

TABLE 12

JAPANESE PVC PRODUCERS - START-UP DATES vs ASL CASES

START-UP YEAR	COMPANY NAME	LOCATION	ASL CASE NUMBER	YEAR OF 1st EXPOSURE
1950	Chisso Corp	Minamata		
	- Kanegafuchi Kag	Osaka		
	+ Tekkosha	Sakata		
1951	Mitsui Toatsu	Nagoya	01, 02	53, 58
1952	Mitsubishi Mon	Yokkaichi		
	Sumitomo Kag	Kikumoto		
1951	Denki Kagaku	Shibukawa		
	Nippon Zeon	Kambara		
	Toa Gosei	Tokushima		
1955	Ryo-Nichi	Uozu		
1956	Nippon Zeon	Takooka		
	Nisshin Kagaku	Takao		
1957	Kuraha Kasei	Nishiki		
	Shinetsu Kag	Naoetsu		
1960	Denki Kagaku	Ohmi		
	Kanegafuchi Kag	Takasago		
1964	Chisso Corp	Chiba		
1966	Tokuyama Sektui	Tokuyama		
1967	San Arrow Kagak	Tokuyama		
	Sumitomo Kag	Chiba		
1968	Ryo-Nichi	Mizushima		
	Shinetsu Kag	Tokuyama		
1970	Chisso Corp	Mizushima		
	Denki Kagaku	Goi (Chiba)		
	Kanegafuchi Kag	Kashima		
	Kawasaki Yuki	Kawasaki		
	Mitsui Toatsu	Sakai		
	Nissan Kagaku	Chiba		
	Shinetsu Kag	Kashima		
1971	Tekkosha	Yokkaichi		
1973	Asahi Glass	Hayatsuki		
1974	Toyo Soda	Sakata		
		Yokkaichi		
1975	Central Kagaku	Kawasaki		
	Toyo Soda	Yokkaichi		
1977	Unknown	Kashima		

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TABLE 13

SOUTH & CENTRAL AMERICAN PVC PRODUCERS

START-UP YEAR	COMPANY NAME	LOCATION	ASL CASE NUMBER	YEAR OF 1st EXPOSURE
1953	Monsanto Mexica	Lecheria (Mexico)		
1954	Policyd	Mexico City (Mexico)		
1955	Gaon Do Brazil	Sao Paulo (Brazil)		
1956	Elchlor	Sao Caetano (Brazil)		
1960	Electrochlor	Capitan Bermudez (Argentina)		
	Viplastic	Mendoza (Argentina)		
1961	Indupa	Cinco Saltos (Argentina)		
1963	SOC Paramanga	Paramonga (Peru)		
	PET Columbiana	Cartagena (Colombia)		
1966	Carburo De Col	Medellin (Colombia)		
1967	Plasticos Omega	Mexico		
1968	Primax	Puebla (Mexico)		
1970	Policasa	Managua (Nicaragua)		
	Petro Dow	Concepcion (Chile)		
1971	Polimeros Max	St Martin Puebla (Mexico)		
1973	Rico Chemicals	Guanilla (Puerto Rico)		
1976	Petroplas	EL Tablazo (Venezuela)		
1977	Indust Resistoc	Tlaxcala (Mexico)		
1978	Huls Brasil	Cubato (Brazil)		
	Polychem	El Salvador		
	Policyd	Coatzacoalcos (Mexico)		
1979	PET Camacari	Camacari Bahia (Brazil)		

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Chemicals/Plastics/Industrial Products Group

Plant ISPHAR 2-A By E. K. STEPHENSON SAF. SUPERVISOR Date 5/30/82

OSHA TRAINING REQUIREMENTS

	Yes	No
1. Manlifts - Shall be inspected by a competent designated person. 1910.68	(✓) ()	
2. Ventilation - Employees working around open surface tank operations must 1910.94 be instructed as to hazards of their respective jobs. - If respirators required, employees need to be trained in their use. (✓) () - If tank entry required for rescue, employees must be trained in procedures. (✓) ()	(✓) ()	
3. Ionizing Radiation - Employees must be informed of occurrence of radioactive 1910.96 materials in their area. () () - Shall be instructed in associated safety problems and provisions in Standard. () () - Shall be advised of reports of radiation exposure, which they may request. () ()	() ()	() ()
4. Hydrogen - Operator instructions posted, and qualified person shall be in 1910.103 attendance when being unloaded. () (✓)	() (✓)	
5. Flammable and Combustible Liquids - Printed instructions for emergencies 1910.106 and employees thoroughly informed as to location and operation of valves and necessary equipment. (✓) ()	(✓) ()	
6. Storage and Handling of Liquified Petroleum Gases 1910.110 - Personnel performing installation, removal, operation, and maintenance shall be properly trained. () ()	() ()	() ()
7. Storage and Handling of Anhydrous Ammonia 1910.111 - Personnel required to handle ammonia should be trained in safe operating practices and proper action to take in event of emergencies. () ()	() ()	() ()
8. Respirator Protection - User shall be trained and instructed in proper use 1910.134 of respirators and their limitations. (✓) ()	(✓) ()	
9. Specifications for Accident Prevention Signs and Tags. 1910.145 - All employees shall be instructed that danger signs indicate immediate danger and that special precautions are necessary. (✓) ()	(✓) ()	
10. Medical Services and First Aid - In absence of an infirmary, clinic, or 1910.151 hospital in near proximity to workplace, a person adequately trained in first aid is required. () ()	() ()	() ()

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Form OSHA-30 (A)
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NOTE: Use NA if not applicable
Indicate date of last training, where applicable

OSHA TRAINING REQUIREMENTS - continued

2.

- | | Yes | No |
|---|-----|---------------|
| 11. Fixed Dry Chemical Extinguishing Systems | | |
| 1910.160 - Inspection required by competent personnel. | () | () <i>NR</i> |
| - Annual training. | () | () |
| 12. Carbon Dioxide Extinguishing System | | |
| 1910.161 - Inspection and testing required by competent person. | () | () <i>NR</i> |
| - Annual training. | () | () |
| 13. Mills and Calenders | | |
| 1910.216 - Monthly mill rescue training Drills are required by Corp. Policy. | () | () (✓) |
| <i>AB M --S</i> | | |
| 14. Safety Relief Devices for Cargo and Portable Tanks Storing Compressed Gases | | |
| 1910.168 - Only qualified personnel shall be allowed to service safety relief devices. | (✓) | () |
| 15. Powered Industrial Trucks | | |
| 1910.178 - Only trained and authorized operators shall be permitted to operate a powered industrial truck. | (✓) | () |
| 16. Overhead and Gantry Cranes | | |
| 1910.179 - Only designated personnel qualified to operate crane should be allowed to operate crane. | () | () <i>NR</i> |
| - Adjustments and repairs shall be done by qualified personnel. | () | () |
| 17. Crawler Locomotive and Truck Cranes | | |
| 1910.180 - Only designed (qualified) personnel shall be permitted to operate a crane. | (✓) | () |
| 18. Derricks | | |
| 1910.181 - Only designated (qualified) personnel shall be permitted to operate a derrick. | () | () <i>NR</i> |
| 19. Slings | | |
| 1910.184 - Each day before use, the sling is to be inspected by a competent (qualified) person designated by the employer. | (✓) | () |
| 20. Woodworking Machinery Requiriements | | |
| 1910.213 - Sharpening or tensioning of saw blades or cutters shall be done by persons of demonstrated skill in this kind of work. | () | () <i>NR</i> |
| 21. Mechanical Power Presses | | |
| 1910.217 - Maintenance personnel are to be trained and competent in caring for, inspecting and maintaining power presses. | (✓) | () |
| - Operator shall be trained in safe method of work before operation. | (✓) | () |
| 22. Forging Machines | | |
| 1910.218 - Train personnel for proper inspection and maintenance of forging machinery and equipment. | () | () <i>NR</i> |
| 23. Welding , Cutting and Brazing Equipment | | |
| 1910.252 - Operators are to be instructed and qualified. | () | () |
| - Repairs shall be made only by qualified personnel. | () | () |
| - Periodic inspection shall be made by qualified maintenance personnel. | (✓) | () |

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OSHA TRAINING REQUIREMENTS - continued

24. Indoctrination and training required for exposure to:

		Yes	No
4-Nitrobiphenyl	1910.1003	()	() <i>NA</i>
Alpha-Naphthylamine	1910.1004	()	()
Methyl Chloromethyl Ether	1910.1006	()	()
3,3' -Dichlorobenzidine (and its salts)	1910.1007		
Bis-Chloromethyl Ether	1910.1008	()	()
Beta-Naphthylamine	1910.1009	()	()
Benzidine	1910.1010	()	()
4-Aminodiphenyl	1910.1011	()	()
Ethyleneimine	1910.1012	()	()
Beta-Propiolactone	1910.1013	()	()
2-Acetylamine-Fluorene	1910.1014	()	()
4-Dimethylamino-Azobenzene	1910.1015	()	()
N-Nitroso Dimethylamine	1910.1016	()	() <i>/</i>
Vinyl Chloride	1910.1017	(<i>NA</i>)	()
Inorganic Arsenic	1910.1018	()	() <i>NA</i>
Lead	1910.1025	()	()
Benzene	1910.1028	()	()
Coke Oven Emissions	1910.1029	()	()
Cotton Dust	1910.1043	()	()
1,2-Dibromo-3-Chloropropene	1910.1044	()	()
Acrylonitrile (Vinyl Cyanide)	1910.1045	()	() <i>/</i>
Noise above 85 dBA, TWA	1910.95	(<i>/</i>)	()

25. Portable Fire Extinguishers

1910.157 - Where provided for employees use shall provide an educational program for employees at least annually. (Post Instructions).
(*/*) ()

26. Employee Alarm Systems

1910.165 - Employer shall explain to each employee the preferred means of reporting emergencies. (Post Instructions) (*/*) ()

27. Employee Emergency Plans

1910.38 - Shall designate and train a sufficient number of persons to assist in the site and orderly emergency evaluation of employees.
(*/*) ()

28. Fire Prevention Plans

1910.38 - The employer shall appraise employees of the fire hazards of the materials and processes to which they are exposed.
(*/*) ()

OSHA TRAINING REQUIREMENTS - continued

- | | | <u>Yes</u> | <u>No</u> |
|----------|--|------------|-----------|
| 29. | Fire Brigades | | |
| 1910.155 | - Provide training and education for all fire brigade members at least annually (insipient), quarterly (interior structure). | (✓) | () |
| 30. | Laundry Machine & Operations | | |
| 1910.264 | - Markers and others handling soiled clothes warned of health hazards, Employees instruction in hazards of the work and safe practices. | (✓) | () |
| 31. | Electrical | | |
| 1910.301 | - To work on electrical equipment or to enter an electrical substation one has to be a qualified person. Qualified means one familiar with the construction and operation of the equipment and the hazards involved - thus training is required. | (✓) | () |