



When Logic Takes Over: A Smart Chemical Approval

September 2019



Agenda

- Introduction to Chemical Approval
- What Information do I need?
- How do you get the data?
- Where does the data flow?
- Why should I control the process?

What Is Chemical Approval?



Captain Charlie Plumb

"I packed your parachute. I guess it worked!"

"It sure did. If your chute hadn't worked, I wouldn't be here today."

Efficient process are critical
for success.



Chemical Approval?

Evaluation Criteria

- ✓ Business requirements
- ✓ Legal requirements
- ✓ Regulations
- ✓ Safety requirements
- ✓ Environmental, Health and Safety
- ✓ Product Stewardship
- ✓ Green Chemistry

What Information Do I Need for Chemical Approval ?

WHAT?

What data is needed?



What Information Do I Need for Chemical Approval ?

WHAT?

What data is needed?



HOW?

How is it captured?



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WHERE?

How does the data flow through the organization?
Is it cross-referenced?



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NOW WHAT?

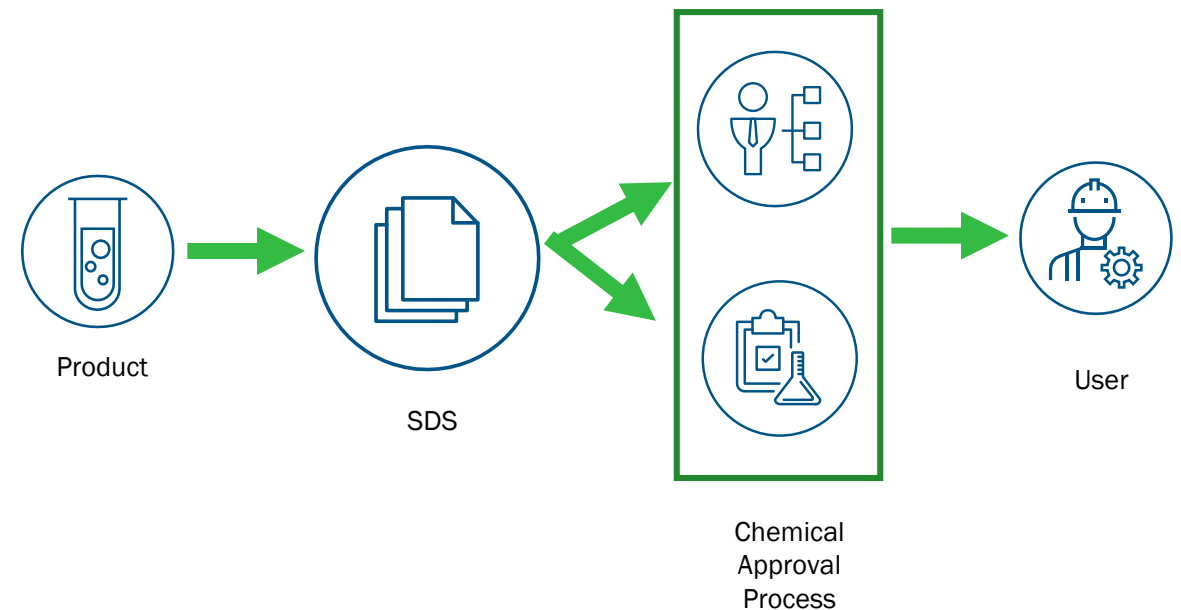
What happens at the end of an approval or denial?





What Data Is Needed?

- Data drives your process
- Majority of this data comes from the Safety Data Sheets (SDS)
- Best Practice: Insight and visibility to SDS data





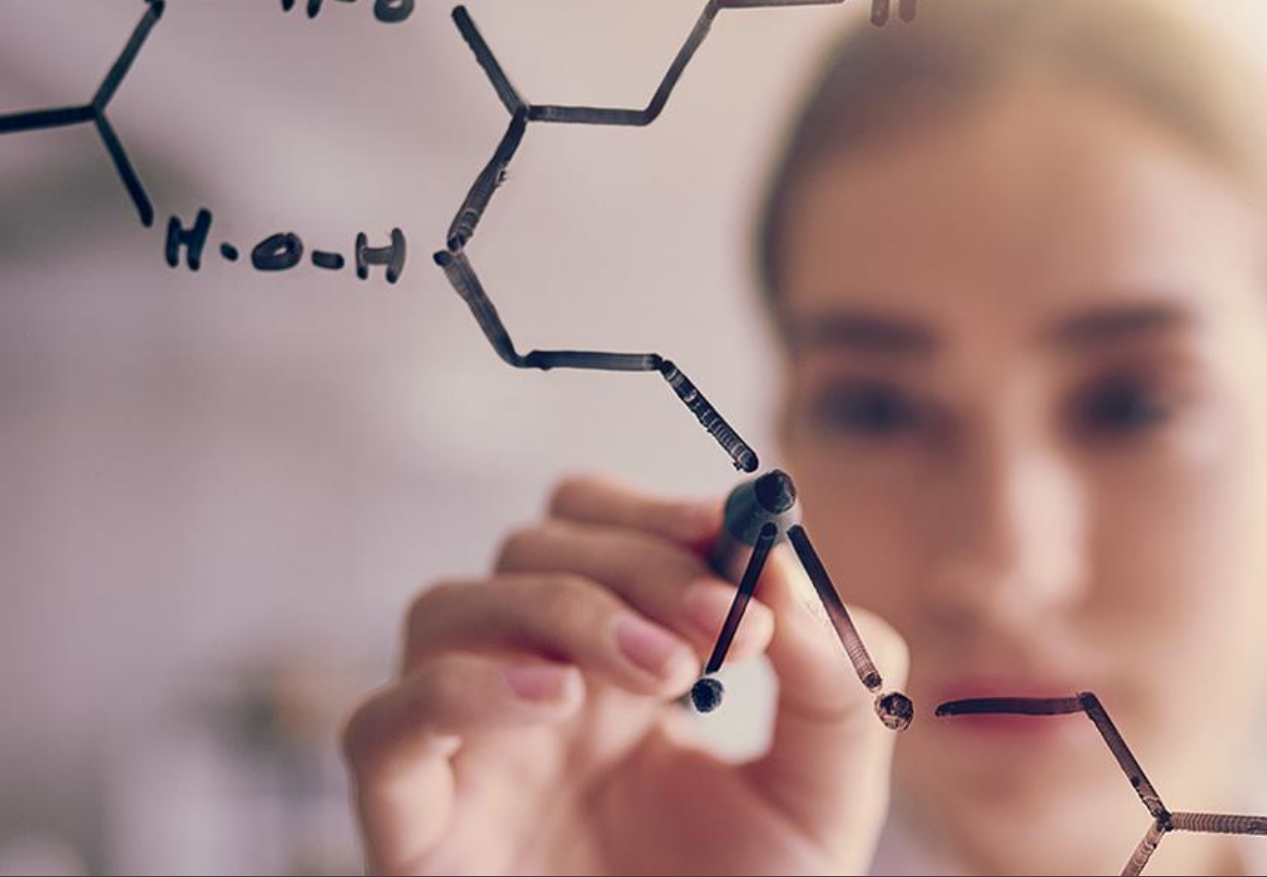
Additional Data Sources

- ☑ Full disclosure
- ☑ Supplier information
- ☑ Supplementary documentation



Poll: How do you capture the data you need to make decisions?

- Paper forms
- Homegrown system
- Software Application/ERP
- No system
- Other



Where is this chemical used:

- Laboratory
- In Process
- Janitorial
- Food Services
- Medical

Capturing Data: Forms



“Smart” Forms

Benefits:

- ✓ Data is accurately captured reducing error
- ✓ Users are not overwhelmed with irrelevant questions
- ✓ User’s focus can be directed to provide data which will have the most impact on the organization
- ✓ It streams line the process and saves a lot of time and duplicity in effort

Where is this chemical used:

- Laboratory
- In Process
- Janitorial
- Food Services
- Medical

Medical

What is the state of the material

- Solid -Crystal
- Solid - powder
- Liquid
- Gas

Is this an Active/Inactive material

- Active
- Inactive

What is the characteristics of the chemical

- Vehicle
- Diluent
- Reactant
- Solvent
- Buffer

How is this chemical administered

- Oral

Where is this chemical used:

- Laboratory
- In Process
- Janitorial
- Food Services
- Medical

IF, THEN

Where is this chemical used:

- Laboratory
- In Process
- Janitorial
- Food Services
- Medical

Laboratory

What kind of ventilation does this material require

- HVAC
- Exhaust Fan
- Exhaust hood
- No special ventilation required

Does it require special clothing while handling

- Yes
- No

Check the type of clothing required

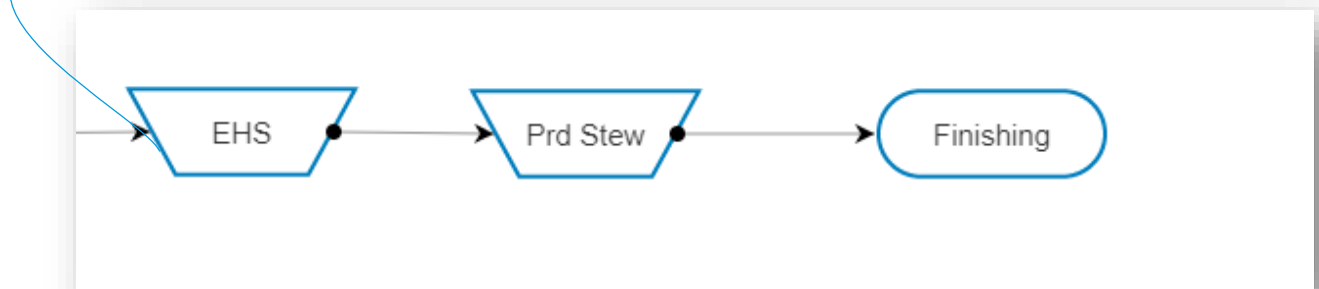
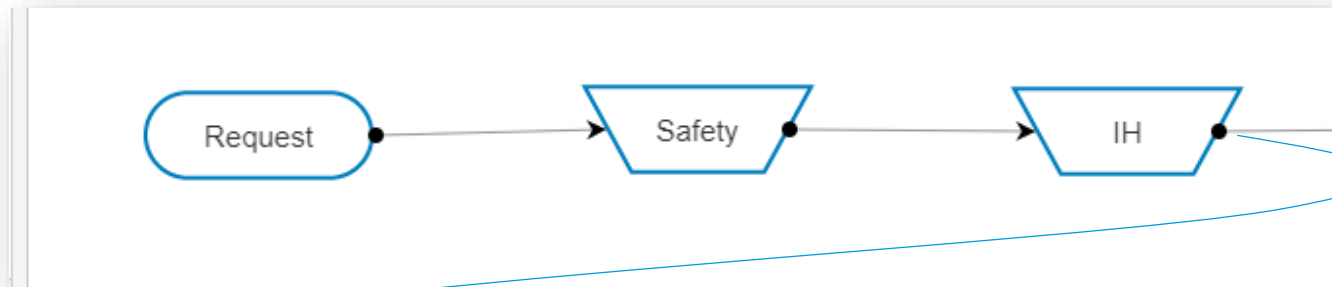
- Gloves
- Hazmat Suit
- Overalls
- Visor
- Safety glasses
- Steel toe shoes

SMART Forms



Where Does Data Flow?

Approval Workflow

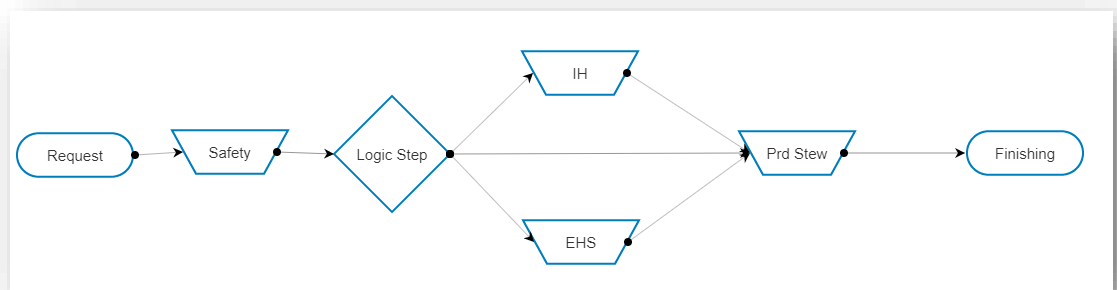




SMART Workflow

Advantages:

- ✓ Everyone in the process need not spend time evaluating, if they are not needed
- ✓ Processes can be streamlined
- ✓ This cuts out the noise for evaluators





Control Each Step of the Way

- Is this step giving us relevant information?
- Is this step saving us time or is it a potential bottleneck?
- What is the impact of this step?

Why?

- ✓ New products
- ✓ Changing products
- ✓ Changing ingredient



Best Practice for Capturing Data:

Think **Short & Easy**

Advantages:

- ✓ Standardize Options
- ✓ Eliminate Confusion
- ✓ Simplify Reports
- ✓ Streamline Logins

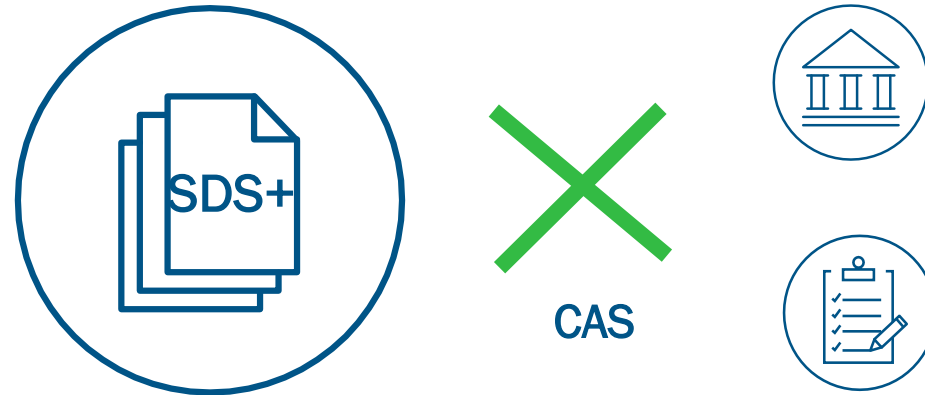


Poll: How long does your approval process currently take?

- Minutes
- Hours
- Days
- Weeks
- Months



The Automated Assistant: Cross Referencing Data



Results:

- ✓ Positive impact to an informed decision making.
- ✓ Reference data set for making product stewardship, safety, EHS, green chemistry.



Results:



- ✓ Positive impact and informed decision making
- ✓ Reference data set for making product stewardship, safety, EHS, green chemistry

Threshold Reporting and Inventory



Quantity data can be collected for threshold reporting and Inventory

Cross referenced data can flag evaluator of chemicals that may have negative impact



The Big Picture: The Necessity for Logical Chemical Approval Processes

- ☑ Ensure chemicals fulfill business needs
- ☑ Fulfill ever-changing regulatory obligations
- ☑ Implement dynamic and flexible processes that correspond to complex facilities
- ☑ Integrate with other processes (threshold reporting, inventory)

A photograph of a man in a light blue shirt sitting in a conference room, seen from behind. He is raising his right hand, pointing towards the front of the room, indicating he wants to ask a question. Other people are blurred in the background.

Questions?



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