84.24 - Mechanical appliances (whether or not hand-operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines (+).

8424.10 - Fire extinguishers, whether or not charged

8424.20 - Spray guns and similar appliances

8424.30 - Steam or sand blasting machines and similar jet projecting machines

- Agricultural or horticultural sprayers :

8424.41 -- Portable sprayers

8424.49 -- Other

- Other appliances:

8424.82 -- Agricultural or horticultural

8424.89 -- Other

8424.90 - Parts

This heading covers machines and appliances for projecting, dispersing or spraying steam, liquids or solid materials (e.g., sand, powders, granules, grit or metallic abrasives) in the form of a jet, a dispersion (whether or not in drips) or a spray.

This heading, however, **does not include** water-jet or water-abrasive jet cutting machines which are designed for precise cutting of a variety of materials (e.g., stone, composites, rubber, glass, metal). These machines typically operate under pressures of 3,000 to 4,000 bars with a stream of water or water mixed with fine abrasives, at a velocity of 2 to 3 times the speed of sound (**heading 84.56**).

(A) FIRE EXTINGUISHERS, WHETHER OR NOT CHARGED

This group covers extinguishers, filled or not, of the kind which use foam-producing or other charges, including simple extinguishers fitted with taps, valves, percussion caps or other opening devices.

The heading does not include:

- (a) Fire extinguishing grenades and charges for fire extinguishers (heading 38.13).
- (b) Fire fighting pumps with or without internal reservoirs, heading 84.13 (non-automobile types) or heading 87.05 (automobile types).

(B) SPRAY GUNS AND SIMILAR APPLIANCES

Spray guns and similar hand controlled appliances are usually designed for attaching to compressed air or steam lines, and are also connected, either directly or through a conduit, with a reservoir of the material to be projected. They are fitted with triggers or other valves for controlling the flow through the nozzle, which is usually adjustable to give a jet or more or less divergent spray. They are used for spraying paint or distemper, varnishes, oils, plastics, cement, metallic powders, textile dust, etc.. They may also be used for projecting a powerful jet of compressed air or steam for cleaning stonework in buildings, statuary, etc.

The group also includes separately presented hand controlled "anti-smudge" spraying devices for fitting to printing machines, and hand controlled metal spraying pistols operating either on the principle of a blow pipe, or by the combined effect of an electric heating device and a jet of compressed air.

Hand controlled spray guns with self-contained electric motor, incorporating a pump and a container for the material to be sprayed (paint, varnish, etc.), are also covered by the heading.

(C) STEAM OR SAND BLASTING MACHINES AND SIMILAR JET PROJECTING MACHINES

Sand blasting machines and the like are often of heavy construction and sometimes incorporate compressors. They are used for de-scaling or cleaning metal articles, for etching or putting a matt surface on glass, stone, etc., by subjecting the articles to the action of high pressure jets of sand, metal abrasives, etc. They are usually fitted with dust extractors to remove the residual sand and dust. The heading also covers steam blast appliances used, for example, for de-greasing machined metal, etc.

(D) SYRINGES, SPRAYS AND POWDER DISTRIBUTORS

These are used for insecticides, fungicides, etc., in agriculture, horticulture or the home. The heading includes such appliances, with or without integral reservoirs, of the type operated by hand (including simple piston pump sprays) or by foot pedal, as well as powder bellows, knapsack sprayers and transportable sprayers. The heading also includes mobile spraying machines in which the motor providing the power for pumping or spraying can also be geared to provide a limited movement of the apparatus for working purposes, but it does not include machines constituting true vehicles within the meaning of heading 87.05.

Provided they incorporate mechanical devices for producing or dispersing the spray or jet, or for automatically orientating the spray head (including simple mechanisms activated by water pressure), the heading includes the following types of appliances, whether fixed, transportable or mobile:

- (1) Sprinklers and sprays for lawns, orchards, etc. (e.g., rotary sprays and oscillating sprays).
- (2) Hydraulic guns designed for dislodging minerals (e.g., gold bearing sands) from mountain sides, etc., by projecting powerful jets of water and water-jet bark strippers used by the paper industry.

The heading also includes mechanical windscreen and headlamp washing devices for motor vehicles, and flame guns of the type used for destroying weeds or for other agricultural purposes.

The heading does not include:

- (a) Insecticides put up under pressure in containers fitted with simple pressure release valves (heading 38.08).
- (b) Hose pipe nozzles (Section XV, or heading 84.81 if fitted with taps, cocks, valves or other appliances for regulating the liquid flow).
- (c) Medical instruments of heading 90.18.
- (d) Scent sprays and similar toilet sprays (heading 96.16).

(E) IRRIGATION SYSTEMS

These irrigation systems, consisting of various components linked together usually include:

- a control station (mesh filters, fertiliser injectors, metering valves, non-return valves, pressure regulators, pressure gauges, air vents, etc.);
- (ii) an underground network (distribution lines and branchlines which carry the water from the control station to the irrigation zone); and
- (iii) a surface network (dripper lines incorporating the drippers).

Such systems are classified in this heading as functional units within the meaning of Note 4 to Section XVI (see the General Explanatory Note to that Section).

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This heading also covers:

- (1) Machines for coating various objects (for example, cups, cartons, boxes) by spraying with paraffin wax or molten wax.
- (2) Electrostatic painting apparatus consisting of a spray gun connected to a paint container by a flexible tube carrying paint, and also connected to a high-tension generator by an electric cable. The electrostatic field created between the object to be painted and the gun attracts the paint particles sprayed by compressed air to that object and prevents dispersion.
- (3) Industrial robots specially designed for projecting, dispersing or spraying liquids or powders.

PARTS

Subject to the general provisions regarding the classification of parts (see the General Explanatory Note to Section XVI), the heading includes parts for the appliances and machines of this heading. Parts falling in this heading thus include, *inter alia*, reservoirs for sprayers, spray nozzles, lances and turbulent sprayer heads not of a kind described in heading 84.81.

* *

The heading also excludes:

- (a) Hand-powered oil cans and grease guns (heading 82.05) and compressed air grease guns and other force-feed lubricating equipment (heading 84.67).
- (b) Steam blast soot removers for boilers (heading 84.04).
- (c) Furnace burners (heading 84.16).
- (d) Machines for cleaning barrels or other containers by jets of water, steam, sand, etc. (heading 84.22).

- (e) Ink-jet printing machines (heading 84.43).
- (f) Automatic vending machines of the scent spraying type (heading 84.76).
- (g) Machines for spreading mortar or concrete or for spraying gravel onto road or similar surfaces (heading 84.79).
- (h) Salt and sand spreaders for clearing snow, designed to be mounted on a lorry (heading 84.79).
- (ij) Spraying appliances for etching, developing, stripping, or cleaning semiconductor wafers and flat panel displays; deflash machines for cleaning and removing contaminants from the metal leads of semiconductor packages prior to the electroplating process (deflash by high pressure spray) (heading 84.86).
- (k) Electric machines and apparatus for hot spraying of metals or cermets, of heading 85.15.
- (l) Jet-type dental drills (heading 90.18) and aerosol therapy apparatus (nebulisers) (heading 90.19).

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Subheading Explanatory Notes.

Subheading 8424.20

This subheading covers the appliances described in Part (B) of the Explanatory Note to heading 84.24.

Subheading 8424.41

The term "portable sprayers" refers to those sprayers which are designed to be pulled or carried by the operator either by a handle, or one or two shoulder straps.

This subheading includes pressure sprayers (which may be marketed as "spray guns"), consisting of a pressure tank incorporating a funnel and integrated pressure pump, a carrying strap, flexible tubing and a hand-held spray arm with a brass lance and an adjustable nozzle, all of which exhibit physical characteristics which clearly render them most suitable for agricultural or horticultural use (for example, operating pressure of 3 bars, 5 litre capacity, adjustable nozzle orifice).

Manual compression and lever operated knapsack sprayers, motorized knapsack sprayers, motorized knapsack mistblowers, operator carried rotary nozzle applicators and manually pulled or pushed boom sprayers are further examples of the portable sprayers of this subheading.

This subheading does not include hot and cold foggers.