

**TABLE2 - WATER-REACTIVE MATERIALS WHICH PRODUCE TOXIC GASES**
**Materials Which Produce Large Amounts of Toxic-by-Inhalation (TIH)  
(PIH in the US) Gas(es) When Spilled in Water**

ID No.	Guide No.	Name of Material	TIH Gas(es) Produced
1923	135	Calcium hydrosulfite	H <sub>2</sub> S SO <sub>2</sub>
1923	135	Calcium hydrosulphite	H <sub>2</sub> S SO <sub>2</sub>
1929	135	Potassium dithionite	H <sub>2</sub> S SO <sub>2</sub>
1929	135	Potassium hydrosulfite	H <sub>2</sub> S SO <sub>2</sub>
1929	135	Potassium hydrosulphite	H <sub>2</sub> S SO <sub>2</sub>
1931	171	Zinc dithionite	H <sub>2</sub> S SO <sub>2</sub>
1931	171	Zinc hydrosulfite	H <sub>2</sub> S SO <sub>2</sub>
1931	171	Zinc hydrosulphite	H <sub>2</sub> S SO <sub>2</sub>
2004	135	Magnesium diamide	NH <sub>3</sub>
2011	139	Magnesium phosphide	PH <sub>3</sub>
2012	139	Potassium phosphide	PH <sub>3</sub>
2013	139	Strontium phosphide	PH <sub>3</sub>
2308	157	Nitrosylsulfuric acid, liquid	NO <sub>2</sub>
2308	157	Nitrosylsulphuric acid, liquid	NO <sub>2</sub>
2353	132	Butyryl chloride	HCl
2395	132	Isobutyryl chloride	HCl
2434	156	Dibenzylchlorosilane	HCl
2435	156	Ethylphenylchlorosilane	HCl
2437	156	Methylphenylchlorosilane	HCl
2495	144	Iodine pentafluoride	HF
2691	137	Phosphorus pentabromide	HBr
2692	157	Boron tribromide	HBr
2806	139	Lithium nitride	NH <sub>3</sub>

**Chemical Symbols for TIH (PIH in the US) Gases:**

Br <sub>2</sub>	Bromine	HF	Hydrogen fluoride	NO <sub>2</sub>	Nitrogen dioxide
Cl <sub>2</sub>	Chlorine	HI	Hydrogen iodide	PH <sub>3</sub>	Phosphine
HBr	Hydrogen bromide	H <sub>2</sub> S	Hydrogen sulfide	SO <sub>2</sub>	Sulfur dioxide
HCl	Hydrogen chloride	H <sub>2</sub> S	Hydrogen sulphide	SO <sub>2</sub>	Sulphur dioxide
HCN	Hydrogen cyanide	NH <sub>3</sub>	Ammonia		