



# PROTECTION IN HAZARDOUS LOCATIONS: NONINCENDIVE, CLASS I, DIVISION 2

Nonincendive, Class I, Division 2, Group A-D, T4 is a special certification that qualifies the Brigadier for use in hazardous work environments where concentrations of flammable gases, vapors or mists are not normally present in an explosive concentration (but may accidentally exist). Devices certified Nonincendive, Class I, Division 2 are specially engineered so they do not produce arcs, sparks or hot surfaces during their operation.

The rating makes it an ideal solution in delivering safety, confidence and protection to work crews for industries such as petroleum refineries, and gasoline storage and dispensing areas; dry cleaning plants where vapors from cleaning fluids can be present; spray finishing areas; aircraft hangers and fuel servicing areas; and utility gas plants and operations involving storage and handling of liquefied petroleum gas or natural gas.

# How do I know if my Brigadier smartphone is rated Nonincendive, Class 1, Division 2, T4?

All Brigadier phones support Nonincendive, Class I, Division 2, T4 rating. Look for the rating on the back of the phone.

#### Where can I find more information on protection in hazardous locations?

For a summary of Hazardous Location Types and Conditions, visit the OSHA website at: www.osha.gov/doc/outreachtraining/htmlfiles/hazloc.html

# When plugging the device into a wall outlet, multi-bay charger or battery pack, can this cause a spark?

Yes. The amount of current that the charger draws from the wall outlet at the standard voltage can cause a spark when plugging/unplugging. Charging is expressly forbidden in Division 2 Hazardous Areas

#### Can accessories be used with the phone on premises?

Bluetooth and other wireless accessories can be used (except wireless chargers), but nothing can be attached to the connectors of the phone, since any accessory connected to the ports increases the possibility of causing a spark. For this reason, the use of ports in Division 2 Hazardous Areas is expressly forbidden.

# If the phone ports are left open in a Hazardous Location: Nonincendive, Class I, Division 2 area, will they cause a spark?

No. The phone is designed to limit the energy available to the ports. However, the Product Safety Guide warns to keep the port covers closed in Division 2 Hazardous Areas in order to prevent the unlikely event of a foreign object with the right electrical properties coming in contact with the connectors and causing a spark.

### Where can the phone be used in a Hazardous Location: Nonincendive, Class I, Division 2 area?

Nonincendive, Class I, Division 2 is a classification of the areas where this phone can be used. Class I Division 2 areas are safe during normal conditions, but when something goes wrong they can contain ignitable concentrations of flammable gas. When that happens, you'll want to be sure you are not carrying any devices that can produce sparks or hot-spots during their normal operation. For this reason, devices must be certified for use in Class I Division 2 to be carried in these areas.

rating	DEFINITION
Class 1	Hazard Location Type—Where flammable gasses or vapors exist in the air
Division 2	Hazardous Location Condition—Where ignitable concentrations of flammable gasses, vapors or liquids are not likely to exist under normal operating conditions
Group A-D	Nature of Hazardous Substances—Kinds of flammable gases, vapors or liquids. A:acetylene B:hydrogen C:ethylene D:propane
T4	Temperature Class—No point inside phone will get hotter than 135°C, as long as phone is kept within operating range of -30°C to 60°C

