



Dangerous Goods

RESTful Developer Guide

June 23, 2021



Important Information

UPS Developer Kit APIs

Your development of an application using UPS Developer Kit APIs is governed by the UPS Technology Agreement you entered into with UPS. The following are key legal requirements from these agreements for the UPS Developer Kit APIs. For more information on all requirements for the UPS Developer Kit APIs, please refer to the UPS Technology Agreement.

Defined terms used but not defined in this document have the meaning set forth in the UPS Technology Agreement.

Key Legal Requirements for UPS Developer APIs

Permitted Territories

This document can only be used in the countries of the Permitted Territory as defined in the UPS Technology Agreement, as applicable.

Use

The application must not be designed to allow distribution of information received through the UPS Developer Kit APIs to third parties, other than to persons having a bona fide interest in such information (e.g., the shipper, receiver, or the third party payer, or to your service providers authorized by UPS).

Consent to Use of UPS Mark

- All screens or forms generated by your application including information received through the UPS Developer Kit APIs must include (1) the UPS Mark positioned in reasonable proximity to the Information and of an appropriate size to readily identify the source of the Information as UPS and (2) the following language at the bottom of every screen that displays the UPS Mark: "UPS, the UPS brand mark, and the Color Brown are trademarks of United Parcel Service of America, Inc. All Rights Reserved." Except as set forth in the preceding sentence, you have no right to use the UPS Mark without the prior written approval of UPS.
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Display of Information

The application must not display information concerning any other provider of shipping services or such other shipping services on any page, whether comprising one or more frames, displaying information your application receives from the UPS Developer Kit APIs. Your application must present all data within each field received through the UPS Developer Kit APIs without amendment, deletion, or modification of any type.

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Chapter 1: Introduction

In this document, you will find guidance and instructions for integrating the Dangerous Goods RESTful API into your application, service, or system.

In this guide, you will find:

- Dangerous Goods RESTful API functionality and business rules
- RESTful API request and response element structure
- Headers, URL and URL elements
- Error response code descriptions
- Sample request, response and error response
- Service code references

Intended Audience

- This guide is intended for developers who will be integrating the Dangerous Goods RESTful API into their application, service, or system.

Required Knowledge & Skills

This guide assumes you have a basic understanding of the following:

- Concepts and instructions in the *Introduction to the UPS Developer Kit* guide.
- Web APIs
- Software development

How to Use this Guide

- If this is your first time working with the UPS Developer Kit, begin with the Introduction to the UPS Developer Kit guide. This guide serves as the foundation for all API-specific developer guides.
- If you are experienced with the UPS Developer Kit but have not yet worked with the Dangerous Goods API, continue with [Chapter 2: Understanding the Dangerous Goods RESTful API](#). There you will find an overview of the Dangerous Goods functionality and business rules.
- [Chapter 3: Customer Integration Environment \(CIE\)](#) contains information on UPS integration environments.
- Chapters 5 & 6 contains an overview of the containers and elements that comprise the Dangerous Good RESTful requests and responses.
- Reference tables, service codes, and error codes are located in the [Appendices](#).

Chapter 2: Understanding the Dangerous Goods API

The Dangerous Goods API provides the ability to determine what Dangerous Goods (also known as Hazardous Materials) can be carried by UPS. UPS Dangerous Goods is a contractual service – to learn more, and to enroll your UPS in the service, visit ups.com/hazmat.

It is recommended the Dangerous Goods API be implemented in tandem with the Pre-Notification API to alert UPS of Dangerous Goods shipments.

Prior to the API, UPS Dangerous Goods shippers would need to manually validate their shipment was acceptable to UPS by referencing the [UPS Chemical Tables on ups.com](#) and the [Approved Countries or Territories List](#) and valid destination [postal codes](#). Different commodities have different allowable quantities, depending on:

- Transportation Mode (i.e. Ground or Air service)
- Regulation Set (i.e. 49 CFR or IATA)
- Specific UN number of the commodity
- Packing Group of the commodity
- Origin and destination of the shipment

With the Dangerous Goods API, shippers can pass limited fields to use UPS's Chemical Reference Data. For example, for UN 1263 (Paint), what are the valid Proper Shipping Name(s), and allowable limits by Transportation Mode and Regulation Set?

Shippers can also pass a complete Dangerous Goods record to UPS and verify the shipment is acceptable to UPS for the origin and destination address. This verification is known as an "Acceptance Audit Pre-Check", and approval from the Dangerous Goods API validates the shipment data is acceptable for carriage by UPS.

Depending on your specific implementation, you may want to use a combination of the Chemical Reference Data and Acceptance Audit Pre-Check features of the Dangerous Goods API. For example, for a prospective order of one or more products, the Acceptance Audit Pre-Check could confirm if all products are acceptable to UPS by air and/or by ground transportation.

The Dangerous Goods API supports the following regulation sets:

- 49CFR: United States Code of Federal Regulations, Title 49 (Transportation by air or ground))
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
- IATA: International Air Transport Association (Domestic and international air transportation)

Other information to help with your implementation:

The Dangerous Goods API does not print regulatory paperwork that is required to accompany UPS Dangerous Goods shipments. [UPS Ready](#) vendors offer software to print regulatory paperwork and assist your employees in compliantly shipping Dangerous Goods shipments with UPS.

The functionality of the Dangerous Goods API is built-in to UPS's Microsoft Windows based shipping software, [UPS WorldShip](#). WorldShip also includes the ability to print required regulatory paperwork.

There are 2 types of Dangerous Goods RESTful Requests/Responses within the API:

- AcceptanceAuditPreCheck
- ChemicalReferenceData

Business Processes and Rules

- UPS expects elements as defined in the request structure without spelling or structural deviations. Elements that are not defined in the data request or do not conform to the structure will be ignored by UPS.
- Only users that plan to ship packages manifested, tendered, and delivered by UPS can use the API.
- Any customers/developers abusing or data mining the API will have their access revoked.

- To access API documentation the user must have or create a My UPS profile.
- To access testing and production sites the user must have an Access Key. To get an Access Key you must have a My UPS profile and an associated shipping account. For additional information, refer to the [UPS Developer Kit User Guide](#).
- For any chemical reference data request wherein three duplicate data for the IATA regulation set are returned, they are returned in following sequence –
 - ▲ IATA US Domestic
 - ▲ IATA International
 - ▲ IATA Freight Forwarding or Air Freight

Please make appropriate adjustments in your code to handle these type of responses. Please refer to [UPS Chemical Tables on ups.com](#) for more information regarding chemical data.

Chapter 3: Customer Integration Environment (CIE)

The Customer Integration Environment allows customers to test their application prior to launch. This environment is intended for integration testing of customer applications with the UPS servers.

Once your application has been thoroughly tested, you should redirect the application to the UPS Production Environment.



No stress testing should ever be performed by customers against any UPS systems.

To access testing and production sites the user must have an Access Key. You can request an Access Key after establishing a UPS profile and associating your shipping account.

System Availability

The Customer Integration Environment is available 24 hours a day, 7 days a week. Note the system is occasionally down for server maintenance.

NOTE:

- Acceptance Audit Pre-Check – Limited to certain ShipFrom countries or territories only in Customer Integration Environment. The supported ShipFrom countries or territories are: US, Canada, Germany, France and the Netherlands.
- Chemical Reference Data – Not supported in Customer Integration Environment.

Integration Testing and Production URLs



All API URLs are case sensitive.

Testing:	https://wwwcie.ups.com/dangerousgoods/v1/AcceptanceAuditPreCheck
Production:	https://onlinetools.ups.com/dangerousgoods/v1/AcceptanceAuditPreCheck

Chapter 4: Common Element Constraints

The following constraints applies to all APIs referenced in this developer guide.



UPS expects elements as defined in the path and presented in the structure i.e., no spelling or structural deviations. Elements that are not defined or do not conform to the structure will be ignored by UPS.

Element constraints are defined as follows:

Name

The element or container name.

Constraints

Required

- Yes - indicates the element must be present in the request or response.
- Yes* - indicates the element must be present in the request if the parent container is present in the request.
- No - indicates the element is optional and may be used if it applies to the request.
- Cond – indicates the element is required under certain conditions.

Type

- Container - holds a group of related elements.
- String - consists of alphanumeric characters, spaces, and decimals.
- Array – collection of values that allows to provide a list of values. An array begins with **[** (left bracket) and ends with **]** (right bracket). Its values are separated by **,** (comma).
- Header – header parameter
- Path – URL path parameter
- Query – URL query parameter

Length

- The maximum number of characters that can be present in a String. Length is not applicable (N/A) to Containers.

Max Allowed

- The maximum number of elements or containers that can be present in the parent container.

Description

A description of the element or container. Also any validation rules associated with the element/container.

Chapter 5: AcceptanceAuditPreCheck Elements and Details

The Request and Response path tables contain the full hierarchy of the API elements.



UPS expects elements as defined in the path and presented in the structure i.e., no spelling or structural deviations. Elements that are not defined or do not conform to the structure will be ignored by UPS.

Headers

Name	Constraint	Description
transId	Required: Yes Type: Header Length: 32	An identifier unique to the request
transactionSrc	Required: Yes Type: Header Length: 512	An identifier of the client/source application that is making the request
AccessLicenseNumber	Required: Yes Type: Header Length: 16	Holds the UPS Access Key associated with the account.
Username	Required: Yes Type: Header Length: 16	Holds the username associated with your MyUPS account.
Password	Required: Yes Type: Header Length: 26	Holds the password associated with your MyUPS account.

URL

<https://onlinetools.ups.com/dangerousgoods/v1/acceptanceauditprecheck>

AcceptanceAuditPreCheckRequest

Name	Constraint	Description	
<code>{"AcceptanceAuditPreCheckRequest": {}}</code>			
AcceptanceAuditPreCheckRequest	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Dangerous Goods Utility Request container for Acceptance Audit Pre-check.	
<code>{"AcceptanceAuditPreCheckRequest": {"OriginRecordTransactionTimestamp": ""}}</code>			
OriginRecordTransactionTimestamp	Required: No Type: String Max Allowed: 1 Length: N/A	The time that the request was made from the originating system. UTC time down to milliseconds. Example: 2016-07-14T12:01:33.999	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {}}}</code>			
Shipment	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Contains shipment information.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipperNumber": ""}}}</code>			
ShipperNumber	Required: Yes Type: String Max Allowed: 1 Length: 6	Shipper's six digit account number. Your UPS Account Number must have correct Dangerous goods contract to successfully use this service.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipFromAddress": {}}}</code>			
ShipFromAddress	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Ship From address container.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipFromAddress": {"AddressLine": ""}}}</code>			
AddressLine	Required: No Type: String Max Allowed: 1 Length: 1...35	The Ship From street address including name and number (when applicable).	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipFromAddress": {"City": ""}}}</code>			

Name	Constraint	Description	
City	Required: No Type: String Max Allowed: 1 Length: 1...30	The Ship From city.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipFromAddress": {"StateProvinceCode": ""}}}}</code>			
StateProvinceCode	Required: No Type: String Max Allowed: 1 Length: 1...30	The Ship From locations state or province code.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipFromAddress": {"PostalCode": ""}}}}</code>			
PostalCode	Required: No Type: String Max Allowed: 1 Length: 1...9	The Ship From locations postal code. 9 characters are accepted.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipFromAddress": {"CountryCode": ""}}}}</code>			
CountryCode	Required: Yes Type: String Max Allowed: 1 Length: 2	The Ship From locations country or territory code.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipToAddress": {}}}}</code>			
ShipToAddress	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Ship To address container.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipToAddress": {"AddressLine": ""}}}}</code>			
AddressLine	Required: No Type: String Max Allowed: 1 Length: 1...35	The Ship To street address including name and number (when applicable).	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipToAddress": {"City": ""}}}}</code>			
City	Required: No Type: String Max Allowed: 1 Length: 1...30	The Ship To city.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipToAddress": {"StateProvinceCode": ""}}}}</code>			
StateProvinceCode	Required: No Type: String Max Allowed: 1 Length: 1...30	The Ship To locations state or province code.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"ShipToAddress": {"PostalCode": ""}}}}</code>			

Name	Constraint	Description	
PostalCode	Required: No Type: String Max Allowed: 1 Length: 1...9	The Ship To locations postal code. 9 characters are accepted.	
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "ShipToAddress": { "CountryCode": "" } } } }			
CountryCode	Required: Yes Type: String Max Allowed: 1 Length: 2	The Ship To locations country or territory code.	
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "Service": {} } } }			
Service	Required: Yes Type: Container Max Allowed: 1 Length: N/A	UPS service type.	
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "Service": { "Code": "" } } } }			
Code	Required: Yes Type: String Max Allowed: 1 Length: 2...3	UPS service type code.	
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "Service": { "Description": "" } } } }			
Description	Required: No Type: String Max Allowed: 1 Length: 1...35	UPS service type description.	
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "RegulationSet": {} } } }			
RegulationSet	Required: Cond Type: String Max Allowed: 1 Length: 3...5	The Regulatory set associated with every regulated shipment. It must be same across the shipment. Not required when the CommodityRegulatedLevelCode is EQ.	Valid values: ADR, 49CFR, IATA. ADR = Europe to Europe Ground Movement 49CFR = HazMat regulated by US Dept. of Transportation within the U.S. or ground shipments to Canada IATA = Worldwide Air movement.
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "Package": {} } } }			

Name	Constraint	Description	
Package	Required: Yes Type: Container Max Allowed: 1000 Length: N/A	Package Information container.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"PackageWeight": {}}}}</code>			
PackageWeight	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Container to hold package weight information.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"PackageWeight": {"Weight": ""}}}}</code>			
Weight	Required: Yes Type: String Max Allowed: 1 Length: 15	Packages weight.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"PackageWeight": {"UnitOfMeasurement": {}}}}</code>			
UnitOfMeasurement	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Container to hold UnitOfMeasurement information for package weight.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"PackageWeight": {"UnitOfMeasurement": {"Code": ""}}}}</code>			
Code	Required: Yes Type: String Max Allowed: 1 Length: 3	Package weight unit of measurement code.	Valid values: LBS = Pounds KGS = Kilograms
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"PackageWeight": {"UnitOfMeasurement": {"Description": ""}}}}</code>			
Description	Required: No Type: String Max Allowed: 1 Length: 1...35	Description of the unit of measurement for package weight.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"QValue": ""}}}</code>			
QValue	Required: Cond Type: String Max Allowed: 1 Length: 3	This is required when a HazMat shipment specifies AllPackedInOneIndicator and the regulation set for that shipment is IATA.	Valid values: 0.1; 0.2; 0.3; 0.4; 0.5; 0.6; 0.7; 0.8; 0.9; 1.0
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"OverPackedIndicator": ""}}}</code>			
OverPackedIndicator	Required: No Type: String Max Allowed: 1 Length: 0	Presence/Absence Indicator. Any value is ignored. Presence indicates that shipment is over pack.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"TransportationMode": {}}}}</code>			

Name	Constraint	Description	
TransportationMode	Required: Cond Type: String Max Allowed: 1 Length: 3	The method of transport by which a shipment is approved to move and the regulations associated with that method. Only required when the CommodityRegulatedLevelCode is FR or LQ.	Valid entries include: GND, CAO, and PAX.
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "Package": { "EmergencyPhone": " " } } } }			
EmergencyPhone	Required: Cond Type: String Max Allowed: 1 Length: 1...25	24 Hour Emergency Phone Number of the shipper. For numbers within the U.S., the layout is 1, area code, 7-digit number. For all other countries or territories the layout is country or territory code, area code, number. The Emergency Phone Number can only include the following allowable characters "period ".", dash "-", plus sign "+" and conventional parentheses "(" and ")", "EXT or OPT"	Valid values for this field are (0) through (9) with trailing blanks. Required when (TDG regulation set and CommodityRegulatedLevelCode = FR)
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "Package": { "EmergencyContact": " " } } } }			
EmergencyContact	Required: Cond Type: String Max Allowed: 1 Length: 1...35	The emergency information, contact name and/or contract number, required to be communicated when a call is placed to the EmergencyPhone. The information is required if there is a value in the EmergencyPhone field above and the shipment is with a US50 or PR origin and/or destination and the RegulationSet is IATA.	
{ "AcceptanceAuditPreCheckRequest": { "Shipment": { "Package": { "ChemicalRecord": {} } } } }			

Name	Constraint	Description	
ChemicalRecord	Required: Yes Type: Container Max Allowed: 3 Length: N/A	Container to hold Chemical Record information.	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"ReportableQuantity": " "}}}}			
ReportableQuantity	Required: Cond Type: String Max Allowed: 1 Length: 1...2	Required if CommodityRegulatedLevelCode = LQ or FR and if the field applies to the material by regulation. If reportable quantity is met, RQ should be entered.	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"ClassDivisionNumber": {}}}}}}			
ClassDivisionNumber	Required: Cond Type: String Max Allowed: 1 Length: 1...10	This is the hazard class associated to the specified commodity. Required if CommodityRegulatedLevelCode is 'LQ' or 'FR'	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"SubRiskClass": " "}}}}}			
SubRiskClass	Required: Cond Type: String Max Allowed: 1 Length: 1...100	Required if CommodityRegulatedLevelCode = LQ or FR and if the field applies to the material by regulation. Secondary hazardous characteristics of a package. (There can be more than one – separate each with a comma).	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"IDNumber": ""}}}}}			
IDNumber	Required: Cond Type: String Max Allowed: 1 Length: 1...6	This is the ID number (UN/NA/ID) for the specified commodity. Required if CommodityRegulatedLevelCode = LR, LQ or FR and if the field applies to the material by regulation. UN/NA/ID Identification Number assigned to the specified regulated good. (Include the UN/NA/ID as part of the entry).	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"PackagingGroupType": " "}}}}}			

Name	Constraint	Description	
PackagingGroupType	Required: Cond Type: String Max Allowed: 1 Length: 1...10	This is the packing group category associated to the specified commodity. Required if CommodityRegulatedLevelCode = LQ or FR and if the field applies to the material by regulation. Must be shown in Roman Numerals.	Valid values are: I II III blank
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"Quantity": " "}}}}</code>			
Quantity	Required: Cond Type: String Max Allowed: 1 Length: 15	Required if CommodityRegulatedLevelCode = LQ or FR. The numerical value of the mass capacity of the regulated good.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"UOM": " "}}}}</code>			
UOM	Required: Cond Type: String Max Allowed: 1 Length: 1...10	Required if CommodityRegulatedLevelCode = LQ or FR. The unit of measure used for the mass capacity of the regulated good. Example: ml, L, g, mg, kg, cylinder, pound, pint, quart, gallon, ounce etc.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"PackagingInstructionCode": " "}}}}</code>			
PackagingInstructionCode	Required: Cond Type: String Max Allowed: 1 Length: 1...353	The packing instructions related to the chemical record. Required if CommodityRegulatedLevelCode = LQ or FR and if the field applies to the material by regulation.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"ProperShippingName": " "}}}}</code>			
ProperShippingName	Required: Cond Type: String Max Allowed: 1 Length: 1...250	The Proper Shipping Name assigned by ADR, CFR or IATA. Required if CommodityRegulatedLevelCode = LR, LQ or FR.	
<code>{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"TechnicalName": " "}}}}</code>			

Name	Constraint	Description	
TechnicalName	Required: Cond Type: String Max Allowed: 1 Length: 1...300	The technical name (when required) for the specified commodity. Required if CommodityRegulatedLevelCode = LQ or FR and if the field applies to the material by regulation.	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"AdditionalDescription": ""}}}}			
AdditionalDescription	Required: Cond Type: String Max Allowed: 1 Length: 1...75	Additional remarks or special provision information. Required if CommodityRegulatedLevelCode = LQ or FR and if the field applies to the material by regulation. Additional information that may be required by regulation about a hazardous material, such as, "Limited Quantity", DOT-SP numbers, EX numbers.	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"PackagingType": ""}}}}			
PackagingType	Required: Cond Type: String Max Allowed: 1 Length: 1...255	The package type code identifying the type of packaging used for the commodity. (Ex: Fiberboard Box). Required if CommodityRegulatedLevelCode = LQ or FR.	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"HazardLabelRequired": ""}}}}			
HazardLabelRequired	Required: Cond Type: String Max Allowed: 1 Length: 1...50	Defines the type of label that is required on the package for the commodity. Not applicable if CommodityRegulatedLevelCode = LR or EQ.	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"PackagingTypeQuantity": ""}}}}			

Name	Constraint	Description	
PackagingTypeQuantity	Required: Cond Type: String Max Allowed: 1 Length: 1...3	The number of pieces of the specific commodity. Required if CommodityRegulatedLevelCode = LQ or FR.	Valid values: 1 to 999
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"CommodityRegulatedLevelCode": ""}}}}}			
CommodityRegulatedLevelCode	Required: Yes Type: String Max Allowed: 1 Length: 2	Indicates the type of commodity.	Valid values: LR, FR, LQ, EQ FR = Fully Regulated LQ = Limited Quantity EQ = Excepted Quantity LR = Lightly Regulated
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"TransportCategory": ""}}}}}			
TransportCategory	Required: No Type: String Max Allowed: 1 Length: 1	Transport Category.	Valid values: 0 to 4
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"TunnelRestrictionCode": ""}}}}}			
TunnelRestrictionCode	Required: No Type: String Max Allowed: 1 Length: 1...10	Defines what is restricted to pass through a tunnel.	
{"AcceptanceAuditPreCheckRequest": {"Shipment": {"Package": {"ChemicalRecord": {"AllPackedInOneIndicator": ""}}}}}			
AllPackedInOneIndicator	Required: No Type: String Max Allowed: 1 Length: 0	Indicates the hazmat shipment/package is all packed in one.	

AcceptanceAuditPreCheckResponse

Name	Constraint	Description	Validation
<code>{"AcceptanceAuditPreCheckResponse": {}}</code>			
AcceptanceAuditPreCheckResponse	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Dangerous Goods Utility Response container for Acceptance Audit Pre-check.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {}}}</code>			
Response	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Contains Dangerous Goods Utility Acceptance Audit Pre-check response components.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"ResponseStatus": {}}}</code>			
ResponseStatus	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Response status container.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"ResponseStatus": {"Code": ""}}}</code>			
Code	Required: Yes Type: String Max Allowed: 1 Length: 1	Identifies the success or failure of the transaction.	Valid values: 1 = Successful.
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"ResponseStatus": {"Description": ""}}}</code>			
Description	Required: Yes Type: String Max Allowed: 1 Length: 1...35	Describes Response Status Code. Returns text of "Success" or "Failure".	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"Alert": {}}}</code>			
Alert	Required: No Type: Container Max Allowed: UNB Length: N/A	Alert Container. There can be zero to many alert containers with code and description.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"Alert": {"Code": ""}}}</code>			
Code	Required: Yes* Type: String Max Allowed: 1 Length: 1...10	Warning code returned by the system.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"Alert": {"Description": ""}}}</code>			
Description	Required: Yes* Type: String Max Allowed: 1 Length: 1...150	Warning messages returned by the system.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {}}}</code>			
AlertDetail	Required: No Type: Container Max Allowed: UNB Length: N/A	Alert Detail Container.	

Name	Constraint	Description	Validation
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {"Code": ""}}}}</code>			
Code	Required: Yes* Type: String Max Allowed: 1 Length: 1...10	Warning code returned by the system.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {"Description": ""}}}}</code>			
Description	Required: Yes* Type: String Max Allowed: 1 Length: 1...150	Warning messages returned by the system.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {"ElementLevelInformation": {}}}}}</code>			
ElementLevelInformation	Required: Cond Type: Container Max Allowed: 1 Length: N/A	Provides more information about the element that represents the alert.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {"ElementLevelInformation": {"Level": ""}}}}}</code>			
Level	Required: Yes* Type: String Max Allowed: 1 Length: 1	Define type of element in request.	Possible values: H for the header details level S for the shipment level P for the package level C for the commodity level
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {"ElementLevelInformation": {"ElementIdentifier": ""}}}}}</code>			
ElementIdentifier	Required: Cond Type: Container Max Allowed: UNB Length: N/A	Contains more information about the type of element. Returned if Level is P or C.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {"ElementLevelInformation": {"ElementIdentifier": {"Code": ""}}}}}}}</code>			
Code	Required: Yes* Type: String Max Allowed: 1 Length: 1	Represents the type of element. Possible values are P and C.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"AlertDetail": {"ElementLevelInformation": {"ElementIdentifier": {"Value": ""}}}}}}}</code>			
Value	Required: Yes* Type: String Max Allowed: 1 Length: 1...5	Represents the value of element.	
<code>{"AcceptanceAuditPreCheckResponse": {"Response": {"TransactionReference": {}}}}}</code>			

Name	Constraint	Description	Validation
TransactionReference	Required: No Type: Container Max Allowed: 1 Length: N/A	Transaction Reference Container.	
{"AcceptanceAuditPreCheckResponse": {"Response": {"TransactionReference": {"CustomerContext": ""}}}}			
CustomerContext	Required: No Type: String Max Allowed: 1 Length: 1...512	The CustomerContext information which will be echoed during response.	
{"AcceptanceAuditPreCheckResponse": {"ShipperNumber": ""}}			
ShipperNumber	Required: Cond Type: String Max Allowed: 1 Length: 6	Shipper's six digit account number. This is same account number present in the request that is played back in response.	
{"AcceptanceAuditPreCheckResponse": {"Service": ""}}			
Service	Required: Cond Type: Container Max Allowed: 1 Length: N/A	UPS service type. This is same UPS Service present in the request that is played back in response.	
{"AcceptanceAuditPreCheckResponse": {"Service": {"Code": ""}}}			
Code	Required: Yes* Type: String Max Allowed: 1 Length: 3	UPS service type code.	
{"AcceptanceAuditPreCheckResponse": {"RegulationSet": ""}}			
RegulationSet	Required: Cond Type: String Max Allowed: 1 Length: 3...5	The Regulatory set associated with every regulated shipment. This is same Regulation set present in the request that is played back in response.	Valid values: ADR 49CFR IATA TDG
{"AcceptanceAuditPreCheckResponse": {"PackageResults": {}}}			
PackageResults	Required: Cond Type: Container Max Allowed: 20 Length: N/A	Package Results container.	
{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"PackageIdentifier": ""}}}			
PackageIdentifier	Required: Yes* Type: String Max Allowed: 1 Length: 1...5	Identifies the package containing Dangerous Goods.	
{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"AccessibleIndicator": ""}}}			

Name	Constraint	Description	Validation
AccessibleIndicator	Required: No Type: String Max Allowed: 1 Length: 1	Indicates if a package is crew accessible or not.	Y = Package is crew accessible. N = Package is not crew accessible.
<code>{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"EuropeBUIndicator": ""}}}</code>			
EuropeBUIndicator	Required: No Type: String Max Allowed: 1 Length: 1	Indicates if origin country or territory is in the Europe Business Unit.	Y = Origin country or territory is in the Europe Business Unit. N = Origin country or territory is not in the Europe Business Unit.
<code>{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"ChemicalRecordResults": {}}}}</code>			
ChemicalRecordResults	Required: Cond Type: Container Max Allowed: 3 Length: N/A	Chemical Records Results container.	
<code>{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"ChemicalRecordResults": {"ChemicalRecordIdentifier": ""}}}}</code>			
ChemicalRecordIdentifier	Required: Yes* Type: String Max Allowed: 1 Length: 1...3	Identifies the Chemical Record.	
<code>{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"ChemicalRecordResults": {"ADRPoints": ""}}}}</code>			
ADRPoints	Required: No Type: String Max Allowed: 1 Length: 1...4	Total points for the chemical records.	
<code>{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"ChemicalRecordResults": {"TransportCategory": ""}}}}</code>			
TransportCategory	Required: No Type: String Max Allowed: 1 Length: 1	Transport Category.	Valid values: 0 to 4
<code>{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"ChemicalRecordResults": {"TunnelRestrictionCode": ""}}}}</code>			
TunnelRestrictionCode	Required: No Type: String Max Allowed: 1 Length: 1...10	Defines what is restricted to pass through a tunnel.	
<code>{"AcceptanceAuditPreCheckResponse": {"PackageResults": {"ChemicalRecordResults": {"ADRUnits": ""}}}}</code>			

Name	Constraint	Description	Validation
ADRUnits	Required: No Type: String Max Allowed: 1 Length: 7	Number of ADR Units (Liters/Kg) Format: 9999.99	

API Sample Scenario

Scenario:

Client application seeks to verify the shipment data is acceptable for carriage by UPS.


Method	POST
Header Elements	transId: 12345 transactionSrc: Test AcceptanceAuditPreCheck Username: username Password: password AccessLicenseNumber: accesslicensenumber
Example URL	https://onlinetools.ups.com/dangerousgoods/v1/acceptanceauditprecheck
Example Request	<pre>{ "AcceptanceAuditPreCheckRequest": { "OriginRecordTransactionTimestamp": "Your Origin Record Transaction Timestamp", "Shipment": { "ShipperNumber": "Your Shipper Number", "ShipFromAddress": { "AddressLine": "Ship From Address Line", "City": "Lutherville Timonium", "StateProvinceCode": "MD", "PostalCode": "21093", "CountryCode": "US" }, "ShipToAddress": { "AddressLine": "Ship To Address Line", "City": "New Milford", "StateProvinceCode": "NJ", "PostalCode": "07646", "CountryCode": "US" }, "Service": { "Code": "001" }, "RegulationSet": "IATA", "Package": { "PackageIdentifier": "1", "PackageWeight": { "Weight": "26", "UnitOfMeasurement": { "Code": "LBS" } } } } } }</pre>

	<pre> } }, "TransportationMode": "PAX", "EmergencyPhone": "Your Emergency Phone", "EmergencyContact": "Your Emergency Contact", "ChemicalRecord": { "ChemicalRecordIdentifier": "1", "ClassDivisionNumber": "3", "IDNumber": "UN2332", "Quantity": "10", "UOM": "L", "PackagingInstructionCode": "355", "ProperShippingName": "Acetaldehyde oxime", "PackagingType": "Fiberboard Box", "PackagingGroupType": "III", "PackagingTypeQuantity": "1", "CommodityRegulatedLevelCode": "FR" } } } } } } </pre>
Example Response	<pre> { "AcceptanceAuditPreCheckResponse": { "Response": { "ResponseStatus": { "Code": "1", "Description": "Success" }, "TransactionReference": { "CustomerContext": "Your Customer Context" } }, "ShipperNumber": "Your Shipper Number", "Service": { "Code": "001" }, "RegulationSet": "IATA", "PackageResults": { "Packageldentifier": "1", "AccessibleIndicator": "N", </pre>

	<pre>"EuropeBUIndicator": "N", "ChemicalRecordResults": { "ChemicalRecordIdentifier": "1" } } }</pre>
Example Error Response	<pre>{ "response": { "errors": [{ "code": "9190032", "message": "Missing or Invalid ShipperNumber." }] } }</pre>

Chapter 6: ChemicalReferenceData Elements and Details

The Request and Response path tables contain the full hierarchy of the API elements.

 UPS expects elements as defined in the path and presented in the structure i.e., no spelling or structural deviations. Elements that are not defined or do not conform to the structure will be ignored by UPS.

Headers

Name	Constraint	Description
transId	Required: Yes Type: Header Length: 32	An identifier unique to the request
transactionSrc	Required: Yes Type: Header Length: 512	An identifier of the client/source application that is making the request
AccessLicenseNumber	Required: Yes Type: Header Length: 16	Holds the UPS Access Key associated with the account.
Username	Required: Yes Type: Header Length: 16	Holds the username associated with your MyUPS account.
Password	Required: Yes Type: Header Length: 26	Holds the password associated with your MyUPS account.

URL

<https://onlinetools.ups.com/dangerousgoods/{version}/chemicalreferencedata>

URL Parameters

Name	Constraint	Description
version	Required: Yes Type: Path Length: 5	Version of the API. Valid values: v1 v1801

ChemicalReferenceDataRequest

Name	Constraint	Description	Validation
{ "ChemicalReferenceDataRequest": {} }			
ChemicalReferenceDataRequest	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Dangerous Goods Utility Request container for Chemical Reference Data.	
{ "ChemicalReferenceDataRequest": { "IDNumber": "" } }			
IDNumber	Required: Cond Type: String Max Allowed: 1 Length: 1...6	This is the ID number (UN/NA/ID) for the specified commodity. UN/NA/ID Identification Number assigned to the specified regulated good. (Include the UN/NA/ID as part of the entry).	At least one of the information - IDNumber or ProperShipping Name should be provided to retrieve Chemical Reference Data.
{ "ChemicalReferenceDataRequest": { "ProperShippingName": "" } }			
ProperShippingName	Required: Cond Type: String Max Allowed: 1 Length: 1...250	The Proper Shipping Name assigned by ADR, CFR or IATA.	At least one of the information - IDNumber or ProperShipping Name should be provided to retrieve Chemical Reference Data.
{ "ChemicalReferenceDataRequest": { "ShipperNumber": "" } }			
ShipperNumber	Required: Yes Type: String Max Allowed: 1 Length: 6	Shipper's six digit account number.	Your UPS Account Number must have correct Dangerous goods contract to successfully use this API.

ChemicalReferenceDataResponse

Name	Constraint	Description	Validation
<code>{"ChemicalReferenceDataResponse": {}}</code>			
ChemicalReferenceDataResponse	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Dangerous Goods Utility Response container for Chemical Reference Data.	
<code>{"ChemicalReferenceDataResponse": {"Response": {}}}</code>			
Response	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Contains Dangerous Goods Utility Chemical Reference Data response components.	
<code>{"ChemicalReferenceDataResponse": {"Response": {"ResponseStatus": {}}}</code>			
ResponseStatus	Required: Yes Type: Container Max Allowed: 1 Length: N/A	Response status container.	
<code>{"ChemicalReferenceDataResponse": {"Response": {"ResponseStatus": {"Code": ""}}}</code>			
Code	Required: Yes Type: String Max Allowed: 1 Length: 1	Identifies the success or failure of the transaction.	Valid values: 1 = Successful.
<code>{"ChemicalReferenceDataResponse": {"Response": {"ResponseStatus": {"Description": ""}}}</code>			
Description	Required: Yes Type: String Max Allowed: 1 Length: 1...35	Describes Response Status Code. Returns text of "Success" or "Failure".	
<code>{"ChemicalReferenceDataResponse": {"Response": {"Alert": {}}}</code>			
Alert	Required: No Type: Container Max Allowed: UNB Length: N/A	Alert Container. There can be zero to many alert containers with code and description.	
<code>{"ChemicalReferenceDataResponse": {"Response": {"Alert": {"Code": ""}}}</code>			
Code	Required: Yes* Type: String Max Allowed: 1 Length: 1...10	Warning code returned by the system.	
<code>{"ChemicalReferenceDataResponse": {"Response": {"Alert": {"Description": ""}}}</code>			

Name	Constraint	Description	Validation
Description	Required: Yes* Type: String Max Allowed: 1 Length: 1...150	Warning messages returned by the system.	
{ "ChemicalReferenceDataResponse": { "Response": { "TransactionReference": {} } } }			
TransactionReference	Required: No Type: Container Max Allowed: 1 Length: N/A	Transaction Reference Container.	
{ "ChemicalReferenceDataResponse": { "Response": { "TransactionReference": { "CustomerContext": "" } } } }			
CustomerContext	Required: No Type: String Max Allowed: 1 Length: 1...512	The CustomerContext information which will be echoed during response.	
{ "ChemicalReferenceDataResponse": { "ChemicalData": {} } }			
ChemicalData	Required: Cond Type: Container Max Allowed: UNB Length: N/A	Container to hold Chemical Data information.	
{ "ChemicalReferenceDataResponse": { "ChemicalData": { "ChemicalDetail": {} } } }			
ChemicalDetail	Required: Cond Type: Container Max Allowed: 1 Length: N/A	Container to hold Chemical details.	
{ "ChemicalReferenceDataResponse": { "ChemicalData": { "ChemicalDetail": { "RegulationSet": "" } } } }			

Name	Constraint	Description	Validation
RegulationSet	Required: Cond Type: String Max Allowed: 1 Length: 3...5	The Regulatory set associated with every regulated shipment.	Possible values are ADR, 49CFR, IATA. It will be returned if applies for a given chemical record. ADR = Europe to Europe Ground Movement 49CFR = HazMat regulated by US Dept. of Transportation within the U.S. or ground shipments to Canada, IATA= Worldwide Air movement.
{ "ChemicalReferenceDataResponse": { "ChemicalData": { "ChemicalDetail": { "IDNumber": "" } } } }			
IDNumber	Required: Cond Type: String Max Allowed: 1 Length: 1...6	This is the ID number (UN/NA/ID) for the specified commodity. UN/NA/ID Identification Number assigned to the specified regulated good. (Include the UN/NA/ID as part of the entry).	It will be returned if applies for a given chemical record.
{ "ChemicalReferenceDataResponse": { "ChemicalData": { "ChemicalDetail": { "HazardousMaterialsDescription": "" } } } }			
HazardousMaterialsDescription	Required: Cond Type: String Max Allowed: 1 Length: 1...250	Free form text containing the full name that are used to describe a regulated chemical record.	It will be returned if applies for a given chemical record.
{ "ChemicalReferenceDataResponse": { "ChemicalData": { "ChemicalDetail": { "ClassDivisionNumber": "" } } } }			
ClassDivisionNumber	Required: Cond Type: String Max Allowed: 1 Length: 1...10	This is the hazard class associated to the specified commodity.	It will be returned if applies for a given chemical record.
{ "ChemicalReferenceDataResponse": { "ChemicalData": { "ChemicalDetail": { "SubRiskClass": "" } } } }			

Name	Constraint	Description	Validation
SubRiskClass	Required: Cond Type: String Max Allowed: 1 Length: 1...100	Secondary hazardous characteristics of a package. (There can be more than one – separate each with a comma).	It will be returned if applies for a given chemical record.
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"ChemicalDetail": {"PackagingGroupType": ""}}}}</code>			
PackagingGroupType	Required: Cond Type: String Max Allowed: 1 Length: 1...10	This is the packing group category associated to the specified commodity. This code represents the potential degree of danger represented by a regulated commodity being transported.	It will be returned if applies for a given chemical record.
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"ChemicalDetail": {"SpecialPermit": ""}}}}</code>			
SpecialPermit	Required: Cond Type: String Max Allowed: 1 Length: 1...4	Indicates whether or not related entity requires special permit in order to transport the chemical.	It will be returned if applies for a given chemical record. Valid values: AIR GND BOTH
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"ChemicalDetail": {"TechnicalNameRequiredIndicator": ""}}}}</code>			
TechnicalNameRequiredIndicator	Required: Cond Type: String Max Allowed: 1 Length: 1	Indicates whether TechnicalName is required or not. It will be returned if applies for a given chemical record. Y = TechnicalName is required. N = TechnicalName is not required.	
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"ChemicalDetail": {"AdditionalShippingInformationRequiredIndicator": ""}}}}</code>			

Name	Constraint	Description	Validation
AdditionalShippingInformationRequiredIndicator	Required: Conditional Type: String Max Allowed: 1 Length: 1	Indicates whether or not additional text is required for the shipping papers for the related entity.	It will be returned if applies for a given chemical record. Valid values: N = No, additional information for the shipping papers are not required. Y = Yes, additional information for the shipping papers are required.
{"ChemicalReferenceDataResponse": {"ChemicalData": {"ChemicalDetail": {"TunnelRestrictionCode": ""}}}}			
TunnelRestrictionCode	Required: No Type: String Max Allowed: 1 Length: 1...10	Defines what is restricted to pass through a tunnel.	EXAMPLES OF VALUES: (B),(D),(E),(B/D),(B/E),(C,D),(C/E),(D/E),Blank
{"ChemicalReferenceDataResponse": {"ChemicalData": {"ChemicalDetail": {"TransportCategory": ""}}}}			
TransportCategory	Required: No Type: String Max Allowed: 1 Length: 1	Code representing a category of transportation, assigned by a regulation set for each regulated commodity. Each value of this category is associated with a multiplier that is used to calculate a value. This value is then used to determine the placarding to be placed on the vehicle or container that holds the related regulated commodity	EXAMPLES OF VALUES: 0 = No multiplier - must use placarding 1 = Use a multiplier of 50 2 = Use a multiplier of 3 3 = Use a multiplier of 1 4 = Use a multiplier of 0 - do not apply a placard
{"ChemicalReferenceDataResponse": {"ChemicalData": {"ChemicalDetail": {"TransportMultiplierQuantity": ""}}}}			

Name	Constraint	Description	Validation
TransportMultiplierQuantity	Required: No Type: String Max Allowed: 1 Length: 1	The quantity that represents a multiplication factor used to calculate a value to determine the placarding to be placed on the vehicle or container that holds the related regulated commodity. This factor is associated with a code value represented by Regulated Commodity Transport Category Code.	EXAMPLES OF VALUES: 0 = No multiplier - must use placarding 1 = Use a multiplier of 50 2 = Use a multiplier of 3 3 = Use a multiplier of 1 4 = Use a multiplier of 0 - do not apply a placard
{“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“ChannelTunnelAcceptedIndicator”: “”}}}}			
ChannelTunnelAcceptedIndicator	Required: No Type: String Max Allowed: 1 Length: 1	ChannelTunnelAcceptedIndicator indicates if the chemical is accepted through channel tunnel or not	Y= Accepted through channel tunnel N=Not accepted through channel tunnel
{“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“ChemicalType”: “”}}}}			
ChemicalType	Required: No Type: String Max Allowed: 1 Length: 25	A set of chemical records in HMMS that correspond to a subset of chemicals for a regulation set, or the entire set of chemicals for a regulation set	EXAMPLES OF VALUES: FREIGHT TDG IATA US DOMESTIC AIR 49CFR ADR IATA INTERNATIONAL AIR
{“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“CAToUSShipmentAllowedIndicator”: “”}}}}			
CAToUSShipmentAllowedIndicator	Required: No Type: String Max Allowed: 1 Length: 1	CAToUSShipmentAllowedIndicator indicates whether this chemical is allowed from CA to US Applicable only for TDG shipments	Y = Permitted from CA to US N = Not Permitted from CA to US
{“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ProperShippingNameDetail”: {}}}}			

Name	Constraint	Description	Validation
ProperShippingNameDetail	Required: Cond Type: Container Max Allowed: 1 Length: N/A	Container to hold Proper Shipping Name Detail information.	It will be returned if applies for a given chemical record.
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"ProperShippingNameDetail": {"ProperShippingName": ""}}}}</code>			
ProperShippingName	Required: Yes* Type: String Max Allowed: UNB Length: 1...250	The Proper Shipping Name assigned by ADR, CFR or IATA.	
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"PackageQuantityLimitDetail": {}}}}</code>			
PackageQuantityLimitDetail	Required: Cond Type: Container Max Allowed: UNB Length: N/A	Container to hold Package Quantity Limit Detail information.	It will be returned if applies for a given chemical record.
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"PackageQuantityLimitDetail": {"PackageQuantityLimitTypeCode": ""}}}}</code>			
PackageQuantityLimitTypeCode	Required: Cond Type: String Max Allowed: 1 Length: 1...10	The type of package quantity limit.	It will be returned if applies for a given chemical record. Valid values: CAO - Cargo Aircraft Only LTD QTY - Limited Quantity GND - Ground PAX - Passenger Aircraft COMAT CAO - Company Material CAO COMAT LTD - Company Material LTD COMAT PAX - Company Material PAX
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"PackageQuantityLimitDetail": {"Quantity": ""}}}}</code>			
Quantity	Required: Cond Type: String Max Allowed: 1 Length: 15	The numerical value of the mass capacity of the regulated good.	It will be returned if applies for a given chemical record.
<code>{"ChemicalReferenceDataResponse": {"ChemicalData": {"PackageQuantityLimitDetail": {"UOM": ""}}}}</code>			

Name	Constraint	Description	Validation
UOM	Required: Cond Type: String Max Allowed: 1 Length: 1...10	The unit of measure used for the mass capacity of the regulated good.	It will be returned if applies for a given chemical record. Example: ml, L, g, mg, kg, cylinder, pound, pint, quart, gallon, ounce etc.
<pre>{ "ChemicalReferenceDataResponse": { "ChemicalData": { "PackageQuantityLimitDetail": { "PackagingInstructionCode": "" } } } }</pre>			
PackagingInstructionCode	Required: Cond Type: String Max Allowed: 1 Length: 1...353	The packing instructions related to the chemical record.	It will be returned if applies for a given chemical record.

API Sample Scenario

Scenario:

Client application is submitting a ChemicalReferenceDataRequest

Method	POST
Header Elements	transId: 12345 transactionSrc: Test ChemicalReferenceData Username: user name Password: password AccessLicenseNumber: accesslicensenumber
Example URL	https://onlinetools.ups.com/dangerousgoods/v1/chemicalreferencedata
Example Request	<pre>{ "ChemicalReferenceDataRequest": { "IDNumber": "UN1088", "ProperShippingName": "Acetal", "ShipperNumber": "Your Shipper Number" } }</pre>
Example Response	<pre>{ "ChemicalReferenceDataResponse": { "Response": { "ResponseStatus": { "Code": "1", "Description": "Success" }, "TransactionReference": { "CustomerContext": "DG_CRD" } }, "ChemicalData": [{ "ChemicalDetail": { "RegulationSet": "TDG", "IDNumber": "UN1088", "HazardousMaterialsDescription": "ACETAL", "ClassDivisionNumber": "3", "PackagingGroupType": "II", "TechnicalNameRequiredIndicator": "N", "AdditionalShippingInformationRequiredIndicator": "N", "ChannelTunnelAcceptedIndicator": "N", </pre>

```
"ChemicalType": "TDG",
"CAToUSShipmentAllowedIndicator": "Y"
},
"ProperShippingNameDetail": {
  "ProperShippingName": [
    "ACETAL",
    "ACETAL MIXTURE",
    "ACETAL SOLUTION"
  ]
},
"PackageQuantityLimitDetail": [
  {
    "PackageQuantityLimitTypeCode": "CAO",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT CAO",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT LTD",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT PAX",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "GND",
    "Quantity": "30.0000",
    "UOM": "L"
  },
  {
    "PackageQuantityLimitTypeCode": "LTD QTY",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "PAX",
    "Quantity": "0.0000"
  }
]
```



```
    },  
    {  
      "ChemicalDetail": {  
        "RegulationSet": "IATA",  
        "IDNumber": "UN1088",  
        "HazardousMaterialsDescription": "ACETAL",  
        "ClassDivisionNumber": "3",  
        "PackagingGroupType": "II",  
        "TechnicalNameRequiredIndicator": "N",  
        "AdditionalShippingInformationRequiredIndicator": "N",  
        "ChannelTunnelAcceptedIndicator": "N",  
        "ChemicalType": "IATA US DOMESTIC AIR"  
      },  
      "ProperShippingNameDetail": {  
        "ProperShippingName": [  
          "ACETAL",  
          "ACETAL MIXTURE",  
          "ACETAL SOLUTION"  
        ]  
      },  
      "PackageQuantityLimitDetail": [  
        {  
          "PackageQuantityLimitTypeCode": "CAO",  
          "Quantity": "30.0000",  
          "UOM": "L",  
          "PackagingInstructionCode": "364"  
        },  
        {  
          "PackageQuantityLimitTypeCode": "COMAT CAO",  
          "Quantity": "60.0000",  
          "UOM": "L",  
          "PackagingInstructionCode": "364"  
        },  
        {  
          "PackageQuantityLimitTypeCode": "COMAT LTD",  
          "Quantity": "1.0000",  
          "UOM": "L",  
          "PackagingInstructionCode": "Y341"  
        },  
        {  
          "PackageQuantityLimitTypeCode": "COMAT PAX",
```

```
"Quantity": "5.0000",
"UOM": "L",
"PackagingInstructionCode": "353"
},
{
  "PackageQuantityLimitTypeCode": "GND",
  "Quantity": "0.0000"
},
{
  "PackageQuantityLimitTypeCode": "LTD QTY",
  "Quantity": "1.0000",
  "UOM": "L",
  "PackagingInstructionCode": "Y341"
},
{
  "PackageQuantityLimitTypeCode": "PAX",
  "Quantity": "5.0000",
  "UOM": "L",
  "PackagingInstructionCode": "353"
}
]
},
{
  "ChemicalDetail": {
    "RegulationSet": "IATA",
    "IDNumber": "UN1088",
    "HazardousMaterialsDescription": "ACETAL",
    "ClassDivisionNumber": "3",
    "PackagingGroupType": "II",
    "TechnicalNameRequiredIndicator": "N",
    "AdditionalShippingInformationRequiredIndicator": "N",
    "TunnelRestrictionCode": "(D/E)",
    "TransportCategory": "2",
    "TransportMultiplierQuantity": "3",
    "ChannelTunnelAcceptedIndicator": "Y",
    "ChemicalType": "IATA INTERNATIONAL AIR"
  },
  "ProperShippingNameDetail": {
    "ProperShippingName": [
      "ACETAL",
      "ACETAL MIXTURE",
```

```
"ACETAL SOLUTION"
]
},
"PackageQuantityLimitDetail": [
{
  "PackageQuantityLimitTypeCode": "CAO",
  "Quantity": "30.0000",
  "UOM": "L",
  "PackagingInstructionCode": "364"
},
{
  "PackageQuantityLimitTypeCode": "COMAT CAO",
  "Quantity": "60.0000",
  "UOM": "L",
  "PackagingInstructionCode": "364"
},
{
  "PackageQuantityLimitTypeCode": "COMAT LTD",
  "Quantity": "1.0000",
  "UOM": "L",
  "PackagingInstructionCode": "Y341"
},
{
  "PackageQuantityLimitTypeCode": "COMAT PAX",
  "Quantity": "5.0000",
  "UOM": "L",
  "PackagingInstructionCode": "353"
},
{
  "PackageQuantityLimitTypeCode": "GND",
  "Quantity": "0.0000"
},
{
  "PackageQuantityLimitTypeCode": "LTD QTY",
  "Quantity": "1.0000",
  "UOM": "L",
  "PackagingInstructionCode": "Y341"
},
{
  "PackageQuantityLimitTypeCode": "PAX",
  "Quantity": "5.0000",
```

```
"UOM": "L",
  "PackagingInstructionCode": "353"
}
],
{
  "ChemicalDetail": {
    "RegulationSet": "IATA",
    "IDNumber": "UN1088",
    "HazardousMaterialsDescription": "ACETAL",
    "ClassDivisionNumber": "3",
    "PackagingGroupType": "II",
    "TechnicalNameRequiredIndicator": "N",
    "AdditionalShippingInformationRequiredIndicator": "N",
    "ChannelTunnelAcceptedIndicator": "N",
    "ChemicalType": "FREIGHT"
  },
  "ProperShippingNameDetail": {
    "ProperShippingName": [
      "ACETAL",
      "ACETAL MIXTURE",
      "ACETAL SOLUTION"
    ]
  },
  "PackageQuantityLimitDetail": [
    {
      "PackageQuantityLimitTypeCode": "CAO",
      "Quantity": "60.0000",
      "UOM": "L",
      "PackagingInstructionCode": "364"
    },
    {
      "PackageQuantityLimitTypeCode": "COMAT CAO",
      "Quantity": "60.0000",
      "UOM": "L",
      "PackagingInstructionCode": "364"
    },
    {
      "PackageQuantityLimitTypeCode": "COMAT LTD",
      "Quantity": "1.0000",
      "UOM": "L",
```

```
"PackagingInstructionCode": "Y341"
},
{
  "PackageQuantityLimitTypeCode": "COMAT PAX",
  "Quantity": "5.0000",
  "UOM": "L",
  "PackagingInstructionCode": "353"
},
{
  "PackageQuantityLimitTypeCode": "GND",
  "Quantity": "0.0000"
},
{
  "PackageQuantityLimitTypeCode": "LTD QTY",
  "Quantity": "1.0000",
  "UOM": "L",
  "PackagingInstructionCode": "Y341"
},
{
  "PackageQuantityLimitTypeCode": "PAX",
  "Quantity": "5.0000",
  "UOM": "L",
  "PackagingInstructionCode": "353"
}
]
},
{
  "ChemicalDetail": {
    "RegulationSet": "ADR",
    "IDNumber": "UN1088",
    "HazardousMaterialsDescription": "ACETAL",
    "ClassDivisionNumber": "3",
    "PackagingGroupType": "II",
    "TechnicalNameRequiredIndicator": "N",
    "AdditionalShippingInformationRequiredIndicator": "N",
    "TunnelRestrictionCode": "(D/E)",
    "TransportCategory": "2",
    "TransportMultiplierQuantity": "3",
    "ChannelTunnelAcceptedIndicator": "Y",
    "ChemicalType": "ADR"
  },
}
```

```
"ProperShippingNameDetail": {
  "ProperShippingName": [
    "ACETAL",
    "ACETAL MIXTURE",
    "ACETAL SOLUTION"
  ],
},
"PackageQuantityLimitDetail": [
  {
    "PackageQuantityLimitTypeCode": "CAO",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT CAO",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT LTD",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT PAX",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "GND",
    "Quantity": "30.0000",
    "UOM": "KG G",
    "PackagingInstructionCode": "P001"
  },
  {
    "PackageQuantityLimitTypeCode": "LTD QTY",
    "Quantity": "0.0000"
  },
  {
    "PackageQuantityLimitTypeCode": "PAX",
    "Quantity": "0.0000"
  }
],
},
{
```

```
"ChemicalDetail": {
  "RegulationSet": "49CFR",
  "IDNumber": "UN1088",
  "HazardousMaterialsDescription": "ACETAL",
  "ClassDivisionNumber": "3",
  "PackagingGroupType": "II",
  "TechnicalNameRequiredIndicator": "N",
  "AdditionalShippingInformationRequiredIndicator": "N",
  "ChannelTunnelAcceptedIndicator": "N",
  "ChemicalType": "49CFR"
},
"ProperShippingNameDetail": {
  "ProperShippingName": [
    "ACETAL",
    "ACETAL MIXTURE",
    "ACETALS",
    "ACETAL SOLUTION"
  ]
},
"PackageQuantityLimitDetail": [
  {
    "PackageQuantityLimitTypeCode": "CAO",
    "Quantity": "30.0000",
    "UOM": "L"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT CAO",
    "Quantity": "60.0000",
    "UOM": "L",
    "PackagingInstructionCode": "202"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT LTD",
    "Quantity": "1.0000",
    "UOM": "L",
    "PackagingInstructionCode": "150"
  },
  {
    "PackageQuantityLimitTypeCode": "COMAT PAX",
    "Quantity": "5.0000",
    "UOM": "L",
```

	<pre>"PackagingInstructionCode": "202" }, { "PackageQuantityLimitTypeCode": "GND", "Quantity": "32.0000", "UOM": "KG" }, { "PackageQuantityLimitTypeCode": "LTD QTY", "Quantity": "1.0000", "UOM": "L", "PackagingInstructionCode": "150" }, { "PackageQuantityLimitTypeCode": "PAX", "Quantity": "5.0000", "UOM": "L", "PackagingInstructionCode": "202" }] }]</pre>
Example Error Response	<pre>{ "response": { "errors": [{ "code": "9190032", "message": "Missing or Invalid ShipperNumber." }] } }</pre>

Appendices

Error Codes

When the UPS system is unable to respond to a request, be it from a malformed request, an illegal or invalid value, or other issues, the API generates an error response.

HTTP Status Codes

Code	Message	Description
200	OK	Success: Everything is working
400	Bad Request	The request was invalid or cannot be served. The exact error should be explained in the error payload. E.g. The JSON is not valid"
401	Unauthorized	The request requires authentication
404	Not found	URL does not exist or resource not found
405	Method not allowed	Method not allowed
500	An internal server error occurred	An internal server error occurred; API developers should avoid this error. If an error occurs in the global catch blog, the stracktrace should be logged and not returned as response.
503	Internal Server Error	The service/resource is not available. There are external component DOWN issues that the client will not be able to resolve

Common Error Codes

The following error codes can apply to all RESTful and other APIs.

Code	HTTP Status	Description
10001	400	The request is not well formed.
10002	400	The request is well formed but the request is not valid.
10003	400	The request is either empty or null.
10006	400	Although the document is well formed and valid, the element content contains values that do not conform to the rules and constraints contained in this specification.
10013	400	The message is too large to be processed by the Application.
20001	500	General process failure.
20002	400	The specified service name, {0}, and version number, {1}, combination is invalid.
20003	400	Please check the server environment for the proper J2EE ws apis.
20006	400	Invalid request action.
20007	400	Missing Required field, {0}.
20008	400	The field, {0}, contains invalid data, {1}.
20012	400	The Client Information exceeds its Maximum Limit of {0}.
250000	400	No XML declaration in the XML document.
250001	400	Invalid Access License for the tool. Please re-license.

Code	HTTP Status	Description
250002	401	Invalid UserId/Password.
250003	401	Invalid Access License number.
250004	401	Incorrect UserId or Password.
250005	401	No Access and Authentication Credentials provided.
250006	401	The maximum number of user access attempts was exceeded.
250007	401	The UserId is currently locked out; please try again in 30 minutes.
250009	401	License Number not found in the UPS database.
250019	401	Invalid Field value.
250050	500	License system not available.

Dangerous Goods RESTful Error Codes

For Dangerous Goods Acceptance Audit Pre-Check request, Streamline and Audit Pre-Check process is carried out depending upon type of `CommodityRegulatedLevelCode` requested. Streamline process only applies to `CommodityRegulatedLevelCode` FR and LQ. It doesn't apply to EQ and LR.

- For `CommodityRegulatedLevelCode` FR and LQ, if Streamline process passes but Audit Pre-Check fails for Dangerous Goods Acceptance Audit Pre-Check request, some of the following codes could be returned as Warning.
- For `CommodityRegulatedLevelCode` FR and LQ, if Streamline process fails for Dangerous Goods Acceptance Audit Pre-Check, the same warning codes could be returned as hard error.
- For `CommodityRegulatedLevelCode` LR and EQ, only Audit Pre-Check applies. Streamline process doesn't apply. Hence, for LR and EQ, it will be always hard error.

Code	HTTP Status	Description
9190000	500	Dangerous Goods Utility Webservice is not available.
9190001	400	Your UPS Account number is not authorized for Dangerous Goods shipments with ADR RegulationSet.
9190002	400	Your UPS Account number is not authorized for Dangerous Goods shipments with CFR RegulationSet.
9190003	400	Your UPS Account number is not authorized for Dangerous Goods shipments with IATA RegulationSet.
9190004	400	Your UPS Account number is not authorized for Dangerous Goods shipments with TDG RegulationSet.
9190005	400	Your UPS Account number is not authorized for Dangerous Goods shipments with ADR RegulationSet and Fully Regulated RegulatoryQuantityCode.
9190006	400	Your UPS Account number is not authorized for Dangerous Goods shipments with CAO TransportationMode.
9190007	400	Missing ShipFromAddress container.
9190008	400	Missing ShipToAddress container.
9190009	400	Missing or Invalid AddressLine for ShipFromAddress.
9190010	400	Missing or Invalid City for ShipFromAddress.
9190011	400	Missing or Invalid CountryCode for ShipFromAddress.
9190012	400	Missing or Invalid AddressLine for ShipToAddress.
9190013	400	Missing or Invalid City for ShipToAddress.
9190014	400	Missing or Invalid CountryCode for ShipToAddress.
9190015	400	Missing or Invalid Service Code.
9190016	400	Missing or invalid RegulationSet.
9190017	400	Missing Package information.
9190018	400	Missing or Invalid PackageWeight.
9190019	400	Missing or Invalid Unit of Measurement for PackageWeight.
9190020	400	Missing ChemicalRecord information.
9190021	400	Exceeds maximum number of ChemicalRecord allowed per Package.
9190022	400	Missing or Invalid TransportationMode.
9190023	400	Missing or Invalid ClassDivisionNumber.
9190024	400	Missing or Invalid IDNumber.
9190025	400	Missing or Invalid CommodityRegulatedLevelCode.
9190026	400	Missing or Invalid QValue.
9190027	400	Missing or Invalid Quantity.

Code	HTTP Status	Description
9190028	400/200	Missing or Invalid PackagingTypeQuantity.
9190029	400	Missing or Invalid TransportCategory.
9190030	400	Invalid Request for Dangerous Goods Utility Webservice.
9190031	400	Missing Shipment information.
9190032	400	Missing or Invalid ShipperNumber.
9190033	400	Your UPS Account number is not authorized for Dangerous Goods shipments.
9190034	400	Missing or Invalid PackageIdentifier.
9190035	400	Missing or Invalid ChemicalRecordIdentifier.
9190036	400	Missing or Invalid OriginRecordTransactionTimestamp.
9190037	400	Exceeds maximum number of allowed packages.
9190038	400	The requested Ship From country is not supported for Acceptance Audit Pre-Check in Customer Integration Mode.
9190039	400	At least one information - ProperShippingName or IDNumber is required to retrieve Chemical Reference Data.
9190040	400	No Chemical Reference Data records found for given input data.
9190041	400	Chemical Reference Data feature is not supported in Customer Integration Mode.
9197059	400/200	EmergencyContact is required when EmergencyPhone is provided.
9197060	400/200	Invalid EmergencyPhone. Emergency Phone Number must be a minimum of 10 characters with at least one numeric.
9197061	400	RegulationSet must be 49CFR, TDG or ADR when TransportationMode is Ground.
9197064	400	Black Powder (NA0027) cannot exceed 100 lbs per shipment.
9197065	400	Smokeless Powder (NA3178) cannot exceed 100 lbs per shipment.
9197066	400/200	TechnicalName is required for specified ProperShippingName.
9197067	400	Technical Name is not allowed for this shipment.
9197068	400/200	Missing or Invalid ProperShippingName.
9197069	400/200	AdditionalDescription is required for this shipment.
9197071	400	Net Quantity indicated exceeds the allowed maximum, based on chemical table validation. [][]
9197072	400/200	Packing Instruction specified does not match the packing instruction expected, based on chemical table validation. [][]
9197073	400/200	Packing Instruction specified does not match the packing instruction expected, based on chemical table validation. The packing instruction should be blank.
9197074	400/200	Package Type must be specified when the package is not Part of All Packed in One.
9197075	400/200	Net Quantity/TI must be specified.
9197077	400	Missing or Invalid UOM for a given Quantity.
9197078	400	Net Quantity UOM: XXX is Not Valid For IATA. Valid values are MT, G, KG, KG G, L, µG, ML, TL. [][]
9197079	400	Missing or Invalid PackagingGroupType for this shipment.
9197080	400	The Packing Group specified: XXX is invalid based on chemical table validation for this UNID.
9197082	400	Missing or Invalid SubRiskClass.

Code	HTTP Status	Description
9197083	400	Lighter authentication (LAA) number required - Remarks must be entered or package rejected.
9197084	400	TI Unit of Measure must be selected for Class Division Number 7.
9197085	400/200	Q Value must be N/A when there are no All Packed in One Basic Descriptions.
9197086	400	UPS does not offer Biological Substances, Category B service from the selected origin country/postal code.
9197087	400	UPS does not offer service for the provided chemical record from the specified origin country/postal code.
9197088	400/200	A single ChemicalRecord cannot be All Packed in One.
9197089	400/200	Overpack is required for a shipment with three ChemicalRecord where only two ChemicalRecord are All Packed in One.
9197090	400/200	The APIO total net quantity exceeds the lowest permitted maximum net quantity.
9197091	400	The Net Quantity Weight exceeds the limit for the specified Risk Class, Sub Risk and Packing Group combination. Risk Class 2.2 cannot exceed 75 KG.
9197092	400	The Net Quantity Weight exceeds the 25KG limit for the given specified ClassDivisionNumber, SubRiskClass and PackingGroupType combination.
9197093	400	CAO Quantities of Class 1 Explosives are not allowed to the specified destination country.
9197094	400	Unable to determine a single chemical record. Acceptance Audit Pre-Check cannot be performed.
9197095	400	CAO Quantities of Class 1 Explosives are not allowed from the specified origin country.
9197096	400/200	Invalid TunnelRestrictionCode for a given Hazardous material package using ADR RegulationSet.
9197097	400/200	Invalid TransportCategory for a given Hazardous material package using ADR RegulationSet.
9197099	400	Fully regulated commodities are prohibited to/from Great Britain for the specified service level. Great Britain chunnel passage not allowed for fully regulated commodities.
9197101	400	UPS does not offer dangerous goods for requested service from selected origin country to selected destination country.
9197104	400	Unable to retrieve the chemical record for selected (Regulation Set: XXX, UNN umber: XXX and Hazard Class: XXX), validations cannot be performed for this commodity.
9197105	400	A ShipTo postal code is required to verify if dangerous goods service is available to the selected destination country otherwise the shipment will be rejected.
9197110	400	Regulation Set is not valid for the destination country.
9197111	400	UPS does not offer dangerous goods service from the selected Origin country/postal code.
9197113	400	UPS does not offer dangerous goods service to the selected Destination country/postal code.
9197114	400/200	Missing or Invalid PackagingType.
9197115	400	A ShipFrom PostalCode is required to verify if dangerous goods service is available from the selected origin country, otherwise the shipment will be rejected.
9197118	400	UPS does not offer Dry Ice service from the selected origin country/postal code.

Code	HTTP Status	Description
9197119	400	UPS does not offer Dry Ice service to the selected destination country/postal code.
9197120	400	UPS does not offer Biological Substance, Category B service to the selected destination country/postal code.
9197121	400	UPS does not offer service for the specified chemical record to the selected destination country/postal code.
9197128	400	UPS does not offer service for the specified Commodity Regulated Level Code to selected Destination country.[XXX][]
9197129	400	UPS does not offer service for the specified Commodity Regulated Level Code from the selected Origin country.[XXX][]
9197130	400	Requested TransportationMode indicates this item is forbidden, based on chemical table validation.
9197131	400	Regulation Set is not valid for the origin country.
9197132	400	Excepted Quantities are not allowed from the selected origin country.
9197133	400	Excepted Quantities are not allowed to the selected destination country.
9197135	400	The specified origin country does not allow shipments containing CAO quantities of Dangerous Goods.
9197136	400	The Transportation Mode for ADR regulation set must be Ground.
9197137	400	Mail Innovations is not a valid service for shipping all categories of dangerous goods.
9197138	400	SurePost is not a valid service for shipping all categories of dangerous goods other than lightly regulated lithium batteries.
9197139	400	The specified destination country does not allow shipments containing CAO quantities of Dangerous Goods.
9197140	400	Validations have not been defined for the supplied regulation set. Validations were not be performed.[][]
9197141	400	As of January 1, 2017, UPS Policy requires that all air shipments containing lithium ion and metal batteries packed alone to be transported as section I.A or I.B fully regulated shipments. In addition, these changes also apply to UPS Ground service to Alaska, Hawaii and Puerto Rico, and UPS Standard service to select locations worldwide. Please refer to UPS.com for guidance to set up a UPS Dangerous Goods service agreement.
9197142	400	Lightly regulated lithium batteries sent via SurePost cannot be shipped outside of the US48.
9197143	400	Emergency contact must not match the Emergency Phone Number.
9197144	400	Emergency Phone Number contains an invalid entry.
9197145	400	The UPS Shipper Account number is invalid to be used as the Emergency contact.
9197146	400	Technical Name must not match the Proper Shipping Name.
9197147	400	Emergency Phone Number is required for dangerous good shipments with TDG regulation set.
9197148	400/200	Invalid Emergency contact. If a third party is being used the contact field must include both the name and the customer account with that provider.
9197149	400	Specified commodity is not permitted from Canada to US through TDG ground service.
9190042	400	Your UPS Account number is not authorized for shipping Biological Substance.
9190043	400	Your UPS Account number is not authorized for shipping Dry Ice.

Service Codes

UPS offers a wide variety of package delivery services. The following tables list the service code values for these services; they are ordered by the origin of the shipment.

- [United States](#)
- [Canada](#)
- [European Union](#)
- [Mexico](#)
- [Poland](#)
- [Puerto Rico](#)
- [Undefined Countries or Territories](#)
- [All Countries or Territories](#)

United States

Shipments originating in United States

Description	Service Code
UPS Standard	11
UPS Worldwide Expedited	08
UPS Worldwide Express	07
UPS Worldwide Express Plus	54
UPS Worldwide Saver	65

United States Domestic Shipments

Description	Service Code
UPS 2nd Day Air	02
UPS 2nd Day Air A.M.	59
UPS 3 Day Select	12
UPS Expedited Mail Innovations	M4
UPS First-Class Mail	M2
UPS Ground	03
UPS Next Day Air	01
UPS Next Day Air Early	14
UPS Next Day Air Saver	13
UPS Priority Mail	M3

Canada

Description	Service Code
UPS Expedited	02
UPS Express Saver	13
UPS 3 Day Select	12
UPS Access Point Economy	70
UPS Express	01
UPS Express Early	14
UPS Express Saver	65
UPS Standard	11
UPS Worldwide Expedited	08
UPS Worldwide Express	07
UPS Worldwide Express Plus	54
UPS Express Early	54

European Union

Description	Service Code
UPS Access Point Economy	70
UPS Expedited	08
UPS Express	07
UPS Standard	11
UPS Worldwide Express Plus	54
UPS Worldwide Saver	65

Mexico

Description	Service Code
UPS Access Point Economy	70
UPS Expedited	08
UPS Express	07
UPS Express Plus	54
UPS Standard	11
UPS Worldwide Saver	65

Poland

Description	Service Code
UPS Access Point Economy	70
UPS Expedited	08
UPS Express	07
UPS Express Plus	54
UPS Express Saver	65
UPS Standard	11
UPS Today Dedicated Courier	83
UPS Today Express	85
UPS Today Express Saver	86
UPS Today Standard	82

Puerto Rico

Shipments originating in Puerto Rico

Description	Service Code
UPS 2nd Day Air	02
UPS Ground	03
UPS Next Day Air	01
UPS Next Day Air Early	14
UPS Worldwide Expedited	08
UPS Worldwide Express	07
UPS Worldwide Express Plus	54
UPS Worldwide Saver	65

Undefined Countries or Territories

Use for all countries or territories other than United States, Canada, European Union, Mexico, Poland, and Puerto Rico

Description	Service Code
UPS Express	07
UPS Standard	11
UPS Worldwide Expedited	08
UPS Worldwide Express Plus	54
UPS Worldwide Saver	65

All Countries or Territories

Shipments originating in any country or territory

Description	Service Code
UPS Worldwide Express Freight	96
UPS Priority Mail Innovations	M5
UPS Economy Mail Innovations	M6
UPS Worldwide Express Freight Mid-day	71

Version Details

UPS uses version strategy to give back elements in the response when there is no functionality change in the request or to enhance the existing functionality. UPS acknowledges enhanced functionality for existing request elements only when the version is specified in the URL.

For ChemicalReferenceDataRequest, if the URL contains “v1801” as the version value, the following elements can be returned in the response:

URL version	Response Elements For ChemicalReferenceDataResponse
v1801 or greater value	<pre> {“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“TunnelRestrictionCode {“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“TransportCategory {“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“TransportMultiplierQuantity {“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“ChannelTunnelAcceptedIndicator {“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“ChemicalType {“ChemicalReferenceDataResponse”: {“ChemicalData”: {“ChemicalDetail”: {“CAToUSShipmentAllowedIndicator </pre>

Emergency Contact Invalid values

When using a third party provider, listing just the provider's name is not sufficient. In addition, the customer's account information must be included in the Emergency Contact field.

For example if 3E was the third party provider:

Invalid: <EmergencyContact>3E</EmergencyContact>

Valid: <EmergencyContact>3E 12345</EmergencyContact>

1-800-262-8200	800.424.3900	CHEMTEL INC	ER REGISTRANT
1-800-353-5053	8000-424-9300	CHEMTEL INC.	ERR
1-800-424-8802	8002429300	CHEMTELL	HAZMAT SERVICE
1-800-424-900	8004243900	CHEMTERC	HAZMAT SERVICE INC
1-800-424-930	800424930	CHEMTRAC	HAZMAT SERVICE INC.
1-800-434-9300	8004949300	CHEMTRACK	INC
1-800-535-5035	8005355302	CHEMTRAK	INFO TRAC
1-888-535-5053	880-424-9300	CHEMTRC	INFO TRACK
1800-535-5035	CAMTREC	CHEMTRE	INFO-TRAC
1800424930	CANUTEC	CHEMTREC	INFOTRAC
18004949300	CANUTECH	CHEMTREC (USA)	INFOTRACK
18005353053	CEMTREC	CHEMTREC 24 HOUR LINE	INFOTRAK
3-COMPANY	CENACOM	CHEMTREC CO	INFOTREC
3-E	CHEM	CHEMTREC INC	NONE SHOWN
3E	CHEM TECH	CHEMTREC USA	NOT SHOWN
3E CO	CHEM TEL	CHEMTREC/3M	P.E.R.S.
3E CO.	CHEM TRAC	CHEMTRECT	PARS
3E COMPANY	CHEM TREC	CHEMTREK	PARS ER
3E COMPANY.	CHEM TREC, CONTRACT # CC	CHEMTREX	PARS ER REGISTRANT
3ECOMPANY	CHEM-TEL	CHEMTREX/+1-703-527-3887	PARS REG
800 535 5035	CHEM-TELL	CHEMTREXC	PARS REGISTRAN
800 535-5035	CHEM-TREC	CHEMTRKE	PARS REGISTRANT
800-262-8200	CHEMETREC	CHEMTRREC	PARS REGS
800-424-3900	CHEMETRIC	CHEMTRTREC	PERS
800-424-8802	CHEMTAL	CHEMTREC	REGISTRANT PARS
800-434-9300	CHEMTEC	CHMTREC	SETIQ
800-535-5035	CHEMTEK	CNN	UNKNOWN
800-924-9300	CHEMTEL	COMPANY EMERGENCY NO.	USA CHEMTREC

Packaging Types Valid values

1 4G	ENV	OTH
1 4G BOX	FBX	OTHER
1 4G FIBREBOARD BOX X	FIBER BOARD BOX	PBX
1 CARDBOARD BOX	FIBERBOARD	PDR
1 FIB BOX	FIBERBOARD BOX	PLASTIC BOX
1 FIBER BOARD BOX	FIBERBOARD BOX 4G	PLASTIC CONTAINER
1 FIBERBOARD BOX	FIBERBOARD BOX: 4G	PLASTIC DRUM
1 FIBERBOARD BOX X	FIBERBOARD CARTON	PLASTIC JERRICAN
1 FIBRE BOARD BOX	FIBERBOARD BOX	PLASTIC PAIL
1 FIBREBOARD BOX	FIBRE BOARD BOX	PWB
1-FIBERBOARD BOX	FIBREBOARD BOX	STD
12SP 4GV BOX	FIBREBOARD BOX (4G)	STEEL DRUM
1FIBERBOARD BOX	FIBREBOARD BOX(S)	STEEL DRUM 1A1
1X FIBERBOARD BOX	FIBREBOARD BOX-4G	STY
4G	METAL BOX	STYROFOAM BOX
4G BOX	MTL	UN4G
4G FIBERBOARD BOX	ONE 4G FIBERBOARD BOX	WDN
4G FIBREBOARD BOX	ONE FIBERBOARD BOX	WOODEN BOX
CYL	ONE FIBERBOARD BOX X	X FIBER BOARD BOX
CYLINDER	ONE FIBREBOARD BOX	

DG API FAQs

Category	Question	Answer
Regulatory Paperwork	Does the Dangerous Goods API produce the appropriate regulatory paperwork for supported Dangerous Goods Regulations? (For example, the IATA Shipper's Declaration to accompany IATA Dangerous Goods shipments.)	No. The DG API can be used to validate that the commodities within a shipment are acceptable to UPS, but printing the regulatory paperwork should be performed in an application after validation of the DG commodities is complete.
Language Support	Does the DG API support languages other than English for inputs? (For example, could I provide the Proper Shipping Name in French or German?)	No. The DG API supports English only. All text inputs to the DG API should be in English.
Language Support	Does the DG API provide translation service for Proper Shipping Name or other required data elements?	No. The DG API supports English only. All text outputs from the DG API are in English.
Validation	What types of UPS shipments does the DG API validate?	An AAPC request will validate the following types of shipments: 1. "Fully Regulated" – DG shipments that require a Diamond Label and a shipping paper. The chemical details and the country or territory and postal code (if the country or territory has postal code) are all validated. 2. Limited Quantity - The chemical details and the country or territory and postal code (if the country or territory has postal code) are validated. 3. Excepted Quantity – The country or territory and postal code (if the country or territory has postal code) are validated. 4. Lightly Regulated - the country or territory and postal code (if the country or territory has postal code) are validated. 5. Dry Ice - the country or territory and postal code (if the country or territory has postal code) are validated. 6. Biological Substances, Category B - the country or territory and postal code (if the country or territory has postal code) are validated.
Validation	How often is the validation data updated?	Generally, the country / postal code validation data is updated monthly. The DG commodity details are generally updated quarterly.
DOT special permit	What is DOT special permit?	The chemical shipped under 49CFR requires DOT special permit. Shipper would get this permit from the Department of Transportation and then they should put the Permit number in the field 'AdditionalDescription' (Permit looks like: DOT-SP 8257).