INTERNATIONAL PRODUCTS CORPORATION
REPRINT SUMMARY
JULY 2012

International Products Corporation Awarded the 2012 Frost & Sullivan North American Product Leadership Award

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SUMMARY: Many industries rely heavily on natural and synthetic rubber for manufacturing purposes. The slip resistant nature of rubber makes it difficult to install, remove or manipulate. The installation of rubber components can take up considerable time on the assembly line. Improper alignment or installation may lead to a reduction in the life-cycle of the component and result in inherent safety issues. Ergonomics and worker safety are also concerns. There are many assembly applications that can benefit from reduced friction and increased safety including, but not limited to, the installation of belts, bumpers, seals, gaskets, grommets, bushings, O-rings, tires and hoses.

Frost & Sullivan, an independent global research organization, has awarded International Products Corporation (IPC) the 2012 North American Product Leadership Award in Automotive Assembly Lubricants for its line of P-80® Temporary Assembly Lubricants. Frost & Sullivan used the following criteria to evaluate P-80®'s performance versus that of key competitive products:

- Product Features / Functionality
- Product Acceptance in the Marketplace
- Product Quality
- Innovative Element of the Product
- Customer Value Enhancements

The results of the study indicated that P-80® ranked highest in every one of the above areas.

P-80® Temporary Rubber Lubricants reduce assembly time and part failure, while increasing safety. P-80® can be used to:

- Reduce installation force
- Increase production rates
- Reduce rejects
- Achieve closer fits
- Improve product performance
- Avoid musculoskeletal and slippage related injuries

P-80® Temporary Assembly Lubricants *are available from* ***International Products Corporation*** *headquartered in Burlington, New Jersey. Please refer to page two for information on how to obtain a sample of* ***P-80®*** *for evaluation in your assembly application. For detailed product information please visit our website at* ***www.ipcol.com*** *or call* ***609-386-8770.***

HERE IS YOUR FREE CHANCE TO DISCOVER WHY

P-80®

TEMPORARY RUBBER LUBRICANTS

SHOULD BE YOUR ASSEMBLY LUBRICANTS OF CHOICE

Ease Installation and Increase Output with P-80® Temporary Assembly Lubricants. A product's components must fit tightly in order to function properly. Low tolerance parts require great exertion for installation, often resulting in damaged parts and injured workers. P-80 solves this problem by providing temporary lubrication that eases assembly operations.

P-80 Temporary Rubber Lubricants:

- Increase production rates
- Reduce rejects
- Improve product performance
- Reduce installation force
- Achieve closer fits
- Help prevent musculoskeletal and slippage related injuries

Fax this form for a FREE SAMPLE to 609-386-8438

Please send me a sample of (check below):

☐ **P-80® EMULSION**
Temporary Rubber Assembly Lubricant
Biodegradable formula ideal for use in easing assembly of o-rings, hoses, grommets and bushings.

☐ **P-80® THIX**
Temporary Rubber Lubricant Gel
Biodegradable gel that stays where it is applied without dripping, especially useful for vertical or overhead applications.

☐ **P-80® GRIP-IT**
Quick-Drying Temporary Lubricant
Dries quickly and slightly tacky to help parts stay in place.

☐ **P-80® REDILUBE**
Temporary Rubber Assembly Lubricant
Biodegradable formula excellent for use on non-porous and coated rubber. Dries quickly to allow the natural tight fit of rubber to return.

☐ **P-80® EMULSION IFC & P-80® THIX IFC**
For Incidental Food Contact
Have the same lubricating properties as the industrial P-80® Emulsion and P-80® THIX but are NSF registered as H1 lubricants and they meet FDA regulation 21 CFR 178.3570 allowing use in incidental food contact applications.

Send my no-obligation sample and MSDS to:

_____
Name

_____
Title

_____
Company

_____
Address

_____
City / State / Zip

_____
Phone

_____
Email

_____
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FROST & SULLIVAN

2012

International Products CORPORATION

2012 North American Automotive Assembly Lubricants Product Leadership Award

FROST & SULLIVAN

50 Years of Growth, Innovation & Leadership

Product Leadership Award
Automotive Assembly Lubricants
North America, 2012

Frost & Sullivan's Global Research Platform

Frost & Sullivan is in its 50th year in business with a global research organization of 1,800 analysts and consultants who monitor more than 300 industries and 250,000 companies. The company's research philosophy originates with the CEO's 360-Degree Perspective™, which serves as the foundation of its TEAM Research™ methodology. This unique approach enables us to determine how best-in-class companies worldwide manage growth, innovation and leadership. Based on the findings of this Best Practices research, Frost & Sullivan is proud to present the 2012 North American Product Leadership Award in Automotive Assembly Lubricants to International Products Corporation.

Significance of the Product Leadership Award

Key Industry Challenges Addressed by P-80® Assembly Lubricants

The automotive industry relies heavily on natural and synthetic rubber for various purposes within chassis, engine and suspension components. Its applications vary from component mounts, various seals, protective surfaces, belts, bushings, O-rings, and hoses, and other powertrain components and subsystems. Due to the slip resistant nature of rubber, it is relatively difficult to install, remove or manipulate rubber components. Market participants report to Frost & Sullivan that complex and tight fitting rubber components take up considerable time on the assembly line. Improper alignment or installation may also lead to reduction in the life-cycle of the component and result in inherent safety issues.

During the design phase for rubber components, they are tested to ensure proper fit and finish, along with analysis of the forces required to achieve a clean fit. An improper installation may lead to component damage, increased waste, damage to the production line and the requirement of excessive assembly force. Cutting rubber parts is also a challenge, as it is quite soft and tends to squirm; achieving perfect cuts is difficult without a lubricant or cutting medium.

Traditionally, lubricants were used to provide ease of assembly; however, the residual lubrication may result in health and safety hazards, reduced functionality or reduced aesthetic appeal. Some lubricants may also react to chemical environments, which the vehicle may undergo during day to day use. At times, the lubricants used may not be bio degradable and may harm the environment in the long run. Improper lubrication for assembly components may also lead to injuries during assembly, creating a hindrance for worker safety.

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Frost & Sullivan feels that the industry needs to address the issue of improper and residual lubrication, along with a customized solution for different requirements. Health and safety issues and environment concerns are also ever increasing in the automotive industry; these are challenges which all must be addressed by an appropriate product.

Key Benchmarking Criteria for Product Leadership Award

For the Product Leadership Award, the following criteria were used to benchmark International Products Corporation's performance against key competitors:

- **Product Features/Functionality**
- **Innovative Element of the Product**
- **Product Acceptance in the Marketplace**
- **Provides Customer Value Enhancements**
- **Product Quality**

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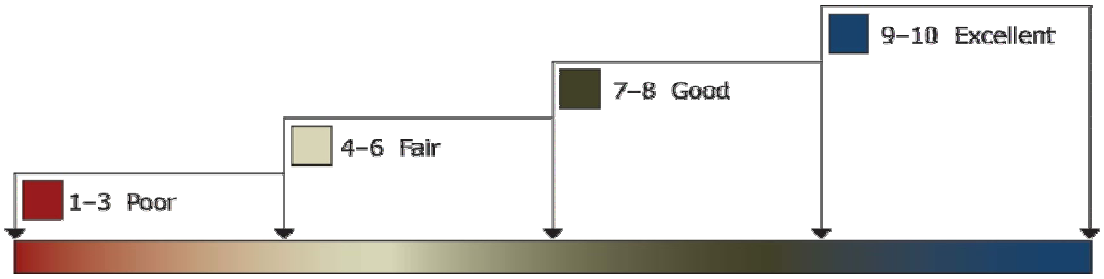
Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies' performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company's performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 2.

Chart 2: Performance-Based Ratings for Decision Support Matrix



This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

Chart 3: Frost & Sullivan's 10-Step Process for Identifying Award Recipients

Best Practice Award Analysis for International Products Corporation

The Decision Support Matrix, shown in Figure 4, illustrates the relative importance of each criterion for the Product Leadership of the Year Award and the ratings for each company under evaluation. To protect the interests of the Award recipient's competitors, we have chosen to refer to them as Competitor 1 and Competitor 2.

Figure 4: Decision Support Matrix for Product Leadership Award

Measurement of 1–10 (1 = lowest; 10 = highest)	**Award Criteria**					
	Features/Functionality	Innovative Element of the Product	Product Acceptance in the Marketplace	Provides Customer Value Enhancements	Product Quality	**Weighted Rating**
Relative Weight (%)	**20%**	**20%**	**20%**	**20%**	**20%**	**100%**
International Products Corporation	**7**	**8**	**8**	**9**	**9**	**8.2**
Competitor 1	6	6	7	7	7	6.6
Competitor 2	7	6	7	8	6	6.8

Criterion 1: Product Features/Functionality

Rubber assemblies usually require large forces to slide rubber parts over metal or plastic surfaces, which may lead to physical stress or injuries for workers. It may also lead to poor fit and finish and diminish the overall product quality. The issues are further amplified in commercial vehicle (trucks and busses) segments, where improper bushings can result in damage to driveline or suspension systems, as heavy weights are involved.

Frost & Sullivan competitive benchmarking concludes that the P-80 range of Temporary Assembly Lubricants from International Products Corporation (IPC) brings the best solution to address this problem. The P-80 lubricants are a complete range from which customers can choose different viscosities, lubricant base, drying properties, and how the lubricant behaves after it dries out. Lubricants can be chosen to suit compatibility to different surfaces and materials for frictional characteristics. It significantly reduces the effort required to attach soft plastic and rubber parts onto metal or plastic components to create an assembly.

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Criterion 2: Innovative Element of the Product

The traditional rubber assembly lubricants have a tendency to leave residues. This residue often becomes soft and allows slippage between surfaces in critical circumstances, due to contact with a liquid or chemical. Furthermore, this poses a threat to the user's health and safety once the product is in its functional environment. At times, excess of residue may result in poor aesthetic value for the component. Cleaning agents for such lubricant products are available, but can be expensive at times, which may add to production costs.

Frost & Sullivan feels that the most innovative factor of the P-80 lubricants range is that it is developed to keep residues at a minimum. It ensures only temporary lubrication at the time of assembly. Most of the P-80 lubricants are completely biodegradable, and the residue is non-reactive, so the two component surfaces retain their expected frictional characteristics. Once applied, it would allow tight fitting rubber or plastic components to slide effectively, with little effort to achieve desired results. The residue can be simply wiped off or washed with water or detergents, without any special cleaning agents.

OEMs and suppliers using P-80 lubricants benefit from ease of assembly without the penalty of steep costs to eliminate or wash away excessive lubricant residue, achieving better finish and meeting their health and safety goals at the same time.

Criterion 3: Product Acceptance in the Marketplace

The acceptance or recognition of a product in the market is a critical parameter that represents the significance and value addition that it offers to its customers. It eventually determines the success of the product from both a technological and cost perspective.

The P-80 range initially consisted of just the P-80 Emulsion; however, IPC realized the need for different customers, who had trouble applying the emulsion based lubricant, as it would drip away all over the assembly. IPC introduced the P-80 THIX (Thixotropic Gel), which would stick to the surface as it has a non-drip composition. It became the first vertical friendly assembly operations lubricant.

Since 2002, IPC has increased the range to six different products suited to different user requirements, which are described as follows. The P-80 Grip-is a quick-dry solution that provides resistance once dried, and helps keep the parts in place and does not react to liquids in the work environment. The P-80 RediLube allows quick drying after fixture is done and is specifically suited to non-porous and rubber coated parts. Apart from these categories, IPC has made P-80 Emulsion IFC suited to Incidental Food Contact (IFC) with FDA and NSF requirements and is registered as an H1 lubricant. A similar P-80 THIX IFC is also available. IPC has worked over the past decade to widen the potential for P-80 lubricants, from automotive and mechanical assemblies to other industries, such as food and healthcare.

Criterion 4: Provides Customer Value Enhancements

Improvement in customer value is an integral part of the development process of any new product. Designing products of high quality, keeping in mind the customer requirements, makes it more appealing for end users. Moreover, it indicates that value propositions that

meet or exceed customer expectations generally possess the potential to enhance customer value.

People working with rubber parts are often injured as a result of the force used in assembly. P-80 lubricants can substantially reduce the pressure needed to complete an assembly job, thereby improving worker safety. For example, a hose-to-cap fitting that originally takes 45kg of pressure to install required only 13kg of pressure with the aid of P-80 lubricant. Fewer forces mean less strain on workers' hands and also reduced likelihood of injuries related to slippage. P-80's benefits are not limited to ease of assembly, but it prevents the areas adjacent to the assembly line from any damage as well as the part assembled from being ripped or damaged due to excessive forces.

The use of P-80 lubricants improves rubber assemblies, speeds up productivity, reduces waste, and helps to ensure a high-quality end product. Frost & Sullivan points out that unlike its competitors, IPC's P-80 products are water-based, non-toxic, non-flammable, easy to dispose, and ready to use. P-80 is NFPA (National Food Processors Association) rated at 0-0-0 and contains negligible VOCs (Volatile Organic Content), with the spillages capable of being cleaned with a cloth or a sponge.

Criterion 5: Product Quality

A note of importance with regards to products is that even though OEMs source components from suppliers, it is the OEMs that offer a complete product warranty to the end customer. Thus any quality issues arising from a supplier component, while initially affecting the OEM, will eventually affect the business with the supplier, depending on the scale of the issue. The quality expectation from Tier 1 and Tier 2 suppliers are constantly on the rise, with the OEMs' continuous drive towards higher reliability and zero defects. Being a global supplier automatically ensures a high expectation in terms of quality from the customers.

The P-80 lubricants from IPC help suppliers and OEMs ensure consistent assembly and maintain quality fit-and-finish for rubber and soft plastic products. IPC remains quite focused, with a drive towards increasing quality of products and also reducing production effort and time. IPC has undertaken internal R&D to ensure that all the assembly needs of its customers are catered to. In case a customer has a new requirement, IPC is equipped to handle the sample fittings in house and recommend an appropriate solution from their product line. This ensures long-term partnerships for IPC and translates into low production costs for its customers. IPC is also willing to look into specialized product requirements, if required by its customers.

Conclusion

From an OEM and a supplier's perspective, the P-80 lubricants offer a compelling case to achieve perfect fit and reliable quality for rubber and plastic assemblies. It further reduces the risk to their workforce and the likelihood of damage to the component or assembly environment. Simple cleaning techniques ensure no harmful effects once the components or products leave the assembly line. IPC's ability to understand and test customer's components at their own facility increases the prospect of market penetration. The P-80 lubricants prove to be the most ideal solution for the automotive powertrain and assembly market, and International Products Corporation is therefore the recipient of the 2012 Frost & Sullivan Product Leadership Award.

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The CEO 360-Degree Perspective™ - Visionary Platform for Growth Strategies

The CEO 360-Degree Perspective™ model provides a clear illustration of the complex business universe in which CEOs and their management teams live today. It represents the foundation of Frost & Sullivan's global research organization and provides the basis on which companies can gain a visionary and strategic understanding of the market. The CEO 360-Degree Perspective™ is also a "must-have" requirement for the identification and analysis of best-practice performance by industry leaders.

The CEO 360-Degree Perspective™ model enables our clients to gain a comprehensive, action-oriented understanding of market evolution and its implications for their companies' growth strategies. As illustrated in Chart 5 below, the following six-step process outlines how our researchers and consultants embed the CEO 360-Degree Perspective™ into their analyses and recommendations.

Chart 5: CEO's 360-Degree Perspective™ Model

Critical Importance of TEAM Research

Frost & Sullivan's TEAM Research methodology represents the analytical rigor of our research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all seven of Frost & Sullivan's research methodologies. Our experience has shown over the years that companies too often make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Frost & Sullivan contends that successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. In that vein, the letters T, E, A and M reflect our core technical, economic, applied (financial and best practices) and market analyses. The integration of these research disciplines into the TEAM Research methodology provides an evaluation platform for benchmarking industry players and for creating high-potential growth strategies for our clients.

Chart 6: Benchmarking Performance with TEAM Research

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best-practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 40 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.

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