

Extraction OpenAI LLM Models

GPT-4

Token 1: 611

Token 2: 499

Token 3: 462

Token Average: 524

Average correctly identified Main Steps: 5 / 12

Average correctly identified Sub Categories: 2.7 / 9

Extraction Output 1:

Extracted Content

Title

**Supply Chain Map: **

Chart Description

The supplied page consists of a detailed flowchart depicting the physical and financial supply chain for a pharmaceutical industry product. The chart demonstrates various stages and trade steps involved from intermediates to the market. Below are the details:

Legend

No description of actual legend at all, extracted content not part of legend

- **PLAN:** Production and trade steps with planned dates.

- **ACTUAL:** Production and trade steps with actual dates.

- **INVENTORY:** Location and inventory data.

- **DO NOT DISPLAY:** Area not to be shown publicly.

- **Diamond – Yellow:** # semantically inaccurate

Flowchart Overview

1. **You Are Here**

- Current node indicator

2. **Trade Steps*

Main Steps

6 / 12 Main Steps identified (correct order)

6 / 12 Main Steps, correctly identified and named

- **Intermediate** # 1

- MSP (INT) India → GROUND HANDLER (CHEM) India (APIs)

- DWS (INT) India → GROUND HANDLER (CHEM) Italy FIS(APIs) # wrong interpretation

- **Warehouse** # 2

- MSP Chemicals (NAS) Italy, MSP Chem (NAS)

- DWS Chemicals (NAS) Italy, MSP Chem (NAS)

- PIS Chemicals (NAS) Italy, MSP Chem (NAS)

- **Spray Drying** # 3

- **Formulation** # 4

- MSP Formulation Italy, MSP Form (NAS)

- **Packaging** # 5

- MSP SPC Packaging France CMO, MSP SPC Pack

- **Secondary Packaging** # 6

- MSP Secondary Pack France CMO
- MSP GROUND HANDLER (MKTS) CMO

Routes and Markets

Sub Categories

8 / 9 Sub Categories identified (incorrect order)

7 / 9 Sub Categories, correctly identified and named

1. ****US Markets**** # 1

2. ****Canada Markets**** # 2

3. ****EMEA Markets**** # 3

- EMEA Markets CMO, MSP EMEA SPC Pack (EMEA)
- MSP EMEA Second Pack (EMEA), MSP EMEA Markets

4. ****LATAM Markets**** # 4 *correct: Latin America Markets*

- MSP LATAM SPC Pack (LATAM), MSP LATAM Second Pack (LATAM)
- MSP LATAM Markets

5. ****AP Markets**** # 5

- MSP AP SPC Pack (AP), MSP AP Second Pack (AP)
- MSP AP Markets
- MSP AP Second Pack, Japan Markets

6. ****India Markets**** # (6) wrong extraction, should be Indonesia Markets

7. ****S. Africa Markets**** # 7

8. ****Australia, Korea, Hong Kong, Singapore, Taiwan****. # 8 wrong order

- MSP ROHU Secondary Pack (AP)
- MSP ROHU Markets

Summary

This slide presents a comprehensive supply chain map for a drug product managed by the pharmaceutical supply chain depicted. It identifies various trade steps essential from intermediate chemicals to final delivery in respective markets. The flowchart extensively maps the processes involved in production, warehousing, drying, formulation, packaging, and distribution across global markets. It includes specific handlers at each step and emphasizes planned versus actual trade flow measures.

Extraction Output 2:

Extracted Content

Title

Proprietary

Main Header

Supply Chain Map:

Chart

This is a **supply chain map** that details the physical and financial supply chain for "ME1ST001-NEG-1439." The map provides a flowchart-like representation of the steps involved, from the intermediaries and trade stops to the final markets. The chart includes boxes interconnected with lines indicating the flow from one process to another.

Components of the Chart:

Main Steps

6 / 12 Main Steps identified (correct order)

6 / 12 Main Steps, correctly identified and named

1. **Intermediates** # 1

- **Trade stop: **
- DPS (A2)
- Stoppanicals P/F (A1)
- DPS (A2)
- DWS (INT) # wrong interpretation
- Stoppanicals P/F (A3)

2. **Warehouse** # 2

- **Locations:**
- Various sites in India
- Germany/Gree
- USA/India

3. **Formulation** # 3

4. Spray Drying** # 4

- **Spray Drying Locations:**
- Barcelona, Spain
- Italy
- Netherlands
- Switzerland
- **Formulation Locations:**
- Markham, Ontario

5. **Packaging** # 5

- Locations such as:
- Montreal, Canada
- USA Packaging

- Japan Packaging

6. **** Markets:**** # 6

Sub Categories

4 / 9 Sub Categories identified

1 / 9 Sub Categories, correctly identified and named

- Europe & Asia # does not exist

- USA Stocks # does not exist

- Canada Markets # correct one

- Japan # does not exist

Legend:

- ****Physical Location:****

- Green Text: Trade Stop

- Diamond: Yellow # semantically inaccurate

- Purple Text: Licensed Logistics & Trade Route

Summarized Slide Description

The slide provides a comprehensive ****supply chain map**** for a particular product (ME1ST001-NEG-1439). This includes details of intermediates, trade stops, warehouses for chemical APIs, spray drying and formulation sites, packaging locations, and final markets. It highlights the detailed flow from raw material suppliers through various stages of processing, packaging, and shipping to different geographical markets. This detailed mapping offers a visual representation to understand the product's journey through the supply chain.

Extraction Output 3:

Supply Chain Map

Chart Description

Chart Type: Flowchart

Content Description:

The flowchart represents the physical & financial supply chain for a product labeled as "HELTESDD4 MNC-914U4".

Legend:

- **Red Solid Line**: Trade Step (Physical Movement)
- **Blue Solid Line**: Title (Financial Flow)

- **Diamond Yellow**: # semantically inaccurate

Flow Description:

Main Steps

3 / 12 Main Steps identified (correct order)

3 / 12 Main Steps, correctly identified and named

- **Intermediate** # 1

- **India**
 - Supplier: RAD (M), Mfr EK MAU, Secondary-Packing Unit, Mika lid, Mfr LI store DO
- **Supplier 1**: Remedies Supplier, US DC, Lot States Inventory, USA
- **Supplier 2**: Buy-side Rx Store
- **Italy**
 - Supplier: FIS (AP) # wrong interpretation
- Storage: SPD Plate US 5L, SPD plate US 10 lot 5
- **USA**
 - Supplier: R&D Proprietary store

- **Formulations** # 2

- **India**
 - Supplier: MFR / Rx 51434284, Lot Store, buy-side residues MCP

- **Packaging** # 3

- **India**: Store Lot Residues, Lot devices MOB Lot stores, Device Start-store lot store, lot storage PPB
- **USA**: LGC SPD Plate US lot Del Store

Supply Chain Summary

This slide shows a detailed supply chain map for the product "HELTESDD4 MNC-914U4". It outlines the flow from intermediates sourced in India, Italy, and the USA, through various trade steps including chemical processing, warehouse storage, spray drying, formulation, and packaging. The diagram highlights the physical and financial movements and the ownership of goods throughout the process. The map is designed to help understand and visualize the interconnected steps and various parties involved in the supply chain, eventually leading to different market distributions

Sub Categories

0 / 9 Sub Categories identified (no sub categories section in this output)

0 / 9 Sub Categories, correctly identified and named

GPT-5

Token 1: 1361
Token 2: 1272
Token 3: 1221

Token Average: 1284

Average correctly identified Main Steps: 11 / 12
Average correctly identified Sub Categories: 8.3 / 9

Extraction Output 1:

Extracted Content

Chart

- Type: Process flow diagram (Supply Chain Map)
- Axes: Not applicable; this is a multi-stage supply chain flow with boxes and connectors showing entities, locations, and transitions.

Elements:

- Stages: Intermediate → Trade step → Chemical (API) → Warehouse → Spray Drying → Formulation → Trade step → Packaging → Trade-BC step → Secondary Packaging → Market # *Usage of symbols for order*
- Boxes: Each box lists organization/site names, locations (city, country), and sometimes notes like approvals or capacities.
- Connectors: Red and blue lines indicate physical/financial flow paths with branching to different markets.

Legend (as visible at center top):

- Indicates color coding and meaning of boxes/lines (e.g., Red: Trade Chain map, Blue: [specific chain], Black: Physical Chain map, Green text: approvals/notes). *# no green text in the graphic*

Exact legend text is partially unreadable due to resolution, but it clearly differentiates trade vs. physical flows and current vs. future states.

Overall depiction: *# Overall Description not in GPT-4*

A detailed end-to-end supply chain for a product (likely an API-based pharmaceutical), showing multiple suppliers, processing steps (chemical API production, spray drying, formulation), warehousing, packaging, and distribution to regional markets (US, Canada, EMEA, AP, Australia/NZ, South Africa, Russia, Latin America, Indonesia). Includes alternate paths and transfer steps.

Text (from boxes; transcribed as accurately as possible given image resolution)

Note: Some labels are small; below captures identifiable names/locations and stage headings. Bracketed notes indicate low legibility items.

- Page header: "Proprietary"
- Title: "Supply Chain Map:"
- Center header in diagram: "Physical & Financial Supply Chain (MULTISORB IMS-106A) (Advance to consider multiple [chains]) — Current"
- Stages and Entities (left to right):

Main Steps

11 / 12 Main Steps identified (correct order)

11 / 12 Main Steps, correctly identified and named

Intermediate # 1 Comparison with Decomposition Part

- India: [Supplier boxes; small text]
- DWS (JP) – Japan # wrong, DIVIS(3P) instead of DWS(JP), because of JP it assumes Japan, which is wrong
- FLS (JP) – Japan # wrong, should be FIS(3P)
- Italy: [Supplier box]
- [Bottom-left] "Amorphous silica" / "Lamorinda & Texilose" [low legibility] # made up Information

Trade step # 2 Comparison with Decomposition Part

- Multiple trade boxes linking India/Japan/Italy intermediates to Chemical (API) # correct Interpretation

Chemical (API) # 3

- India: [Manufacturer(s)]
- India: Laurus Labs & ASH Ingredients (3P) # correct Information
- DWSS (JP) – Japan # wrong interpretation should be DIVIS (3P)
- FLS (JP) – Japan # wrong Interpretation, should be FIS(3P)
- Italy: [Manufacturer]
- Boxes include plant names; some note “API” and city-country.

Warehouse # 4

- US Warehouse: [site] # made up hallucination
- EU Warehouse: [site] # made up hallucination
- “WH transfer” boxes indicating movements to spray drying # connection node to Spray Drying correct
- Notes in blue: “Current,” “DO NOT DISPLAY” (center banner overlay) # “Current” and “DO NOT DISPLAY” don’t belong to Warehouse

Spray Drying # 5 many small boxes, especially hard to interpret for LLM

- US: Pharmatech (PA) / [site] # made up hallucination
- EU: [Spray dryer site in IT/DE] # made up hallucination
- Portugal (PT) # correct for level of detail
- Boxes: “Pilot SD,” “Prod SD,” “New SD vendor” # made up hallucination
- Connectors to Formulation # correct

Formulation # 6

- [Formulation site] “Nutrilo Transfer to [X]” / “Medis transfer” (low legibility)
- Europe: [Formulator]
- US: [Formulator]
- Connectors to Trade Step # correct

Trade Step # 7 correct identification, only 1 out of 2 Trade Steps recognized

Packaging # 8 correct Step, However Information within Step made up

- Wilson (US) # correct example for level of detail
- US: Multi-Pack (PA) / “Blister pack” [example]
- EU: [Packaging partner] # made up hallucination
- Canada: [Packaging partner] # made up hallucination
- EMEA/AP: [Packaging partner] # made up hallucination
- Boxes show “Pack size,” “Lot,” and regulatory notes # made up

Trade-DC step # 9

- MDD CORP PLAINFIELD
- Financial trade/brand company step nodes linking packaging to secondary packaging # connection node comment is correct

Secondary Packaging # 10

Identification of Step correct, however Content of Main Steps incorrect
Title mixed with Names from next Main Steps, almost no content in original File

- US Secondary Packaging: “Retail packs,” “Case packs”
- Canada Secondary Packaging

- EMEA Secondary Packaging
- AP Secondary Packaging
- Australia/NZ Secondary Packaging
- South Africa Secondary Packaging
- Russia Secondary Packaging
- Latin America Secondary Packaging
- Indonesia Secondary Packaging

Market # 11

Sub Categories

9 / 9 Sub Categories identified (incorrect order)

9 / 9 Sub Categories, correctly identified and named

- US Markets. # 1
- Canada Markets # 2
- EMEA Markets # 3
- AP Markets # 4 wrong order
- Australia, Korea, Singapore, Taiwan, Hongkong Markets # 5 wrong order
- South Africa Markets # 6 wrong order
- Russia Market # 7 wrong order
- Latin America Markets # 8 wrong order
- Indonesia Markets # 9

Additional nodes (right-center/bottom): # completely made up, no additional nodes in the original document

- "Nutrilo Transfer to [X]"
- "Medis transfer to [X]"
- "Finished goods" → "Retail distribution" → Markets
- Some boxes include dates like "Effective in 2023" and approver/regulatory notes (green text)

- Legend (top-center):

- Lists:
 - Red outline/text: Trade Chain (Financial) # *correct Interpretation*
 - Black outline/text: Physical Chain # *correct Interpretation*
 - Blue outline/text: [current/alternate chain] # *Blue Current text belongs to title not Legend*
 - Symbols for plant locations, warehouses, spray drying, formulation, packaging, and market nodes

- Hazard/triangle icon indicating "Confidential/Proprietary" # semantically accurate

Notable Trends/Highlights # *many information made up*

- Multiple sourcing options for intermediates and API from India, Japan (DWSS, FLS), and Italy to mitigate risk.
- Centralized warehousing nodes in US and EU feeding spray drying and formulation sites.
- Parallel packaging streams for different regions leading to distinct secondary packaging and market nodes. # *correct*
- Presence of transfer plans (Nutrilo, Medis) indicating planned or ongoing changes.
- Regulatory/approval milestones noted in green; one box mentions "Effective in 2023."

Slide Summary This slide presents a proprietary, end-to-end supply chain map for a product involving an API and downstream processing. It visualizes both physical and financial (trade) chains from intermediate sourcing through chemical API production, warehousing, spray drying, formulation, packaging, and distribution to global markets. The diagram highlights alternative suppliers, regional processing sites, transfer plans, and regulatory statuses, offering a comprehensive view of current pathways and contingencies across the supply chain.

Extraction Output 2:

Object Type: Chart (Process Flow Diagram / Supply Chain Map)

Title

- Supply Chain Map

Legend (visible in the diagram header)

- Indicates:
 - Physical flow vs. financial flow
 - Current vs. future states
 - Plant/Location codes and regions (e.g., US, EU, APAC)
 - Trade steps and DC (Distribution Center) steps
 - Packaging and secondary packaging
 - Market destinations
- The diagram is labeled “Physical & Financial Supply Chain (MELSTRRO IMC-106A, device-level ownership).”
- A prominent “DO NOT DISPLAY” tag is present within the header area (likely an internal restriction note).

- triangle icon indicating “Confidential/Proprietary” # semantically accurate

Chart Type and Structure

- Type: Process flow diagram (supply chain map) with connected nodes and swim-lanes for stages.
- Flow Direction: Left to right. # explicitly describes left to right layout
- Stages (top row labels):

Main Steps

11 / 12 Main Steps identified (correct order)

11 / 12 Main Steps, correctly identified and named

- Intermediate # 1
- Trade step # 2
- Chemical (API) # 3
- Warehouse # 4
- Spray Drying # 5
- Formulation # 6
- Trade step # 7
- Packaging # 8
- Trade-DC step # 9
- Secondary Packaging # 10
- Market # 11

Axes

- No numerical axes. The diagram uses categorical lanes/stages and connected boxes indicating locations, activities, and transfers.

Detailed Content (nodes and flows)

Note: Text is small; below captures all discernible labels and their lane placement and connections.

- Intermediate (left-most lane)
 - Multiple nodes referencing raw/intermediate sources by country:
 - India (several suppliers)
 - DWS (JP) – likely Japan supplier. # wrong interpretation
 - FIS (JP) – likely Japan supplier # wrong interpretation
 - Italy – supplier node(s)
 - Latin America – supplier node
 - Additional India-based suppliers
 - Green annotations: “Project in pipeline” or similar (future additions).
 - Trade step (immediately after Intermediate)
 - Boxes indicating trade transactions from supplier countries into processing regions.
 - Chemical (API)
 - Nodes for API manufacturing by country: # mentioning of nodes # recognition of nodes
 - India – API manufacturing (multiple facilities)
 - Italy – API manufacturing
 - FIS (JP) – API manufacturing in Japan
 - DWS (JP) – API manufacturing in Japan
 - Warehouse
 - Central warehouse nodes:
 - US Warehouse
 - EU Warehouse
 - APAC Warehouse
 - Connected red-outline flows from API to warehouse.
 - Spray Drying
 - Nodes for SD activities: # recognition of nodes
 - Portugal SD
 - US SD
 - EU SD
 - APAC SD
 - Some nodes have blue or green highlights indicating “Current” vs “Future/Project.” # recognition of nodes
 - Formulation
 - Nodes represent formulation plants:
 - US Formulation Plant
 - EU Formulation Plant
 - APAC Formulation Plant
 - Connected from Spray Drying to Formulation.
 - Trade step (post-formulation)

- Trade/transfer boxes moving formulated product to packaging regions or DCs.
- Packaging
 - Packaging plants:
 - US Packaging Plant
 - EU Packaging Plant
 - Canada Packaging Plant
 - APAC Packaging Plant
 - Some nodes show "Blister/Bottle" or similar packaging types (text partially visible).

- Trade-DC step
 - Distribution Center (DC) transfers:
 - US DC # made up hallucination
 - EU DC # made up hallucination
 - Canada DC # made up hallucination
 - APAC DC # made up hallucination
 - EMEA DC # made up hallucination

- Secondary Packaging
 - Secondary packaging nodes by region:
 - US Secondary Packaging
 - Canada Secondary Packaging
 - EMEA Secondary Packaging
 - APAC Secondary Packaging

Observed Trends and Notable Points

- Multi-regional sourcing of intermediates and API (India, Japan, Italy, Latin America).
- Centralized warehouse stage before spray drying and formulation.
- Parallel processing paths exist in the US, EU, and APAC for spray drying, formulation, and packaging.
- Trade/Distribution steps bridge between manufacturing and regional markets.
- The map shows both physical and financial flows; boxes and connector colors differentiate current vs. future projects and flow types.
- Some nodes are marked as "Project/Pipeline" suggesting future expansions or alternative suppliers. # recognition of nodes
- The map emphasizes compliance points like secondary packaging by region before market release.

Extracted Text (visible standalone labels on the page)

- Proprietary
- Supply Chain Map:
 - Physical & Financial Supply Chain (MELSTRRO IMC-106A, device-level ownership)
- DO NOT DISPLAY
- LEGEND (items summarized above)
- Lane headers:
 - Intermediate
 - Trade step

- Chemical (API)
 - Warehouse
 - Spray Drying
 - Formulation
 - Trade step
 - Packaging
 - Trade-DC step
 - Secondary Packaging
 - Market
- Market labels:

Sub Categories

9 / 9 Sub Categories identified (wrong order)

8 / 9 Sub Categories, correctly identified and named

- US Markets # 1

- Canada Markets # 2

- EMEA Markets # 3

- Russia Market # 4

- AP Markets # 5

- S. Africa Markets # 6

- Australia # (7) many additional country names missing

- Indonesia Markets # 8

- Latin America Markets # 9

Slide Summary

This slide presents a comprehensive supply chain map depicting the end-to-end physical and financial flows for a product labeled MELSTRRO IMC-106A. It traces the journey from global intermediates and API manufacturing (primarily India, Japan, Italy, and Latin America) through warehousing, spray drying, and formulation, followed by packaging and distribution center steps, culminating in secondary packaging and delivery to regional markets. The diagram highlights current operations and future projects, showing parallel processing capabilities across US, EU, and APAC regions and the trade transactions that connect each stage.

Extraction Output 3:

Extracted Content

Text

- Proprietary

- Supply Chain Map:

Chart (Process Flow Diagram)

Type: Process flow map/diagram of a physical and financial supply chain for a product (likely a pharmaceutical or chemical product), showing intermediate, chemical (API), warehouse, spray drying, formulation, trade steps, packaging, secondary packaging, and markets.

Legend (as visible in the diagram):

- Indicates types of flows/boxes:

- Red: Trade flow (Trade step)

- Blue/Teal: Physical flow (Physical location)

- Grey: Financial flow

- Green annotations: Current/alternative suppliers or notes

- "Physical & Financial Supply Chain (MILESTONES, MC-140A)" (exact model name partially visible)

- Hazard/triangle icon indicating "Confidential/Proprietary" # semantically accurate

- "DO NOT DISPLAY" watermark present

- "Current" highlighted (suggesting the map reflects the current-state supply chain)

Axes: Not applicable (process flow). The diagram is organized left to right across stages:

- Intermediate → Trade step → Chemical (API) → Warehouse → Spray Drying → Formulation → Trade step(s) → Packaging → Trade-DC step → Secondary Packaging → Market # *Usage of symbols for order*

Nodes and content (boxes) gleaned from the image. Note: Many box labels are small; below captures clearly readable items and stage structure, preserving hierarchy and flows:

Main Steps

11 / 12 Main Steps identified (correct order)

11 / 12 Main Steps, correctly identified and named

- Intermediate (leftmost column) # 1

- Multiple supplier locations, including:

- India (several entries)

- DWS (JP) # wrong interpretation

- FIS (JP) # wrong interpretation

- Italy

- China

- Green notes appear under some nodes: "Potential alt supplier", "Potential intermediary", "Lennonstock & Taralton" (text partially legible)

- Trade step (following Intermediate) # 2

- Trade entities connecting intermediates to API manufacturers (details mostly obscured)

- Chemical (API) # 3

- India (multiple API manufacturers)

- DWS (JP)

- FIS (JP)

- Italy
- China

- Warehouse # 4

- Multiple warehouse nodes
- Examples (partially legible):
 - US warehouse(s)
 - EU warehouse(s)
- "WH transfer" nodes between regions # recognition of nodes

- Spray Drying # 5

- Nodes labeled: # recognition of nodes
 - "Plant GEA Niro" (spray dryer equipment or site) # *made up hallucination*
 - "Plant GEA Niro" in different regions (US/EU), with "WH transfer" connections
 - "PQ" or "PQ status" boxes (possibly Product Qualification) # *made up hallucination*
 - "Alt SD" (alternative spray drying site) noted in blue/teal
 - "Effective in 2023" annotation near one alt site

- Formulation # 6

- Multiple formulation plants
- Examples:
 - "Form Plant (EU)"
 - "Form Plant (US)"
 - "Alt Form Plant" options
- "WH transfer" between regions

- Trade step (post-formulation) # 7

- Connects formulation plants to packaging sites
- Includes trading entities (names not clearly legible)

- Packaging # 8

- Primary packaging plants by region:
 - US Pack Site(s) # *made up hallucination*
 - EU Pack Site(s) # *made up hallucination*
 - Canada Pack Site(s) # *made up hallucination*
 - EMEA Pack Site(s) # *made up hallucination*
 - APAC Pack Site(s) # *made up hallucination*
 - Africa/South Africa Pack Site(s) # *made up hallucination*
 - Australia, Korea, Hong Kong Pack Site(s) # *made up hallucination*
 - Indonesia Pack Site(s) # *made up hallucination*
- "Alt Pack Site" labels present for certain regions # *made up hallucination*

- Trade-DC step # 9

- Distribution center trade step between packaging and secondary packaging

- Regional DCs (US, EU, Canada, EMEA, APAC)

- Secondary Packaging # 10

- Region-specific secondary packaging facilities:
 - US Secondary Packaging
 - Canada Secondary Packaging
 - EMEA Secondary Packaging
 - AP Secondary Packaging
 - Africa Secondary Packaging
 - Australia/Korea/Hong Kong Secondary Packaging
 - Indonesia Secondary Packaging
- Notes like "Effective in 2023" near certain changes/alternatives

- Market (rightmost column) # 11

Sub Categories

9 / 9 Sub Categories identified (incorrect order)

8 / 9 Sub Categories, correctly identified and named

- US Markets # 1

- Canada Markets # 2

- EMEA Markets # 3

- Russia Market # 4 wrong order

- AP Markets # 5 wrong order

- S. Africa Markets # 6 wrong order

- Australia, Singapore Markets # (7) many additional country names missing

- Indonesia Markets # 8

- Latin America Markets (visible near upper right) # 9

Key observed trends/details:

- The supply chain is global with multiple alternative nodes (spray drying, formulation, packaging). # recognition of nodes
- Many flows include "WH transfer" indicating inter-regional warehouse transfers.
- Blue/teal boxes denote alternative physical locations; red outlines denote trade steps.
- Several markets are served via region-appropriate packaging and secondary packaging.
- Annotations like "Effective in 2023" indicate recent or planned changes.

Slide Summary

This slide presents a proprietary, current-state global supply chain map for a product, showing the end-to-end flow from intermediates and API manufacturing through warehouses, spray drying, formulation, trading, primary and secondary packaging, and distribution to regional markets. It highlights multiple regional nodes, warehouse transfers between regions, and alternative sites for spray drying, formulation, and packaging. The legend distinguishes physical locations, trade steps, and financial flows, and notes recent changes effective in 2023. The map is intended to provide a comprehensive overview of the physical and transactional pathways to various global markets.