**Properties of Ionic Compounds Quiz Review – Gen**

1. Why are ionic compounds hard and brittle?
2. Determine whether the compounds below are most likely ionic or not ionic:

* A compound with a melting point of -14 degrees Celsius.
* A compound that can be used as a fire retardant to put out fires..
* A compound that can be used to make a balloon.
* A compound that forms large, purple crystals.

1. Why do ionic compounds conduct electricity only when melted or dissolved?
2. Why do ionic compounds generally dissolve well in water?
3. Lithium salicylate is a chemical compound with the following properties (taken from Wikipedia):

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| Chemical formula | LiC7H5O3 |
| Molar mass | 160.104 g/mol |
| Appearance | White crystals |
| Melting point | 200 degrees C (392 F, 473 K) |
| Solubility in water | 124.6 g/100 g water at 25 degrees C |
| Solubility in other solvents | Glycerol, 1-4- dioxane, alcohol |
| Solubility in methanol | 26.28 g/100 g at 15 degrees C |

Is lithium salicylate an ionic compound. Explain your answer, using your knowledge of ionic properties.