
| Lab Oil Code: | Lab: |
|---------------|------|

| CMIR: | | TMC Industry Oil Code: | | | |
|----------------------|----------------------|------------------------|-------------------------|----------------------------|----------------------|
| Elastomer Type: | | Elastomer Batch Code: | | | |
| SOT Time: | | EOT Time: | | Bath Number: | |
| SOT Date: | | EOT Date: | | | |
| Test Temperature, °C | Test Duration, Hours | Volume Change, % | Hardness Change, Points | Tensile Strength Change, % | Elongation Change, % |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Average | | | | | |
| Standard Deviation | | | | | |

**D xxxx – Engine Oil Elastomer Compatibility
Form 6 – Candidate Data**

Sample Code: _____ Lab: _____ EOT Date: _____

| Elastomer Identification | Parameter | Specification Limit | Candidate Result | TMC Identification | Reference Acceptance Limits | Reference Result |
|--------------------------|---------------|---------------------|------------------|--------------------|-----------------------------|------------------|
| | | | | | Updated on: | |
| Type: Nitrile | Volume Change | +5% to -3% | | Industry Oil: | to | |
| | Hardness | +7 pts to -5 pts | | | to | |
| Batch: | Tensile | +10% to -TMC 1006 | | CMIR: | to | |
| | Strength | +10% to -TMC 1006 | | | to | |

| Elastomer Identification | Parameter | Specification Limit | Candidate Result | TMC Identification | Reference Acceptance Limits | Reference Result |
|--------------------------|---------------|---------------------|------------------|--------------------|-----------------------------|------------------|
| | | | | | Updated on: | |
| Type: Polyacrylate | Volume Change | +5% to -3% | | Industry Oil: | to | |
| | Hardness | +8 pts to -5 pts | | | to | |
| Batch: | Tensile | +18% to -15% | | CMIR: | to | |
| | Strength | +10% to -35% | | | to | |

| Elastomer Identification | Parameter | Specification Limit | Candidate Result | TMC Identification | Reference Acceptance Limits | Reference Result |
|--------------------------|---------------|---------------------|------------------|--------------------|-----------------------------|------------------|
| | | | | | Updated on: | |
| Type: Fluoroelastomer | Volume Change | +5% to -2% | | Industry Oil: | to | |
| | Hardness | +7 pts to -5 pts | | | to | |
| Batch: | Tensile | +10% to -TMC 1006 | | CMIR: | to | |
| | Strength | +10% to -TMC 1006 | | | to | |

| Elastomer Identification | Parameter | Specification Limit | Candidate Result | TMC Identification | Reference Acceptance Limits | Reference Result |
|--------------------------|---------------|---------------------|------------------|--------------------|-----------------------------|------------------|
| | | | | | Updated on: | |
| Type: Silicon | Volume Change | +TMC 1006 to -3% | | Industry Oil: | to | |
| | Hardness | +5 pts to -TMC 1006 | | | to | |
| Batch: | Tensile | +10% to -45% | | CMIR: | to | |
| | Strength | +20% to -30% | | | to | |

| Elastomer Identification | Parameter | Specification Limit | Candidate Result | TMC Identification | Reference Acceptance Limits | Reference Result |
|--------------------------|---------------|---------------------|------------------|--------------------|-----------------------------|------------------|
| | | | | | Updated on: | |
| Type: Vamac | Volume Change | Report | | Industry Oil: | to | |
| | Hardness | Report | | | to | |
| Batch: | Tensile | Report | | CMIR: | to | |
| | Strength | Report | | | to | |

