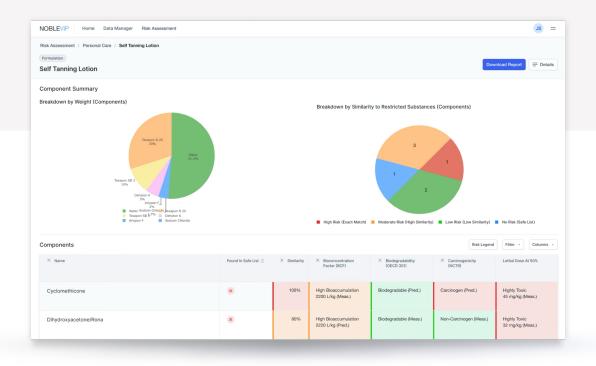


# Risk Assessment + Ingredient Replacement



## **About NobleAl**

NobleAl delivers practical Al solutions for chemistry and energy companies tackling complex, multi-scale challenges. Our Science-Based Al technology and VIP Platform compress months of work into minutes, which accelerates innovation, improves decision-making, and creates substantial economic value. Trusted by global enterprises, our proven Al solutions help optimize performance, reduce time-to-market, and drive profitability.

# Risk Assessment + Ingredient Replacement

NobleAl Risk Assessment (RA) empowers teams to rapidly identify and evaluate risks in product formulations, while Ingredient Replacement (IR) delivers real-time, safer alternatives for hazardous or unsustainable components. These tools enable data-driven decisions that ensure product safety and sustainability without sacrificing performance.

Together, RA and IR on the VIP Platform offer a comprehensive solution to accelerate development timelines, meet regulatory requirements, and maintain product excellence, all achieved in minutes instead of months.



#### **Risk Assessment**



#### Substance Risk Evaluation

Analyze substances to identify potential physical, chemical, and environmental hazards.



#### **Toxicology Data Integration**

Integrates toxicology databases and regulations to provide comprehensive toxicity information.



#### **Regulatory Compliance Checker**

Cross-checks substances with global regulations to ensure compliance with hazardous substance rules.



#### **AI-Powered Risk Prediction**

Predict risk profiles of substances using machine learning models based on chemical properties.



#### **Automated Reporting**

Generate and export risk assessment reports for decision making and team-wide collaboration.

### **Ingredient Replacement**



#### New Inverse Design Job Type

Access ingredient replacement optimization directly within existing job workflows.



#### **AI-Driven Replacement Solutions**

Predict alternative formulations using machine learning while preserving key properties.



#### **Formulation Property Matching**

Retain critical formulation characteristics like viscosity, stability, and performance.



#### **Formulation Comparison Insights**

Compare old and new formulations based on safety, performance, and cost.



#### **Regulatory Compliance Integration**

Ensure suggested formulations meet global and regional regulatory standards.

