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FED-STD-313F
October 12, 2018
SUPERSEDING
FED-STD-313E
July 1, 2014

FEDERAL STANDARD

MATERIAL SAFETY DATA, TRANSPORTATION DATA AND DISPOSAL DATA FOR HAZARDOUS MATERIALS FURNISHED TO GOVERNMENT ACTIVITIES

The General Services Administration has authorized the use of this federal standard by all federal agencies.

1. SCOPE AND PURPOSE

1.1 Scope. This standard establishes requirements for the preparation and submission of Safety Data Sheets (SDSs) and hazardous warning labels, as defined in 5.3.9, by contractors who provide hazardous materials to government activities.

1.2 Purpose. This Standard expands on the Occupational Safety and Health Administration (OSHA) definition of hazardous materials. Data obtained will be used within the government in employee safety and health programs and to provide for safe handling, storage, use, transportation and environmentally acceptable reuse or disposal of hazardous materials by government activities.

2. REFERENCED DOCUMENTS

2.1 Government Publication. The issues of the following documents, in effect on the date of invitation for bids or request for proposals, form a part of this standard to the extent specified herein.

CODE OF FEDERAL REGULATIONS (CFRs)

Title 10 – Energy
Title 29 – Labor
Title 40 – Protection of Environment
Title 49 – Transportation

(Copies of CFRs are available on line at www.ecfr.gov or from the Superintendent of Documents, US GPO, North Capital and H streets, N.W., Washington, DC 20402-0002. A Toxic Release Inventory (TRI) chemical list (EPA 745/K-94-052) is available from the EPCRA Document Distribution Center, 11029 Kenwood Road, Cincinnati, 45242, Attention NCEPI, or on the Internet at www.epa.gov/tri/).

US Air Force Manual 24-204 Joint service Publication:

"AFMAN 24-204/TM38-250/NAVSUP PUB 505/DLAI 4145.3 Preparing Hazardous Materials for Military Air Shipments"

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration (GSA), Federal Acquisition Service (FAS), Policy, Standards, and Engineering Branch (QSDPA), 1800 F Street NW, Rm. G300 Washington, DC 20405; or fedstd313@gsa.gov.

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(Application for copies should be addressed via the Contract Administration Office (CAD), Defense Contract Management Area Operations (DCMAO's) or the Defense Plant Representative Office (DPRO). An electronic copy of AFJMAN 24204 can be accessed via the internet at www.e-publishing.af.mil)

2.2 OTHER PUBLICATIONS

International Air Transport Association (IATA): "Dangerous

Goods Regulations (DGR)"

(Application for copies should be addressed to: Publications Assistant, International Air Transport Association, 800 Place Victoria, P.O Box 113, Montreal, Quebec, H4Z1M1. This is also available from commercial booksellers, and via the internet at (www.iata.org)

International Maritime Organization (IMO):

"International Maritime Dangerous Goods (IMDG) Code"

(Application for copies should be addressed to: International Maritime Organization, 4 Albert Embankment, London, SE1 7SR, United Kingdom. This is also available from commercial book sellers, and via the internet at www.imo.org)

American Conference of Governmental Industrial Hygienists (ACGIH):

"Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment"

(Application for copies should be addressed to: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH 45240. This is also available via the internet at www.acgih.org)

International Civil Aviation Organization (ICAO):

"Technical Instructions for the Safe Transport of Dangerous Goods by Air"

(Application for copies should be addressed to: The Document Sales Unit, International Civil Aviation Organization, 1000 Sherbrooke St W. Suite 400, Montreal, Quebec, Canada H3A 2R2. This is also available via the internet at www.icao.int)

United Nations Economic Commission for Europe (UNECE) Globally Harmonized System of Classification and Labeling of Chemicals (GHS):

(Application for copies should be addressed to: United Nations Publications Customer Service, C/O National Book Network, 15200 NBN Way, P.O. Box 190, Blue Ridge Summit, PA 17214. This is also available via the internet at www.unp.un.org, via email at unpublications@nbnbooks.com, or via Toll Free phone: 1-888-254-4286; or Toll Free fax: 1-800-338-4550.)

3. DEFINITIONS

3.1 Contractor. The contractor is any supplier, manufacturer, or other party who provides material to a government agency.

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3.2 Hazardous Material.

3.2.1 Any item or chemical which is classified as a health hazard, a physical hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified as defined by OSHA's Hazard Communication Standard (HCS) in 29 CFR 1910.1200 and Revision 3 of the GHS, or an "environmental hazard", as defined in 40 CFR, which includes, but is not limited to, hazards that pose one of the following effects:

- Acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard.

- Explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.

- Aquatic toxicity; bioaccumulation; degradation (biotic or abiotic) for organic chemicals; ozone layer depletion.

- Materials which in the course of normal handling, intended use, or normal storage operations may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics.

3.2.2 Any item or chemical which is reportable or potentially reportable or notifiable as inventory under the reporting requirements of the Designation, Reportable Quantities, and Notification (40 CFR Part 302), or as an environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right to Know (40 CFR Part 372), which includes the following:

- Chemicals with special characteristics which in the opinion of the manufacturer can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (40 CFR 355) and including the abandonment or discarding of barrels, containers, and other receptacles.

3.2.3 Any item or chemical which, when being transported or moved, is a risk to public safety or the environment and is regulated as such by one or more of the following:

- Department of Transportation Pipeline and Hazardous Materials Regulations (49 CFR 100-199) which includes the Hazardous material regulations (49 CFR 171-180);

- International Maritime Dangerous Goods (IMDG) of the International Maritime Organization (IMO);

- Dangerous Goods Regulations (DGR) of the International Air Transport Association (IATA);

- Technical Instructions for the safe Transport of Dangerous Goods by Air of the International Civil Aviation Organization (ICAO); and

- AFMAN 24-204/TM 38-250/ NAVSUP PUB 505/DLAI 4145.3 (Joint service publication)

3.2.4 Material which produces ionizing radiation (e.g. alpha & beta, gamma & x-rays, neutrons, high-speed electrons, high speed protons, and other particles capable of producing ions). This includes special nuclear material, by-product material, and radioactive substances as defined in 10 CFR 20.

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3.2.5 End items incorporating hazardous material (including those contained in removable components when originally installed in the end item) when the incorporation does not eliminate the hazardous nature throughout the life cycle of the end item.

3.3 Preparer. The preparer is the entity that developed the SDS and has provided the mailing address and phone number for contacting the manufacturer, and the emergency response phone number. The preparer is responsible for the accuracy of the technical data in the SDS. The preparer may or may not be the contractor furnishing the material to the government.

3.4 End item. The end item is a final combination of assemblies, components, modules, and parts which is designed to perform an operational function and is ready for intended use. Articles are considered end items.

4. GENERAL STATEMENTS OF REQUIREMENTS

4.1 Safety Data Receipt. The contractor shall submit, to the contracting officer, a physical or electronic copy of each SDS and a hazardous warning label meeting the requirements of the OSHA's HCS, or other relevant data.

5. DETAILED STATEMENTS OF REQUIREMENTS

5.1 Referencing this standard in purchase documents. Government agencies shall reference this standard in commodity specifications, contracts, and other purchase documents to assure inclusion of adequate requirements and clear instructions to contractors for the preparation and submission of SDSs and hazardous warning labels.

5.2 Preparation and Submission of the SDS. Items requiring an SDS shall be prepared and submitted as follows:

5.2.1 Items requiring an SDS. Contractors shall furnish a separate SDS for each individual item which is defined as a hazardous material in 3.2 or as required by the solicitation or contract. Appendix A provides examples of the supply classes containing hazardous materials. In cases where an SDS for an item is not required by regulation, the contractor may provide (a) an SDS for the item, (b) a separate SDS for each individual hazardous material incorporated into the end item, or (c) an alternative approach as identified in the contract as a distinct deliverable (e.g. technical/product data, hazardous material data or report(s) containing the end item's hazardous material data/information).

5.2.2 Preparation of the SDS. The SDS shall comply with the latest requirements of OSHA as defined in 29 CFR 1910.1200 Hazard Communication Standard (HCS) and its implementation of the United Nations Economic Commission for Europe (UNECE) Globally Harmonized System (GHS) of Classification and Labeling of Chemicals, Revision 3, as applicable. The SDS for hazardous material shipped overseas shall comply with the GHS. All sixteen (16) sections including section numbers and headings, and associated information under each heading shall be completed with at least the minimum information and in the order listed in the applicable HCS appendix or GHS annex. Unless otherwise specified in the solicitation or contract, the SDS shall include the additional information required in 5.3. Contractors, who have not manufactured the hazardous material they are furnishing to the government, shall include in or provide the additional information in an addendum (or equivalent) to the preparer's SDS, provided the SDS meets all other requirements of this standard. Unless otherwise specified in the solicitation or contract, contractors shall cite this standard in their subcontracts for hazardous materials. The government will assume that a current SDS submitted in good faith by the contractor is accurate unless it contains obvious

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errors or omissions. Examples of such omissions include, but are not limited to, failure to include the government identifiers, transportation or disposal data, or a statement that the material is not regulated for transportation under 49 CFR or disposal under 40 CFR.

5.2.3 Submission of the SDS and label. Contractor submission of SDSs and hazardous warning labels shall be as follows:

5.2.3.1 Copies of the SDS, hazardous material label, or other relevant data shall be provided prior to contract award unless otherwise specified in the solicitation, contract, or other written request.

5.2.3.2 Unless otherwise specified in the contract or order, one copy of the SDS shall be furnished to: (i) the Service/Agency SDS receipt point(s) listed in 5.5 for the Military service or Federal agency that purchased the item, and (ii) with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the contractor shall be permitted to transmit SDSs to consignees in advance of receipt of shipments, if authorized in writing by the Contracting Officer.

5.2.3.3 Electronic transmission of the SDS shall be the preferred method; however, physical copies may be accepted with a permission of the receiving agency's Contracting Officer.

5.2.3.4 Copies of the hazardous warning labels (HCS or GHS) shall be provided with the SDS for all products defined as hazardous under this regulation. GHS labels may be provided instead of the HCS labels. HCS labels are not required for end items containing hazardous materials.

5.2.4 Revision of SDS. The contractor shall submit a revised SDS when there has been a change in the composition or characteristics of the product or when the contractor has knowledge of new information which affects any of the information on the SDS, thus rendering the original SDS incomplete. The revised SDS shall be submitted to the Contracting Officer or the Service/Agency SDS receipt point(s) listed in 5.5 for the Military service or Federal agency that purchased the item, and shall be included with future shipments.

5.3 Additional information required. In addition to the information required in 5.2.2, the contractor shall provide an addendum to the SDS containing the government identifiers in 5.3.1 through 5.3.3. The information in 5.3.4 through 5.3.9 shall also be provided in the SDS under its proper section or in an addendum regardless of whether or not it is mandatory by OSHA.

5.3.1 The contract or solicitation number, manufacturer's Commercial and Government Entity (CAGE) code, and contractor's name and CAGE code.

5.3.2 The national stock number, activity control number, or local stock number specified in the contract. If these are not present, enter the Federal Supply Schedule Special Item Number or Category for the item.

5.3.3 Where applicable, the specification reference including specification number, revision letter, type, grade, or class.

5.3.4 The chemical and common name(s), Chemical Abstract Service (CAS), Registry number(s), and percentage(s) by weight of composition of all ingredients that are defined as hazardous materials in 3.2. The percentage may be specified as an upper limit or upper bound, as defined by 40 CFR 372.45. The specific hazardous chemical information must be provided unless it meets the 'trade secret' criteria of 29 CFR 1910.1200 or 40 CFR 350. The contractor shall treat trade secret data consistent with 29 CFR 1910.1200 or 40 CFR 350, as applicable. The contractor must indicate the authority under which trade secret data is

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withheld. The Government must maintain trade secret data in confidence, and only release the data consistent with 29 CFR 1910.1200 or 40 CFR 350, as applicable.

5.3.5 The OSHA Permissible Exposure Limit (PEL), ACGIH Threshold Limit Value (TLV), and any other US exposure limit known to the preparer for the product as a whole, or any of its hazardous constituents. This may include recommendations made by recognized toxicological groups, the manufacturer, or importer preparing the SDS.

5.3.6 The toxic chemicals as specified under EPA's 40 CFR.

5.3.7 Transportation data, to include the Proper Shipping Name, United Nations or North America Identification Number, Hazard Class, and Packaging Group.

5.3.8 Radioactive materials data, to include radioactive form (e.g. solid, liquid, gas), whether radiation source is sealed or not, radioisotope(s) information to include name (e.g. Thorium 32) chemical symbol (e.g. Th 232), CAS Number (e.g. 7440-29-1) and radioactive amount (in Micro curies, Curies or Becquerel units) for all radioisotopes contained in the material.

5.3.9 Hazardous warning label data elements, to include product identifier, signal words, hazard statements, pictograms, precautionary statements, contact information (name, address, and phone number) of the chemical manufacturer, importer, or other responsible party, and supplemental information (optional).

5.4 Product Labeling Requirements. The contractor shall label all containers of hazardous materials with OSHA's HCS or UNECE's GHS labels for all containers, despite any exemptions to the requirement as identified by 29 CFR 1910.1200 (b)(5). This requirement is needed for material ultimately being shipped to non-U.S. entities and for those items used in processes other than in consumer quantities. Products shipped overseas must be labeled in accordance with UNECE GHS requirements and other applicable regulatory requirements. When a hazardous product is repackaged, relabeled, or renamed, the chemical product and company name on the SDS, as well as the label information shall match that on the package.

5.5 Agency Focal Points. Indicated below is a list of Service/Agency focal points:

Procuring Service/Agency	SDS receipt point
Air Force:	USAFSAM/OET ATTN: HMIRS 2520 Fifth Street, Bldg. 840 Wright-Patterson AFB, OH 45433-7913 EMAIL:esoh.service.center@us.af.mil
Army:	Chief USAMC LOGSA Packaging, Storage, and Containerization Center ATTN: AMXLS-AT-P (HMIRS) 11 Hap Arnold Blvd. Tobyhanna, PA 18466-5097

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Defense Logistics Agency:	Commander Defense Supply Center, Richmond ATTN: DLA Aviation VBA 8000 Jefferson Davis Highway Richmond, VA 23297-5607
Defense Mapping Agency:	Director Defense Mapping Agency ATTN: HRG, Occupational Health, A-8 8613 Lee Hwy, Fairfax, 22031
GSA – All Commodities:	HMIRS Focal Point GSA/FAS/QSDPA 1800 F St NW, Room G300 Washington, DC 20405 Or by email: fedstd313@gsa.gov
Marine Corps:	Commander Navy & Marine Corps Public Health Center ATTN: IH-HMIRS 620 John Paul Jones Circle, Suite 1100 Portsmouth, VA 23708-2103
National Security Agency:	Director National Security Agency Central Security Service ATTN: CODE L542 Ft. George Meade, MD 20756-6000
Navy:	Commander N262 5450 Carlisle Pike P.O. Box 2050 Mechanicsburg, PA 17055
Postal Service	United States Postal Service Safety and Risk Management 475 L'Enfant Plaza West Washington, DC 20260-4231
Tennessee Valley Authority	TN Valley Authority Employee Relations and Safety Program P.O. Box 1010 MPB 1B Muscle Shoals, AL 35662-1010

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US Coast Guard	Commandant (G-KSE) US Coast Guard 2100 2nd Street, SW Washington, DC 20260-4231
Veterans Affairs	Facility Safety Official National Engineering Service Center Department of veterans Affairs 2350 market Plaza, Suite 100 St. Louis, MO 63103

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory).

6.1 Intended use. This standard is intended for use by contractors who provide hazardous materials to government activities. The standard establishes requirements for the preparation and submission of Safety Data Sheets (SDSs), hazardous warning labels, and/or other relevant data.

6.2 Major Changes. The following is a summary of the major changes from the previous revision:

1. In addition of the SDS(s), this standard now requires the submission of hazardous warning label(s) or other relevant data as specified herein or in the contract.
2. Reference to submission of SDS(s) in Product Hazard Data, Extensible Mark- Up Language (PHD/XML) schema is removed from the standard.
3. The term "environmental hazards" has now been added to the definition of Hazardous Material.
4. Radioactive material that spontaneously emits ionizing radiation has now been added to the definition of Hazardous Material.

6.3 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue date due to the extent of the changes.

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MILITARY INTEREST:

Military Coordinating
Activity: DLA-DLSC-LEP

Civil Agency Coordinating
Activity: COM-NIST
DOE
EPA
HHS-NIH-HHS-DSR
DOL-TEC DOT-OST
OST VA-OSS

Custodians: Army – MD
Navy – SA
Air Force – 07

Review Activities: Army - SM
Navy – MS, AS, SH
Air Force – 69, 03, 04, 08, 11, 40, 50 DLA – GS
Marine Corps – MC (LF1, LPP, SD, HQ

Preparing Activity: GSA-FAS
FSC MISC

Project Number MISC-2018-015

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APPENDIX A

Identification of Hazardous Materials by Federal Supply Class/Group

A.1 (FSC/FSG). Any FSC/FSG could contain hazardous materials

Table I and Table II are not intended to be inclusive listings of all hazardous materials, but to identify the major classes/groups which contain hazardous items. However, not all materials in these classes/groups are hazardous.

FSCs in which most items contain hazardous materials: An SDS and an HCS or GHS compliant label, as applicable are required for all hazardous materials listed in Table I unless the contractor provides written documentation that the items are not hazardous by any definition in 3.2 of this standard.

Table I – Examples of FSCs In Which Most Items Are Hazardous Materials

FSC	ITEM DESCRIPTION
6810	Chemicals
6820	Dyes
6830	Gases: Compressed and Liquefied
6840	Pest Control Agents and Disinfectants
6850	Miscellaneous Chemicals Specialties
7930	Cleaning and Polishing Compounds and Preparations
8010	Paints, Dopes, Varnishes, and Related Products
8030	Preservative and Sealing Compounds
8040	Adhesive
9110	Fuels, Solid
9130	Liquid Propellants and Fuels and Fuels, Petroleum Base
9135	Liquid Propellant Fuels and Oxidizers, Chemical Base
9140	Fuels Oils
9150	Oils and Greases: Cutting, Lubricating, and Hydraulic
9160	Miscellaneous Waxes, Oils and Fats

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A.2 Other FSGs: An SDS and HCS label is required for all hazardous items defined in 3.2. Table II lists some examples of hazardous materials in other FSGs not listed in Table I.

This is not an inclusive list, but is only meant as guidance.

Table II – Examples of Hazardous Materials in other FSGs

FSG	ITEM DESCRIPTION	EXAMPLES OF HAZARDOUS ITEMS
12	Fire Control Equipment	Initiator propellants, cartridges power device
13	Ammunition & Explosives	Explosive Devices, fire starter, flares
14	Guided Missile Components & Accessories	Cartridges power devices, rockets, PCB's
15	Aircraft & Airframe Structural Components	Radioactive Materials
16	Aircraft Components & Accessories	Items containing asbestos
22	Railway Equipment	Items containing asbestos
25	Vehicular Equipment Components	Items containing asbestos
26	Tire & Tubes	Items containing flammable or toxic compounds
34	Metalworking Machinery	Compressed gases, cleaners, acids, flux, and supplies containing or potentially producing hazardous air contaminants
36	Miscellaneous Machinery	Flammable or toxic hazardous air pollutants, and hazardous air contaminants
42	Fire Fighting, Rescue & Safety Equipment	Extinguishing agents, repair and refill kits containing hazardous chemicals, items containing compressed gases or initiating charges
53	Hardware & Abrasives	Asbestos material, lead caulking, hazardous chemicals, items producing hazardous air contaminants
54	Prefabricated Structures & Scaffolding	Repair kits containing hazardous chemicals
56	Construction & Building Materials	Cutback asphalt, deck and floor covering, sealing compounds, asbestos, formaldehyde, repair kits containing hazardous chemicals
58	Communication, Detection, & Coherent Radiation Equipment	Circuit cooler items containing ozone depleting substances, cleaners with hazardous chemicals

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Continued- Table II – Examples of Hazardous Materials in other FSGs		
FSG	ITEM DESCRIPTION	EXAMPLES OF HAZARDOUS ITEMS
59	Electrical & Electronic Equipment Components	Items with PCB's, radioactive materials, flammable solvents, asbestos, etc.
61	Electric Wire, & Power Distribution Equipment	Lithium, mercury, lead-acid, nickel-cadmium batteries, cadmium, nickel-metal hydride, zinc batteries, engineered nanomaterials
62	Lighting Fixtures & Lamps, Household & Quarters Use	Lithium, mercury, lead-acid, nickel- cadmium batteries, cadmium, nickel-metal hydride, zinc batteries, engineered nanomaterials
63	Alarm, Signal, & Security Detection Systems	Items containing wet batteries or radioactive materials
65	Medical, Dental, & Veterinary Equipment & Supplies	Items containing hazardous chemicals, radioactive materials, mercury, asbestos, or flammable solvents
66	Instruments & Laboratory Equipment	Radioactive materials, flammable compounds, mercury, asbestos, compressed gases, and engineered nanomaterials
67	Photographic Equipment	Radioactive compounds, solvents, thinners, engineered nanomaterials cements and cements
75	Office Supplies & Devices	Solvents, thinners, cleaning fluids, flammable inks, varnishes, engineered nanomaterials and chemicals potentially off-gassing hazardous air contaminants
84	Clothing, Individual Equipment & Insignia	Maintenance kits containing flammable solvents
85	Personal Toiletry Articles	Pressurized containers with flammable or nonflammable propellants, chemicals with off-gas, and engineered nanomaterials
87	Agriculture Supplies	Items containing herbicides and/or insecticides
93	Fabricated Materials	Items containing flammable solvents or toxic materials
96	Ores, Minerals, and their Primary Products	Asbestos, mica, silica, and engineered nanomaterials