Petroleum Quality Institute of America



Automatic Transmission Fluid - Survey 2017

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It is our pleasure to present the findings of the **Petroleum Quality Institute of America's Automatic Transmission Fluid Survey - 2017.**

The survey was conducted with the understanding that its findings would be used to inform suppliers, installers, consumers and others about issues concerning the quality, integrity, and labeling of automatic transmission fluids (ATF) in the market.

The findings of the survey are eye-opening and provide a powerful foundation to help protect the interests of buyers and sellers of ATF. They demonstrate that the lubricant industry and consumers recognize there are significant issues around the quality and integrity of ATF in the US market and that action can and should be taken to address the issues. The survey identifies that the highest priority actions the industry can take are to further educate consumers and installers; use more meaningful, accurate and consumer friendly labeling for ATF; and work to reduce the number of ATF specifications in the market. Importantly, the survey reveals an interesting dichotomy between the high level of concern around labeling but a fairly low concern about actual quality. This suggests that if the industry can get labeling in order, there may not necessarily be significant issues with the quality of ATF in the market.

The PQIA believes that the survey raises a number of important concerns about ATF that merit further research, review, discussion, and most importantly, action. To that end, the next step is to turn the information and insights from the survey into action. PQIA will do so by taking the lead to develop an ATF Quality Improvement Leadership Council comprising lubricant and additive manufacturers and distributors, installers, consumers, and industry associations.

I trust that you find value from this survey and invite you to join the PQIA in development of the ATF Quality Improvement Leadership Council and the work that lies ahead. Please contact me if you would like to participate on the council.

In closing, I thank <u>PQIA's Supporters</u> for making this survey possible and those who participated in the survey for their interests and efforts to help improve the quality and integrity of lubricants in the market.

Sincerely,

Thomas F. Slenn

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1. Background



1. BACKGROUND

It wasn't long ago that the automatic transmissions in most of the cars on the road were factory filled and serviced with Dexron/Mercon transmission fluid, and to a lesser extent, Automatic Transmission Fluid (ATF) meeting Chrysler specifications, see figure 1. In fact, in 2000, an estimated 48 million gallons or, 65% of the total ATF consumed in the US was Dexron III/Mercon. Chrysler's ATF+3 followed at 12%. The balance went to Mercon V, ATF+4 and others. That made it relatively easy for lubricant marketers and installers to inventory and sell ATFs since close to 80% of the aftermarket demand was served by two types of transmission fluids. But times have changed since then.



Figure 1

Automatic Transmission Fluid (ATF) Always refer to your vehicle owner's manual for proper engine oils and transmission fluids.

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Whereas Dexron/Mercon fluids used to be the leading types of ATF in the US market, today demand for such fluids has slipped below 50% of the total and is moving towards extinction as older model vehicles are retired and cars with newer transmission designs and different lubrication requirements take their place. Dexron III/Mercon and other historically prominent ATFs are being replaced and displaced by a splintering number of OEM specific ATF requirements. These include ATF+4, Mercon V, Mercon LV, Dexron VI, ATF DW-1, ATF T-IV, SP-IV, Matic S and Matic D and K, Toyota ATF-WS, Honda DW (ZF), Diamond SP-IV, and others. With that, what used to be a fairly simple world in ATF selection has now become more complicated.



1. BACKGROUND

In addition to the complexity around the number of ATF specifications in the market, concerns have also been voiced about the use of such language as "Universal" and "Multi-Vehicle," and other similar verbiage on ATF product labels. Although many lubricant marketers and installers say the "golden ring" in ATFs is a true Universal or Multi-Vehicle product, they question if such a product is technically possible. This is because a growing number of Original Equipment Manufacturer (OEM) ATF specifications are mutually exclusive, as shown in Figure 2. As an example, you can't meet a Dexron III/Mercon specifications and a Mercon V specification due to differences in Brookfield viscosity. Similarly, if an ATF meets the ATF+4 specification, it's Brookfield viscosity will not meet that of JASO or Dexron III/Mercon. Similar conflicts exist with the kinematic viscosity specifications for ATF+4, Dexron VI and Mercon LV. And without getting technical, the challenges of formulating a truly Universal ATF becomes exceedingly more complicated when one includes CVTs and DCTs into the mix. Beyond the challenge of what clearly are mutually exclusive viscosity requirements, there are also significant differences in other specifications.

Figure 2





2. Introduction



2. INTRODUCTION

The Petroleum Quality Institute of America (PQIA) is an independent resource for information and insights on the quality of lubricants in the marketplace.

PQIA's mission is to serve the consumer of lubricants by testing and reporting on the quality and integrity of lubricants in the marketplace. It is expected that this improved visibility of quality will lead to wider conformance by lubricant manufacturers to specification and performance claims.

In an effort to help guide PQIA's efforts to assure the quality and integrity of ATFs in the market and raise awareness about the proper use of ATF, PQIA conducted a survey focused on the ATF market in the United States.

Invitations to participate in the survey went out to PQIA's mailing list of newsletter subscribers on April 28, 2017. There were 218 responses to the survey. When taken together, lubricant marketers/distributors and consumers account for 63% of the total respondents to the survey. A significant percentage identified as consumers are also industry stakeholders.

It should be noted that the PQIA mailing list comprise a unique population that are generally believed to be more attentive to ATF issues and concerns in the marketplace than the general population. As such, while useful, the results of the survey must be viewed with caution due to the possibility of respondent bias.

Despite potential limitations, the Petroleum Quality Institute of America believes the results of the survey provide valuable information and insights into issues of concern in the ATF market and what we as an industry can do to help assure the quality and integrity of ATFs, and their proper use.



2. INTRODUCTION

The survey was conducted online and included a series of eight questions, as shown below. The matrix question choices were randomized to overcome the bias that can result from the order items are presented.

1. What class of trade best describes your business?

Major Lubricant Manufacturer Independent Lubricant Manufacturer Lubricant Marketer/Distributor Lubricant Additive Supplier Installer (i.e. fast lube, repair garage) Retailer Consumer (end-user) Other

2. Please rate how strongly you agree or disagree with each of these statements. (Strongly disagree, Disagree, Neutral, Agree, Strongly Agree)

ATF brand warranty is sufficient if the ATF is not formally OEM approved ATFs labeled as "Universal" can be used in all automatic transmissions Misleading ATF labeling is a widespread issue Most consumers don't know the OEM recommended ATF for their vehicle(s) Most consumers don't read the labels on ATF Off-spec, potentially transmission damaging ATFs are a major issue Suitable for use multi-vehicle ATFs adequately satisfy a market need The number of ATF specifications in the market leads to misapplication There are widespread issues with the quality of ATFs in the market

3. On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

ATFs not meeting claimed specifications Availability of OEM approved ATFs Consumer knowledge of ATF specifications Cost of OEM approved ATFs Installer knowledge of ATF specifications Installer level of concern about the quality of ATF Misleading/confusing ATF labeling Number of ATF specifications in the market Regulation of ATF quality and compliance to specifications



2. INTRODUCTION

The survey was conducted online and included a series of eight questions, as shown below. The matrix question choices were randomized to overcome the bias that can result from the order items are presented. (continued)

4. How significant do you feel the issue of quality is in the following types of ATFs?

Type A Type F Unlicensed ATF (i.e. D/M, SM) OEM Genuine/Licensed ATF

5. Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Suitable for use in... Universal Multivehicle Recommended for use... Meets/Satisfies the requirements of... Licensed for... Approved for use in... Multipurpose

6. How prevalent are ATF quality issues in the following classes of trade?

Fast Lubes Independent Repair Shops New Car Dealers Retail Stores Transmission Rebuilders

7. Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:

8. Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:



3. Executive Summary



3. EXECUTIVE SUMMARY

The Petroleum Quality Institute of America (PQIA) conducted an Automatic Transmission Fluid (ATF) Survey to help guide its efforts to assure the quality and integrity of ATFs in the market and their proper application, and to raise awareness about ATF issues and potential solutions. The geographic scope of the survey is the United States and the survey went live on April 28, 2017 and closed on May 12, 2017.

Invitations to participate in the survey were sent by email to PQIA's mailing list of newsletter subscribers. There were 218 responses to the survey. When taken together, lubricant marketers/distributors and consumers account for 63% of the total respondents to the survey. A significant percentage of respondents identifying themselves as consumers are also industry stakeholders.

It should be noted that the PQIA mailing list comprise a unique population that are generally believed to be more attentive to ATF issues and concerns in the marketplace than the general population. As such, while useful, the results of the survey must be viewed with caution due to the possibility of response bias.

Despite potential limitations, the Petroleum Quality Institute of America believes the results of the survey provide valuable information and insights into issues of concern in the ATF market and what we as an industry can do to help assure the quality and integrity of ATFs and its proper use.

Overall, the survey findings highlights that the quality and integrity of ATF currently in the market is an issue and that the industry can, and should do more to address these issues. The following are the key findings of the survey and PQIA's recommendation regarding actions we as an industry can take to address them.

Key Findings

- Both the suppliers and consumers of ATF feel similarly about the issues. Although there are some differences between the groups of respondents (i.e. lubricant marketer/distributors, consumers, major lubricant manufactures), the differences are negligible.
- Off-spec, potentially transmission damaging ATFs are a significant issue.
- Misleading ATF labeling is the leading concern.
- Also of high concern is the number of ATF specifications in the market; this leads to confusion and misapplication.
- The words "Universal," "Multipurpose," and "Multivehicle" are considered a hindrance to consumer selection of the right ATF for their vehicles.
- Such terms as "licensed for...," and "approved for use in...," are considered helpful to consumer selection of ATF and "meets/satisfies the requirements of...," Recommended for use...," are somewhat helpful.
- The most significant quality issues are believed to exist with unlicensed ATF (i.e. D/M, DM).
- ATF quality issues are considered most prevalent at fast lubes and independent repair shops, as compared to new car dealers, transmission rebuilders, and retail stores.



3. EXECUTIVE SUMMARY

- By a large majority, most feel the industry can and should do more to help assure the quality and integrity of ATF in the market, and proper application.
 - Nearly 35% of respondents feel that taking action to improve labeling will help to assure proper application of ATF. This includes clear labeling that defines such terms as "Universal" and "Multivehicle."
 - Education of installers and consumers is also considered an important action.
 - Additional efforts to establish transparent standards, certification, licensing, compliance testing and monitoring are also considered of high importance.

Conclusion

The industry recognizes that there are significant issues around the quality and integrity of automatic transmission fluid in the US market and that action can and should be taken to address them. The highest priority actions the industry can take are to further educate consumers and installers, use more meaningful, accurate and consumer friendly labeling for ATF, and work to reduce the number of ATF specifications in the market. Importantly, the survey reveals an interesting dichotomy between the high level of concern around labeling but a fairly low concern about actual quality. This suggests that if the industry can get labeling in order, there may not necessarily be significant issues with the quality of ATF in the market.

PQIA Recommendations

- The PQIA believes that the survey raises a number of important concerns about ATF that merit further research, review, discussion and, most importantly, action. To that end, the PQIA recommends:
- Creation of an ATF Quality Improvement Leadership Council to expand dialogue among industry stakeholders. The council will comprise lubricant and additive manufacturers and distributors, OEMs, installers, consumers, and industry associations. The Petroleum Quality Institute of America will lead the effort to create the council. The mission of the council is to assure the quality, integrity and proper use of ATFs in the marketplace. It will achieve this objective by:
 - Conducting additional surveys, interviews, and/or focus groups of installers and lubricant distributors to gain a better understanding of their experiences with education on the topic of ATF and their views as to material and delivery systems the industry can provide to help educate them on the quality of ATF and its specifications and applications.
 - Improving the language used on labels and sales collateral to describe ATF applications.
 - Developing and encouraging practices and use of support material to improve installer knowledge about ATF quality issues and applications, as well as the risks around the misuse of ATF.
 - Developing and encouraging implementation of methods to further educate consumers about ATF quality issues and applications, as well as the risks around the misuse of ATF.



4. Overview



The Petroleum Quality Institute of America (PQIA) conducted an Automatic Transmission Fluid (ATF) Survey to help guide its efforts to assure the quality and integrity of ATFs in the market and their proper application, and to raise awareness about ATF issues and potential solutions. The geographic scope of the survey is the United States and the survey went live on April 28, 2017 and closed on May 12, 2017.

Invitations to participate in the survey were sent by email to PQIA's mailing list of newsletter subscribers. It should be noted that the PQIA mailing list comprise a unique population that are generally believed to be more attentive to ATF issues and concerns in the marketplace than the general population. As such, while useful, the results of the survey must be viewed with caution due to the possibility of response bias.

Despite potential limitations, the Petroleum Quality Institute of America believes the results of the survey provide valuable information and insights into issues of concern in the ATF market and what we as an industry can do to help assure the quality and integrity of ATFs and its proper use.

Overall, the survey findings highlights that the quality and integrity of ATF currently in the market is an issue and that the industry can, and should do more to address these issues.



Survey demographics

There were 218 responses to the survey. When taken together, lubricant marketers/distributors and consumers account for 63% of the total respondents to the survey. A significant percentage of respondents identifying themselves as consumers are also industry stakeholders.



Both the suppliers and consumers of ATF feel similarly about the issues. Although there are some differences between the groups of respondents to the survey (i.e. lubricant marketer/distributors, consumers, major lubricant manufactures), as shown in Sections 6 through 12 of the report, the differences are negligible.

Rate how strongly you agree or disagree with this statement

Respondents were asked to "Rate how strongly you agree or disagree with each of these statements." and rate their response based on the following scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

The following chart compares all responses to the statements mentioned based on a Rating Score. The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



Respondents were asked to "**Rate how strongly you agree or disagree with each of these statements**." and rate their response based on the following scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

The following charts show the ratings by all responses to the statements mentioned.



ATFs labeled as "Universal" can be used in all automatic transmissions



Misleading ATF labeling is a widespread issue



Most consumers don't know the OEM recommended ATF for their vehicle(s)





Respondents were asked to "**Rate how strongly you agree or disagree with each of these statements**." and rate their response based on the following scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

The following charts show the ratings by all responses to the statements mentioned.



Off-spec, potentially transmission damaging ATFs are a major issue



Suitable for use multi-vehicle ATFs adequately satisfy a market need



The number of ATF specifications in the market leads to misapplication





Respondents were asked to "**Rate how strongly you agree or disagree with each of these statements**." and rate their response based on the following scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

The following chart shows the ratings by all responses to the statements mentioned.

There are widespread issues with the quality of ATFs in the market





On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace." In addition, respondents were given an opportunity to provide comments about the issues mentioned.

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The following chart compares all responses to the statements mentioned based on a Rating Score. The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Scale of 1 to 5 (1 being least concerning)



Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace."

The following charts show the ratings by all responses to the statements mentioned.



ATFs not meeting claimed specifications

Availability of OEM approved ATFs





Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace."

The following charts show the ratings by all responses to the statements mentioned.



Consumer knowledge of ATF specifications







Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace."

The following charts show the ratings by all responses to the statements mentioned.



Installer knowledge of ATF specifications







Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace."

The following charts show the ratings by all responses to the statements mentioned.



Misleading/confusing ATF labeling

Number of ATF specifications in the market





Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace."

The following chart shows the ratings by all responses to the statements mentioned.

Regulation of ATF quality and compliance to specifications





Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace." In addition, respondents were given an opportunity to provide comments about the issues mentioned.

Thirty three respondents to this question provided comments. Nearly 25% of the comments voiced concerns relating to issues around confusing and misleading labelling of ATF. A significant number of comment s also spoke to the concerns about confusion around and misapplication of ATF tied to the large number of specifications in the marketplace.

Although many of the comments included a mix of thoughts and suggestion, each were grouped into like bins for analysis. The following provides a summary of percentage of comments within each bin.





Respondents were asked "On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace." In addition, respondents were given an opportunity to provide comments about the issues mentioned.

Thirty three respondents to this question provided comments. Nearly 25% of the comments voiced concerns relating to issues around confusing and misleading labelling of ATF. A significant number of comment s also spoke to the concerns about confusion around and misapplication of ATF tied to the large number of specifications in the marketplace.





How significant do you feel the issue of quality is in the following types of ATFs?

Respondents were asked "How significant do you feel the issue of quality is in the following types of ATFs?" and rate their response based on the following scale: 1 = Not significant, 2 = Somewhat significant, 3 = Very significant

The following chart compares all responses to the statements mentioned based on a Rating Score. The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



1 = Not significant, 2 = Somewhat significant, 3 = Very significant



Respondents were asked **"How significant do you feel the issue of quality is in the following types of ATFs?"** and rate their response based on the following scale: 1 = Not significant, 2 = Somewhat significant, 3 = Very significant



Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Respondents were asked "Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?" and rate their response based on the following scale: 1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder

The following chart compares all responses to the statements mentioned based on a Rating Score. The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?



1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder



Respondents were asked **"Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?"** and rate their response based on the following scale: 1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder







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Respondents were asked **"Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?"** and rate their response based on the following scale: 1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder





How prevalent are ATF quality issues in the following classes of trade?

How prevalent are ATF quality issues in the following classes of trade?

Respondents were asked "How prevalent are ATF quality issues in the following classes of trade?" and rate their response based on the following scale: 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent, 5 = Extremely prevalent

The following chart compares all responses to the statements mentioned based on a Rating Score. The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.




Respondents were asked "How prevalent are ATF quality issues in the following classes of trade?" and rate their response based on the following scale: 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent, 5 = Extremely prevalent

The following charts show the ratings by all responses to the statements mentioned.





Independent Repair Shops



Respondents were asked **"How prevalent are ATF quality issues in the following classes of trade?"** and rate their response based on the following scale: 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent, 5 = Extremely prevalent

The following charts show the ratings by all responses to the statements mentioned.







Respondents were asked **"How prevalent are ATF quality issues in the following classes of trade?"** and rate their response based on the following scale: 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent, 5 = Extremely prevalent

The following chart shows the ratings by all responses to the statements mentioned.



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4. OVERVIEW

Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:

Respondents were asked "Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:" Respondents were given an opportunity to provide comments about the issues mentioned.

The following chart shows the answer by all responses to the statements mentioned.



Comments were provided by 150 respondents. The following provides a summary of the comments.





Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:

Respondents were asked "Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:" Respondents were given an opportunity to provide comments about the issues mentioned.



The following chart shows the answer by all responses to the statements mentioned.

Comments were provided by 107 respondents. Although many of the comments included a mix of thoughts and suggestion, each were grouped into like bins for analysis. The following provides a summary of percentage of comments within each bin.





5. Combined Responses



This section provides the combined responses of each class of trade surveyed. It should be noted that of the 218 survey respondents, when taken together, lubricant marketers/distributors and consumers account for 63% of the total respondents to the survey. As such, the combined results are heavily influenced by these classes of trade.

POLA BUILDE OF NUMBER

5. COMBINED RESPONSES

Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



Strongly Disagree

■ Disagree ■ Neutral

Agree

Strongly Agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (1 being least concerning)





The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



How significant do you feel the issue of quality is in the following types of ATFs?





[■] Not Significant ■ Somewhat Significant ■ Very Significant





Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?







How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:





Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:





Question 2

Please rate how strongly you agree or disagree with each of these statements.

- ATF brand warranty is sufficient if the ATF is not formally OEM approved
- ATFs labeled as "Universal" can be used in all automatic transmissions
- Misleading ATF labeling is a widespread issue
- Most consumers don't know the OEM recommended ATF for their vehicle(s)
- Most consumers don't read the labels on ATF
- Off-spec, potentially transmission damaging ATFs are a major issue
- Suitable for use multi-vehicle ATFs adequately satisfy a market need
- The number of ATF specifications in the market leads to misapplication
- There are widespread issues with the quality of ATFs in the market



Rate how strongly you agree or disagree with this statement?

ATF brand warranty is sufficient if the ATF is not formally OEM approved





Rate how strongly you agree or disagree with this statement?

ATFs labeled as "Universal" can be used in all automatic transmissions







Rate how strongly you agree or disagree with this statement?

Misleading ATF labeling is a widespread issue





Rate how strongly you agree or disagree with this statement

Most consumers don't know the OEM recommended ATF for their vehicle(s)







Rate how strongly you agree or disagree with this statement

Most consumers don't read the labels on ATF







Rate how strongly you agree or disagree with this statement

Off-spec, potentially transmission damaging ATFs are a major issue







Rate how strongly you agree or disagree with this statement

Suitable for use multi-vehicle ATFs adequately satisfy a market need







Rate how strongly you agree or disagree with this statement

The number of ATF specifications in the market leads to misapplication







Rate how strongly you agree or disagree with this statement

There are widespread issues with the quality of ATFs in the market







Question 3

On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

- ATFs not meeting claimed specifications
- Availability of OEM approved ATFs
- Consumer knowledge of ATF specifications
- Cost of OEM approved ATFs
- Installer knowledge of ATF specifications
- Installer level of concern about the quality of ATF
- Misleading/confusing ATF labeling
- Number of ATF specifications in the market
- Regulation of ATF quality and compliance to specifications



On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

ATFs not meeting claimed specifications







On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Availability of OEM approved ATFs







Consumer

Marketer

Distributor

Majors

Independents

Installer

Other

Lubricant

Additive Supplier

5. COMBINED RESPONSES

On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Consumer knowledge of ATF specifications



64

Retailer



On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Cost of OEM approved ATFs







On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Installer knowledge of ATF specifications







On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Installer level of concern about the quality of ATF





On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Misleading/confusing ATF labeling





On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Number of ATF specifications in the market







On a scale of 1 to 5 (with 1 being the least concerning), please rate where you feel the most concerning issues are with ATFs in the marketplace.

Regulation of ATF quality and compliance to specifications







Question 4

How significant do you feel the issue of quality is in the following types of ATFs?

- Type A
- Type F
- Unlicensed ATF (i.e. D/M, DM)
- OEM Genuine/Licensed ATF



How significant do you feel the issue of quality is in the following types of ATFs?

Type A ATF






How significant do you feel the issue of quality is in the following types of ATFs?

Type F ATF





How significant do you feel the issue of quality is in the following types of ATFs?



100 90 80 70 Total Responses 60 50 40 30 20 10 0 Lubricant Consumer Marketer Majors Independents Installer Other Retailer Distributor Additive Supplier Not Significant Somewhat Significant Very Significant





OEM Genuine/Licensed ATF

How significant do you feel the issue of quality is in the following types of ATFs?







Question 5

Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

- Suitable for use in...
- Universal
- Multivehicle
- Recommended for use...
- Meets/Satisfies the requirements of...
- Licensed for...
- Approved for use in...
- Multipurpose



Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Suitable for use in...







Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Universal







Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Multivehicle







Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Recommended for use...







Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Meets/Satisfies the requirements of...







Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Licensed for







Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Approved for use in...







Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

Multipurpose







Question 6

How prevalent are ATF quality issues in the following classes of trade?

- Fast Lubes
- Independent Repair Shops
- New Car Dealers
- Retail Stores
- Transmission Rebuilders

How prevalent are ATF quality issues in the following classes of trade?

Fast Lubes





Independent Repair Shops

How prevalent are ATF quality issues in the following classes of trade?





How prevalent are ATF quality issues in the following classes of trade?

New Car Dealers





How prevalent are ATF quality issues in the following classes of trade?

Retail Stores





How prevalent are ATF quality issues in the following classes of trade?

Transmission Rebuilders







Question 7

Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:



Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:





■ Yes ■ No ■ No Response



Question 8

Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:



Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:





■ Yes ■ No ■ No Response



6. Consumers



Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



ATFs labeled as "Universal" can be used in all automatic transmissions ATF brand warranty is sufficient if the ATF is not formally OEM approved Suitable for use multi-vehicle ATFs adequately satisfy a market need There are widespread issues with the quality of ATFs in the market Off-spec, potentially transmission damaging ATFs are a major issue Misleading ATF labeling is a widespread issue Most consumers don't read the labels on ATF The number of ATF specifications in the market leads to misapplication

Most consumers don't know the OEM recommended ATF for their vehicle(s)

Strongly Disagree Disagree Neutral Agree Strongly Agree

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6. CONSUMERS RESPONSES

Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (with 1 being the least concerning)



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



Scale of 1 to 5 (with 1 being the least concerning)



How significant do you feel the issue of quality is in the following types of ATFs?





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6. CONSUMERS RESPONSES

Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?









How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent





Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:





Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:





7. Lubricant Marketers/Distributors

Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



ATFs labeled as "Universal" can be used in all automatic transmissions ATF brand warranty is sufficient if the ATF is not formally OEM approved Suitable for use multi-vehicle ATFs adequately satisfy a market need There are widespread issues with the quality of ATFs in the market Off-spec, potentially transmission damaging ATFs are a major issue Misleading ATF labeling is a widespread issue Most consumers don't read the labels on ATF The number of ATF specifications in the market leads to misapplication Most consumers don't know the OEM recommended ATF for their vehicle(s)

Strongly Disagree Disagree Neutral Agree Strongly Agree

Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (with 1 being the least concerning)



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



Scale of 1 to 5 (with 1 being the least concerning)



How significant do you feel the issue of quality is in the following types of ATFs?

1 = Not significant, 2 = Somewhat significant, 3 = Very significant



Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder





How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent








7. LUBRICANT MARKETER/DISTRIBUTOR RESPONSES

Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:





7. LUBRICANT MARKETER/DISTRIBUTOR RESPONSES

Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:





8. Major Lubricant Manufacturers

Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



ATFs labeled as "Universal" can be used in all automatic transmissions ATF brand warranty is sufficient if the ATF is not formally OEM approved Suitable for use multi-vehicle ATFs adequately satisfy a market need There are widespread issues with the quality of ATFs in the market Off-spec, potentially transmission damaging ATFs are a major issue Misleading ATF labeling is a widespread issue Most consumers don't read the labels on ATF The number of ATF specifications in the market leads to misapplication Most consumers don't know the OEM recommended ATF for their vehicle(s)

Strongly Disagree Disagree Neutral Agree Strongly Agree

Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (with 1 being the least concerning)





Scale of 1 to 5 (with 1 being the least concerning)

■1 ■2 ■3 ■4 ■5

How significant do you feel the issue of quality is in the following types of ATFs?

1 = Not significant, 2 = Somewhat significant, 3 = Very significant



Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder





How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent







Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:





Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:





9. Independent Lubricant Manufacturers



Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



ATFs labeled as "Universal" can be used in all automatic transmissions ATF brand warranty is sufficient if the ATF is not formally OEM approved Off-spec, potentially transmission damaging ATFs are a major issue There are widespread issues with the quality of ATFs in the market Most consumers don't read the labels on ATF Misleading ATF labeling is a widespread issue Suitable for use multi-vehicle ATFs adequately satisfy a market need Most consumers don't know the OEM recommended ATF for their vehicle(s) The number of ATF specifications in the market leads to misapplication



Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (with 1 being the least concerning)



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



Scale of 1 to 5 (with 1 being the least concerning)

How significant do you feel the issue of quality is in the following types of ATFs?

1 = Not significant, 2 = Somewhat significant, 3 = Very significant



[■] Not Significant ■ Some what Significant ■ Very Significant

Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder







How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent





Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:





Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:



■ Yes ■ No



10. Installers



Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



ATFs labeled as "Universal" can be used in all automatic transmissions ATF brand warranty is sufficient if the ATF is not formally OEM approved Suitable for use multi-vehicle ATFs adequately satisfy a market need There are widespread issues with the quality of ATFs in the market Misleading ATF labeling is a widespread issue Off-spec, potentially transmission damaging ATFs are a major issue The number of ATF specifications in the market leads to misapplication

Most consumers don't read the labels on ATF

Most consumers don't know the OEM recommended ATF for their vehicle(s)



Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (with 1 being the least concerning)





Scale of 1 to 5 (with 1 being the least concerning)



How significant do you feel the issue of quality is in the following types of ATFs?

1 = Not significant, 2 = Somewhat significant, 3 = Very significant





Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder





How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent









Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:



■ Yes ■ No ■ No Responses



Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:





11. Lubricant Additive Manufacturers



Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



ATFs labeled as "Universal" can be used in all automatic transmissions There are widespread issues with the quality of ATFs in the market ATF brand warranty is sufficient if the ATF is not formally OEM approved Misleading ATF labeling is a widespread issue Off-spec, potentially transmission damaging ATFs are a major issue Suitable for use multi-vehicle ATFs adequately satisfy a market need The number of ATF specifications in the market leads to misapplication Most consumers don't read the labels on ATF Most consumers don't know the OEM recommended ATF for their vehicle(s)



Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (with 1 being the least concerning)





Scale of 1 to 5 (with 1 being the least concerning)

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11. LUBRICANT ADDITIVE MANUFACTURER RESPONSES

How significant do you feel the issue of quality is in the following types of ATFs?

1 = Not significant, 2 = Somewhat significant, 3 = Very significant





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11. LUBRICANT ADDITIVE MANUFACTURER RESPONSES

Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.





How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent







Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:



■ Yes ■ No



Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:



∎ Yes ■ No



12. Retailers



12. RETAILER RESPONSES

Rate how strongly you agree or disagree with each of these statements

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



ATFs labeled as "Universal" can be used in all automatic transmissions ATF brand warranty is sufficient if the ATF is not formally OEM approved Suitable for use multi-vehicle ATFs adequately satisfy a market need There are widespread issues with the quality of ATFs in the market Misleading ATF labeling is a widespread issue Off-spec, potentially transmission damaging ATFs are a major issue The number of ATF specifications in the market leads to misapplication Most consumers don't read the labels on ATF

Strongly Disagree Disagree Neutral Agree Strongly Agree


Rate where you feel the most concerning issues are with ATFs in the marketplace

Scale of 1 to 5 (with 1 being the least concerning)



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.



Scale of 1 to 5 (with 1 being the least concerning)



How significant do you feel the issue of quality is in the following types of ATFs?

1 = Not significant, 2 = Somewhat significant, 3 = Very significant



Not Significant Somewhat Significant Very Significant



Do the following words and/or phrases help or hinder consumer selection of the right ATF for their vehicles?

1 = Significantly help, 2 = Help, 3 = No impact, 4 = Hinder, 5 = Significantly hinder







How prevalent are ATF quality issues in the following classes of trade?

- 1 = Not prevalent, 2 = Slightly prevalent, 3 = Somewhat prevalent, 4 = Very prevalent,
- 5 = Extremely prevalent



The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.





Do you feel the industry can, and should do more to help assure the quality and integrity of ATFs in the market? If yes, please explain:

100% of retailers responded "Yes" to this question.

Do you feel the industry can, and should, do more to help assure proper application of ATFs in the market? If yes, please explain:

100% of retailers responded "Yes" to this question.



13. Conclusion and Recommendations



13. CONCLUSION AND RECOMMENDATIONS

Conclusion

The industry recognizes that there are significant issues around the quality and integrity of automatic transmission fluid in the US market and that action can and should be taken to address it. The highest priority actions the industry can take are to further educate consumers and installers, use more meaningful, accurate and consumer friendly labeling for ATF, and work to reduce the number of ATF specifications in the market. Importantly, the survey reveals an interesting dichotomy between the high level of concern around labeling but a fairly low concern about actual quality. This suggests that if the industry can get labeling in order, there may not necessarily be significant issues with the quality of ATF in the market.

Key Findings of the Survey Follow:

- Both the suppliers and consumers of ATF feel similarly about the issues. Although there are some differences between the groups of respondents (i.e. lubricant marketer/distributors, consumers, major lubricant manufactures), the differences are negligible.
- Off-spec, potentially transmission damaging ATFs are a significant issue.
- Misleading ATF labeling is the leading concern.
- Also of high concern is the number of ATF specifications in the market; this leads to confusion and misapplication.
- The words "Universal," "Multipurpose," and "Multivehicle" are considered a hindrance to consumer selection of the right ATF for their vehicles.
- Such terms as "licensed for...," and "approved for use in...," are considered helpful to consumer selection of ATF and "meets/satisfies the requirements of...," Recommended for use...," are somewhat helpful.
- The most significant quality issues are believed to exist with unlicensed ATF (i.e. D/M, DM).
- ATF quality issues are considered most prevalent at fast lubes and independent repair shops, as compared to new car dealers, transmission rebuilders, and retail stores.
- By a large majority, most feel the industry can and should do more to help assure the quality and integrity of ATF in the market, and proper application.
 - Nearly 35% of respondents feel that taking action to improve labeling will help to assure proper application of ATF. This includes clear labeling that defines such terms as "Universal" and "Multivehicle."
 - Education of installers and consumers is also considered an important action.



13. CONCLUSION AND RECOMMENDATIONS

 Additional efforts to establish transparent standards, certification, licensing, compliance testing and monitoring are also considered of high importance.

PQIA Recommendations

- The PQIA believes that the survey raises a number of important concerns about ATF that merit further research, review, discussion and, most importantly, action. To that end, the PQIA recommends:
- Creation of an ATF Quality Improvement Leadership Council to expand dialogue among industry stakeholders. The council will comprise lubricant and additive manufacturers and distributors, OEMs, installers, consumers, and industry associations. The Petroleum Quality Institute of America will lead the effort to create the council. The mission of the council is to assure the quality, integrity and proper use of ATFs in the marketplace. It will achieve this objective by:
 - Conducting additional surveys, interviews, and/or focus groups of installers and lubricant distributors to gain a better understanding of their experiences with education on the topic of ATF and their views as to material and delivery systems the industry can provide to help educate them on the quality of ATF and its specifications and applications.
 - Improving the language used on labels and sales collateral to describe ATF applications.
 - Developing and encouraging practices and use of support material to improve installer knowledge about ATF quality issues and applications, as well as the risks around the misuse of ATF.
 - Developing and encouraging implementation of methods to further educate consumers about ATF quality issues and applications, as well as the risks around the misuse of ATF.



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