

# Cargill Road Safety

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Protect lives and enhance commerce by providing sustainable road safety solutions.

*Cargill*<sup>®</sup>





# Winter Maintenance solutions





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**Tel.** 1-800-600-SALT (7258)  
**Web.** [CargillDeicing.com](http://CargillDeicing.com)





Every day  
we strive to  
keep roads safe  
for everyone.



# About Us

Know who we are —

Headquartered in North Olmsted, Ohio, Cargill Salt Road Safety has been a premier deicing solutions provider in North America since 1997. Strategically located operating facilities in North America, we provide our customers with a deicing portfolio that helps protect lives and enhance commerce by providing sustainable road safety solutions.

We strive to be a partner that you can depend on to deliver cost effective, environmentally conscious, high performing products and services. We understand the importance of keeping roads safe in winter while respecting the environment.

Through collaboration, we have developed and continue to innovate with our customers. Having a commitment to research and development, we are developing products and services that help keep North America moving in a manner that is best for the end users of our technologies and Mother Nature.



## Availability. Local access.

When it comes to availability, Cargill delivers. Our nationwide production and distribution capabilities provide you with access to bulk rock and enhanced salt where and when you need it. And no matter if you need 100 tons or 100,000 tons, we can be your partner of choice.



## A solid company history.

With Cargill you get a sense of security. You know that the company providing your deicer is solid, stable, and delivers the highest quality products in the industry. You benefit from the skills and experience, amassed in over 100 years of doing business. You get trust, quality, and dependability.



## Your service partner.

When the weather turns severe, you cannot afford to lose valuable time placing orders, worrying about supply, or tracking deliveries. With Cargill, you get a partner whose dedication to customer service ensures you get your order placed and your product delivered.

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# AccuBatch<sup>®</sup>

brine maker —

## Introduction

The decision to purchase a brine making system can be an overwhelming but rewarding task. With so many options to choose from and numerous factors to consider, finding the right fit takes time. Although cost-effective, many entry-level models lack the key features desired to make your brine easily, accurately, and without hassle - until now.



## Simple Setup

The simple plug and play design is a semi-automated do-it-yourself operational system. Just hook up the water and power and begin making brine without the setup costs or the need for technical assistance.





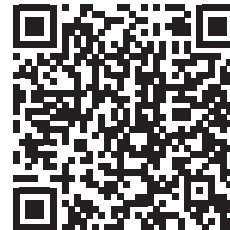
### Automatic Brine Concentration

The AccuBatch® brine maker is capable of producing up to 800 gallons of brine per batch. Make what you need when you need it. AccuBatch® is the ideal introduction into brine production because it is made with your operation in mind; easy to use and made with quality to last.



### Production Capacity

The AccuBatch® brine maker is capable of producing up to 800 gallons of brine per batch. Make what you need when you need it.



Can be purchased on:



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# AccuBrine® NXT-Gen

automated brine maker —

## Introduction

The the AccuBrine® automated brine maker NXT-Gen. All the benefits of brine — with none of the production and consistency headaches.



## Accuracy and Efficiency

With features such as an operator interface screen layout and PLC program to provide a cleaner screen navigation, remote access to improve troubleshooting capabilities, and tank level management logic for better truck loading accuracy, the AccuBrine® automated brine maker NXT-Gen is equipped to adapt to customer needs and help achieve your business goals.





### Always Ready

Developed with durability in mind, the AccuBrine® automated brine maker NXT-Gen is manufactured from marine-grade fiberglass to withstand the harsh, corrosive nature of salt, water, and winter conditions.

Investing in the AccuBrine® automated brine maker NXT-Gen additionally translates into long-term savings. Investment costs are quickly recouped through reduced operational costs including less production time, less manual labor, and fewer deicing applications of regular road salt.



### Expands with Your Program

As your liquids program continues to grow, the AccuBrine® will adapt to the changes made as it easily connects to the AccuBrine® blend truck loading & blending system. Capable of mixing multiple additives with your brine, this addition gives you the freedom to create various different recipes ensuring you are ready for whatever mother nature throws your way.



Can be purchased on:



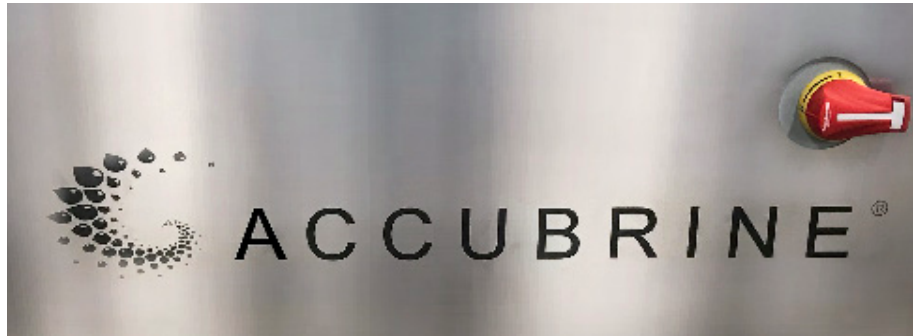
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# AccuBrine® blend V2

loading & blending system —

## Introduction

With the AccuBrine® Blend v2 system, you can create custom liquid blends of your choosing at the touch of a button. This modular system enables you to produce any custom blend by mixing your brine with various other liquid additives to enhance performance and lower the effective melting temperature. This is the best way to achieve the custom blends you desire efficiently and accurately.



## Expands to Meet Your Needs

Designed to accommodate customers who want to load trucks quickly and make custom brine recipes, the AccuBrine® blend v2 adds to any existing brinemaker setup, as this truck loading & blending system operates independently of the brinemaker.





### Easy. Accurate. Efficient

The AccuBrine® blend v2 system eliminates the need to store blended product in storage tanks as a custom blend can be made in real time as it is being sent directly to a liquid application truck. Product dispensed will be measured via a corrosion resistant, in-line Flow Meter. The storage tank volume sensors provided to determine if enough volume of each product is available to produce desired blend.



### Product Recirculation

Ability to schedule for automatic recirculation of tanks during off-hours to help eliminate stratifications and solids settling out of solutions. Requires storage tanks to be plumbed according to recommendation.

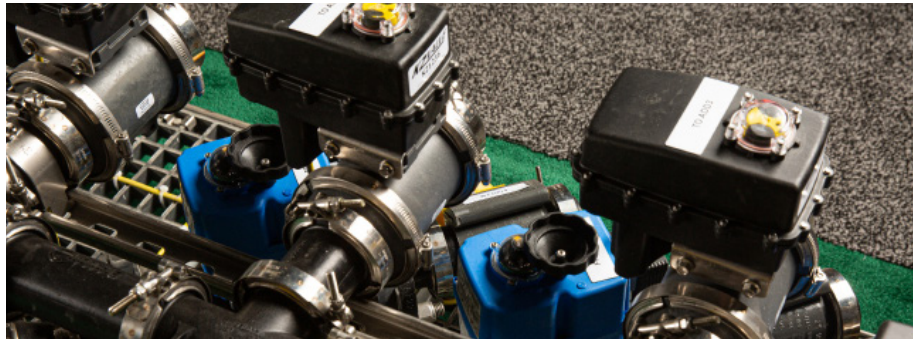
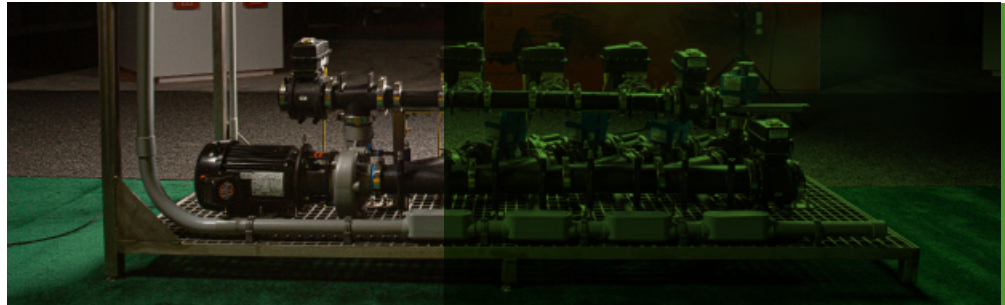


# AccuBrine® blend

loading & blending system —

## Introduction

You know what works best on the surfaces you manage; Take your brine program to the next level by developing your own customized liquid blends to tackle your specific winter weather situation with the AccuBrine® blend truck loading & blending system. This state-of-the-art system works independently of your brine maker and gives you the freedom and flexibility to grow your liquids program as you see fit.



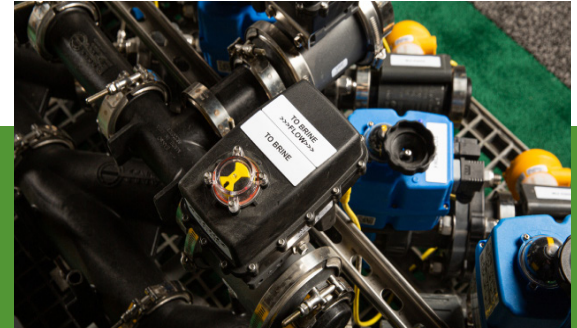
## Expands to Meet Your Needs

Designed to accommodate customers who want to load trucks quickly and make custom brine recipes, the AccuBrine® blend truck loading & blending system can load brine only or make a volume ratio blend of brine and various additives directly into your liquid application trucks. Its adaptability ensures that you will easily be able to meet current and future liquid use.



### Easy. Accurate. Efficient

Using an in-line volume ratio blending method to fill your truck with customized brine blends accurately and quickly, the AccuBrine® blend truck loading & blending system's modular design gives you the option to add multiple additives to blend with brine. The system also gives you the option to add tanker truck offload capabilities easily and economically. Finally, it eliminates the need to store blended product in storage tanks as a custom blend can be made in real time as it is being sent directly to a liquid application truck.



### Blend the Liquids You Want

The AccuBrine® blend truck loading & blending system works with virtually any liquid additive. With so many options available, the AccuBrine® blend truck loading & blending system will ensure that you have the right combination in any given temperature and be prepared for whatever Mother Nature sends your way.



Can be purchased on:



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# ClearLane®

enhanced road salt —

## Introduction

ClearLane® enhanced deicer is a pre-wet sodium chloride made from a patented liquid magnesium chloride formula and mixing process. Combined with pre-wetting and deicing agents, including a PNS-approved corrosion inhibitor, a coloring agent, and a leaching inhibitor, ClearLane® is a superior deicer for effective winter road maintenance that's anti-corrosive, better for the environment than traditional road salt and an alternative to road salt.



## Less chloride. More green friendly

Plain and simple, ClearLane® enhanced deicer is better for the environment, when compared to the solutions on the market. Because the same deicing effect is achieved using 30% less product when compared to regular rock salt, spreading less product on the road means fewer chlorides in the environment.



### Less scatter. Less cost

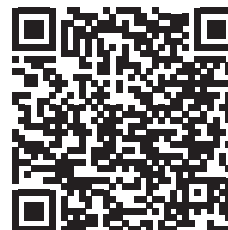
When salt hits the road from application trucks, it often bounces to the edges of the pavement. Traffic action also contributes to the scattering effect. With ClearLane® enhanced deicer the patented liquid treatment helps the product adhere to the road surface better.

Lab tests show, 80% of ClearLane® enhanced deicer stays within 18 inches of where it lands as opposed to 51% of bulk deicing salt. That means you get less bounce and less scatter, which translates to fewer applications, less product use and less overall cost.



### Reduced corrosion. Longer Equipment Life

Harmful rust and corrosion that results from extensive salt use often diminishes the life of application equipment. The patented PNS-approved corrosion inhibitor found in ClearLane® enhanced deicer is better than traditional road salt for your fleet, helping extend the life of your application vehicles.



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# SafeLane® CA-48

surface overlay —

## Introduction

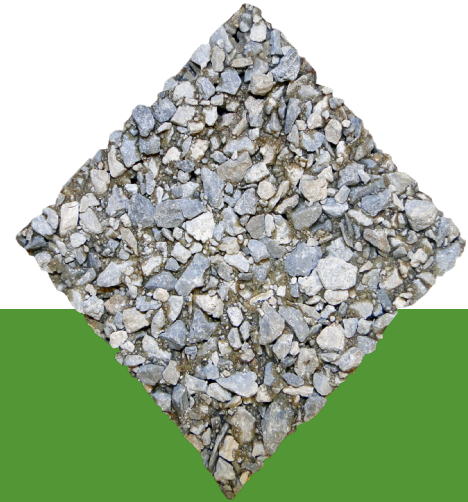
SafeLane® CA-48 surface overlay works with your anti-icing applications to help prevent the formation of black ice and frost in addition to keeping light snow from bonding to the walkway surface. Combining residual effects with infrastructure protection and increased friction, this three-in-one product helps keep pedestrians safer while providing a surface that protects your investment.



## Safer Surfaces. Friendlier on the Environment

SafeLane® surface overlay is a unique, patented, ADA-compliant epoxy-aggregate pavement surface that stores anti-icing and deicing chemicals for longer periods of time during and after snowstorms, and then releases them when needed. With better-targeted applications the amount of chemicals used is greatly reduced, resulting in less run-off into surrounding vegetation.



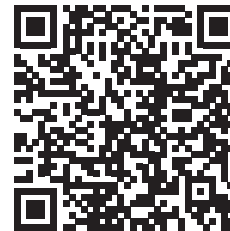


### Increasing Infrastructure Life

SafeLane® CA-48 surface overlay combats corrosion, common effects from harsh winter conditions. The impermeable epoxy layer seals the pavement and creates a durable bond with the aggregate, which helps prevent water, chlorides and chemicals from permeating and damaging the infrastructure.

### Better Traction and Anti-Slip Properties

The unique aggregate in SafeLane® CA-48 surface overlay provides longer residual effects that can create safer pedestrian pathways by helping to prevent snow accumulation and frozen precipitation from bonding to the surfaces more effectively when compared to common paving surfaces such as asphalt and concrete. Additionally, SafeLane® CA-48 surface overlay helps to prevent the formation of black ice. As a result, all-season walking or jogging conditions are less dangerous.



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# SafeLane® HDX

surface overlay —

## Introduction

SafeLane® HDX surface overlay works with your anti-icing applications to help prevent the formation of black ice and frost in addition to keeping light snow from bonding to the road surface. Studies show that preventing slippery conditions on winter roadways can reduce accidents by as much as 75%. Combining residual effects with infrastructure protection and increased friction, this three-in-one product helps keep drivers safer while protecting your investment; making it one of the most effective winter maintenance solutions available.



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**Cargill Road Safety**  
Brochure

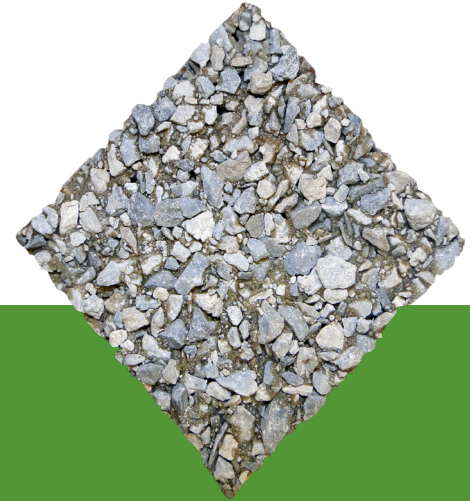
## safer Surfaces. Friendlier on the Environment

SafeLane® surface overlay is a unique, patented, epoxy-aggregate pavement surface that stores anti-icing and deicing chemicals for longer periods of time during and after snowstorms, and then releases them when needed. With better-targeted applications the amount of chemicals used is greatly reduced, resulting in less run-off into surrounding vegetation.



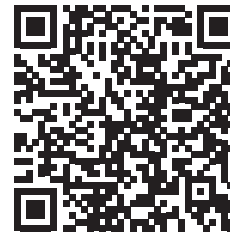
### Better Traction and Anti-Skid Properties

The unique aggregate in SafeLane® HDX surface overlay provides longer residual effects when working with chemicals, that can increase driver safety by helping to prevent snow accumulation and frozen precipitation from bonding to winter roads more effectively when compared to common paving surfaces such as asphalt and concrete. Additionally, SafeLane® surface overlay helps to prevent the formation of black ice. As a result, all-season driving conditions are less dangerous.



### Increasing Infrastructure Life

SafeLane® HDX surface overlay combats infrastructure damage and corrosion, common effects from harsh winter conditions. The impermeable epoxy layer seals the pavement and creates a durable bond with the aggregate, which helps prevent water, chlorides and chemicals from permeating and damaging the infrastructure.

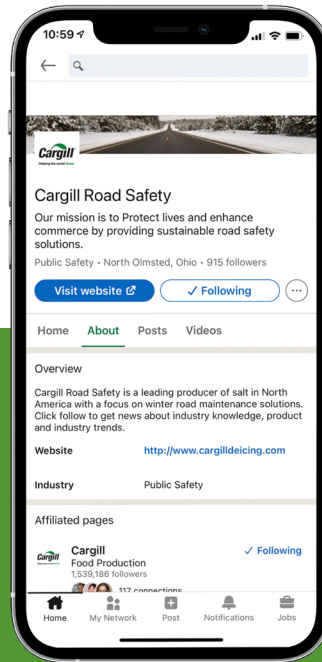


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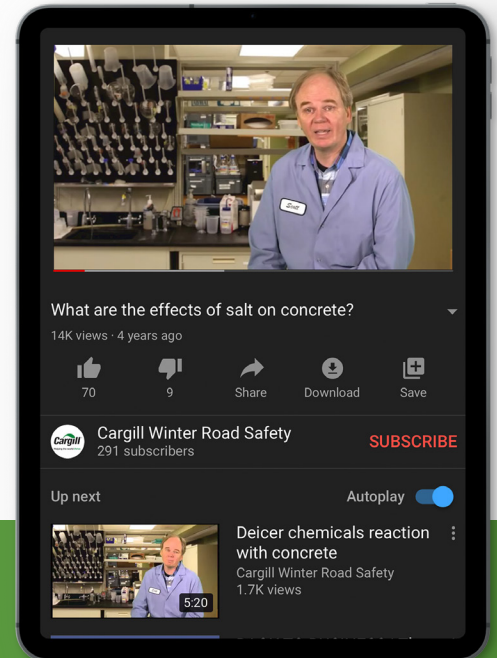
# Online Resources

Our latest works —



## LinkedIn

<https://www.linkedin.com/showcase/cargill-road-safety/>

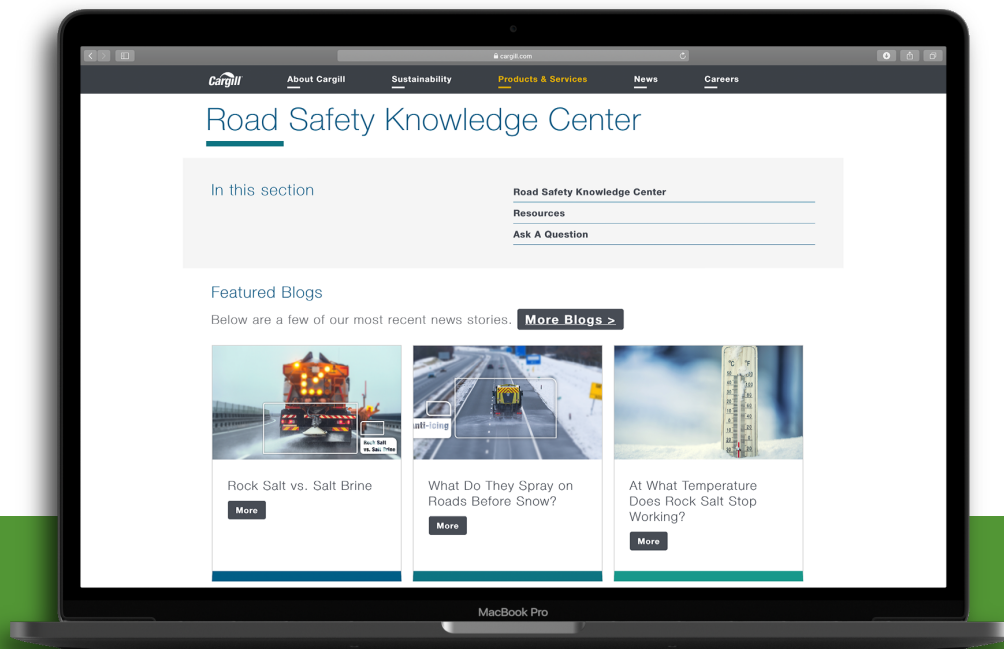


## YouTube

<https://www.youtube.com/Cargilldeicing>

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**Cargill Road Safety**  
Brochure



# Knowledge Center

<https://www.cargill.com/industrial/knowledge-center-blog>

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# Ask Dr. Scott

Principal Scientist for Cargill Road Safety

## Background

Dr. Scott Koefod has been involved in the study of deicers for over 20 years in his role as Principal Scientist for Cargill Road Safety. Scott received his Ph.D. in inorganic chemistry at the University of Minnesota in 1990 and did two years of postdoctoral research at the University of Illinois at Urbana-Champaign before he started working for Cargill in 1992.

In his role as an R&D scientist for Cargill Salt and Cargill Road Safety, Scott has worked on a variety of salt applications, but has devoted a

significant portion of his career to the study and development of deicing products.

Scott is the principal inventor on 18 U.S. patents, 12 of which are related to deicing.

In addition to his work at Cargill, Scott also taught chemistry at the University of Minnesota from 1996 to 2007

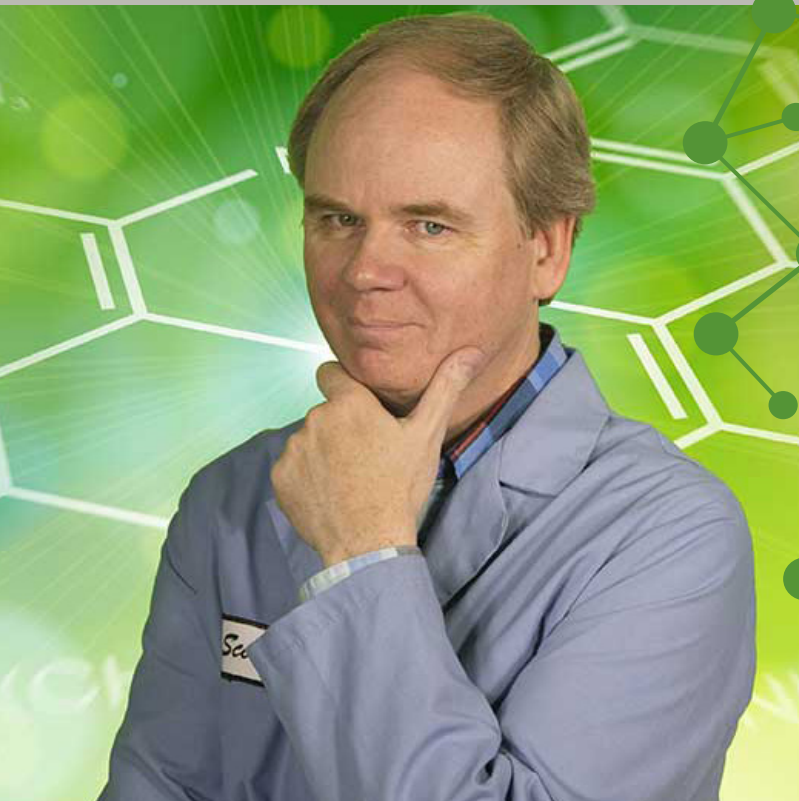
## Ask Dr. Scott

Do you have a question about your current deicing program? Perhaps you are considering anti-icing and would like more background on which chemicals to use in addition to brine. Let Cargill Road Safety's Principal Scientist help you out by keeping you informed and educated of the latest research and developments in the world of deicing.

**Scan to ask your question!**







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