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SAFETY DATA SHEET

Jain Americas, Inc.

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EX-CEL®

SDS Number 16275040FF Edition: 04 Revision : 00 Date : 01.10.2016

1. Identification

(a) Product Identifier	EX-CEL PVC Free Foam Sheet
(b) Other means of identification	Not provided
(c) Use of the Product	No additional information provided
(d) Name, Address and Telephone number of the Manufacturer	Jain Irrigation Systems Ltd., Jain Plastic Park, N.H. No : 6, Bambhori Jalgaon 425001, India Tel : +91 257 2258011 / 22.
(e) Emergency phone number	+91 257 2258011 / 22

2. Hazard(s) Identification

(a) Classification of the Product
Not Classified

(b) Labelling of the Product
Not applicable

(c) Other Hazards
EXCEL PVC Free Foam sheet is produced by extrusion process from Polyvinyl chloride polymer and other additives / chemicals required for the extrusion process. These additives and Polyvinyl chloride polymer are all in a homogenous fused state and after formation into sheets, polymer or additive will not separate out. If the sheet is subjected to extreme heat or fire, there exists a possibility for liberation of fumes. During the fabrication work such as cutting, sawing, grinding etc., there exists a possibility for generation of dust and if this dust goes into eyes or swallowed may cause mechanical irritation. Appropriate Personal Protective Equipments such as respiratory masks shall be used and precautionary efforts shall be taken to minimize the dust generation.

(d) Unknown acute toxicity
Data not available

3. Composition / Information on Ingredients

(a) Substance	Not Applicable
(b) Mixture	

Material	CAS No	Percentage	Classification
Polyvinyl chloride	9002 – 86 – 2	> 70 %	Combustible dust
Calcium carbonate	1317 – 65 – 3	< 5 %	No classification
Titanium dioxide	13463 – 67 - 7	< 5 %	Carc.2 H351

EXCEL PVC Free Foam sheet is produced from Polyvinyl chloride polymer and various additives as required for the extrusion process. Above health hazards is given for individual component of the additives and this is not applicable to the final product as all Polyvinyl chloride and additives are fully fused & homogenized.

4. First Aid Measures

(a) Description of First aid measures for different routes of exposure	Inhalation : If smoke from burning plastics is inhaled, remove and subject to fresh air immediately. If any symptoms develop seek immediate medical attention. Skin : If burnt by molten plastics sheet get medical attention immediately. Eye : Immediately flush eyes with water for atleast 15 minutes. Do not rub the eyes. If irritation develops consult a physician. Ingestion : Quite unlikely. In case ingested rinse the mouth and contact medical attention.
(b) Most important symptoms / effects, acute and delayed	Product as such does not pose any health hazard. During fabrication it quite likely that there will be dust generation. This dust may cause irritation to the eyes, nose and throat. Sheet edges may be sharp and may cause injury if handled with bare hand. Molten sheets may generate fumes and if comes in contact with skin or body may cause thermal burn. If exposed to dust of sheets or fumes of burnt sheets immediately seek medical attention.
(c) Indication of any medical attention and special treatment needed	If exposed to dust of sheets or fumes of burnt sheets immediately seek medical attention.

5. Fire Fighting Measures

Extinguishing media	Dry chemical, carbon dioxide, foam water. Avoid use of heavy stream of water.
Specific hazards arising from the chemical	Product does not catch fire. But at high temperature it may degrade to liberate gases and fumes.
Special protective equipment and precautions for fire fighters	Wear respiratory masks, Full protective clothing, gloves and other appropriate protective equipment in case of fire. Evacuate all personnel from danger area. Use dry chemical, foam water or carbon dioxide to extinguish fire.

6. Accidental release measures

(a) Personnel precautions, protective equipment and emergency procedures

Avoid generating dust during fabrication. Wear respiratory masks to avoid dust inhalation. Contact with eyes, skin to be avoided. Ignition source to be removed Sheets shall be kept away from direct heat, flames, hot surfaces and any other ignition sources. Wear appropriate personal protective equipment and evacuate the area in case of any fire related emergency. In case of fire ventilate and secure the area. If required, call for trained assistance.

(b) Methods and materials for containment and cleaning up

Collect and segregate the solid spills over from the sheets after fabrication work. Do not allow it to get into the sewer or water stream line. Clean spills immediately after the work and take up mechanically for collection in a suitable container for final disposal. For cleaning and collecting the dust on floor use vacuum cleaner which is explosion proof. Avoid mixing with other plastic or non plastic materials.

7. Handling and storage

(a) Precautions for safe handling	Wear safety glasses during sheet cutting or fabricating process. Wear gloves during fabrication work. Avoid any ignition source during the fabrication work as it can lead to combustible dust explosion. Wash hands thoroughly with soap solution before eating, drinking, smoking or leaving the work. Avoid eyes, skin and cloth contact with the dust. Do not inhale the dust. Avoid smoking while working with the sheets. Avoid sparks, light or heat source, open flames, hot surfaces.
(b) Conditions for safe storage, including any incompatibilities	Avoid creating dust and use explosion proof electrical and lighting equipment. Avoid generation of static electric charge and use proper grounding procedures. Store in a cool, dry and well-ventilated area. Avoid outdoor storage and storage under direct sunlight. Sheet is incompatible to strong and concentrated acids, bases, strong oxidizing agents / chemicals.

8. Exposure controls / personal protection

Polyvinyl Chloride - CAS number : 9002 – 86 – 2	Exposure limit : TLV (ACGIH – USA) 1 mg / m3 Respirable PNOC. ACGIH Chemical category – not classified as human carcinogen
Calcium Carbonate - CAS number : 1317 – 65 - 3	Exposure limit : NIOSH REL (TWA) : 10 mg / m3 total dust & 5 mg / m3 respirable dust. PEL (OSHA) : 15 mg / m3 total dust & 5 mg / m3 respirable dust
Titanium dioxide - CAS number : 13463 – 67 – 7	Exposure limit : TLV (ACGIH – USA) 10 mg / m3 ACGIH Chemical category – not classified as human carcinogen. PEL (OSHA) : 15 mg / m3 total dust
(b) Appropriate engineering controls	If the product is cut or fabricated there exists possibility for dust or particulate matter generation. For emergency eye wash & safety showers shall be made available. Provide adequate ventilation in work area. Avoid static electricity through proper grounding procedures. Use explosive proof equipment in work area and dust shall be collected to avoid dust in work area. Avoid any live flames, ignition source or hot surfaces to avoid combustible dust generation. Adhere to national or local regulations.
(c) Individual protection measures (Personal protection equipment)	Sheet edges may be sharp and use appropriate gloves. Wear respiratory masks, full clothing during fabrication work. Wear protective goggles.Cloth shall be chemical resistant. Do not eat, smoke or drink while working with the sheets

9. Physical and chemical properties

(a) Appearance	Solid
(b) Odour	No data available
(c) Odor threshold	No data available
(d) pH	Not applicable
(e) Melting point / freezing point	No data available
(f) Initial boiling point and boiling range	Not applicable
(g) Flash point	No data available
(h) Evaporation rate	Not applicable
(i) Flammability (Solid / gas)	No data available
(j) Upper / lower flammability or explosive limits	No data available
(k) Vapor pressure	No data available
(l) Vapor density	No data available
(m) Relative density	No data available
(n) Solubility	No data available
(o) Partition coefficient :	No data available

n-Octanol / water (p) Auto ignition temperature (q) Decomposition temperature (r) Viscosity	 No data available No data available Not applicable

10. Stability and Reactivity

Reactivity	Product is stable under normal conditions
Chemical stability	Product is stable if stored and handled properly as highlighted in point 7.
Possibility of hazardous reactions	No hazardous reactions will occur. Product is stable.
Conditions to avoid	Avoid direct sunlight, extreme high temperature, static electricity, ignition source, hot surface, open flame, sparks, heat and contact with incompatible materials. Avoid accumulation of dust during fabrication to avoid dust explosion hazard
Incompatible materials	Strong or concentrated acids, bases, oxidizing chemicals, halogens.
Hazardous decomposition products	Product may undergo thermal degradation and emits carbon dioxide, carbon dioxide, hydrogen chloride, Irritating fumes and black fumes.

11. Toxicological Information

(a) Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact) (b) Symptoms related to physical, chemical and toxicological characteristics (c) chronic effects (d) Numerical measures of toxicity (e) whether hazardous chemical is listed in NTP report on carcinogens or has been found to be potential carcinogen in IARC or by OSHA	Dust may be harmful or cause irritation to skin or eye. May cause allergy to sensitive individual if the dust or particulate matter is ingested. Dust may cause irritation to eyes and after inhalation. Prolonged exposure may cause skin irritation. None known. None known. None.

12. Ecological Information

(a) Ecotoxicity	Not classified
(b) Persistence and degradability	Not established
(c) Bioaccumulative potential	Not established
(d) Mobility in soil	Not available
(e) Other adverse effects such as hazardous to the ozone layer	None

13. Disposal considerations

Disposal recommendations	Dispose of in accordance with local, national and international regulations.
Additional information	Recycle the product after intended use as far possible

14. Transport information

Not regulated for transport in accordance with DOT, IMDG and IATA.

15. Regulatory Information

Federal Regulatory Information : PVC Sheet	
OSHA Status	Not listed, non-hazardous
EPA Clean Air Act Status	Not listed
EPA Clean Water Act Status	Not listed
TSCA Status	Polyvinyl chloride, Lime stone, Titanium dioxide are all listed on TSCA inventory (40 CFR710)
CERCLA RQ	Not listed
SARA Title III : PVC Sheet	
Section 302*	None * Reportable quantity of extremely hazardous substance, Sec 302 • Threshold planning quantity, extremely hazardous substance. Sec. 302
Section 313**	None ** Toxic Chemical Sec. 313 ** Category as required by Sec. 313 (40CFR37263 C) must be used on Toxic Release Inventory form
Section 311/312***	None *** Hazard category for SARA Sec. 311/312 reporting H1= acute health hazard H2= chronic health hazard P3= fire hazard P4= sudden release of pressure hazard P5= reactive hazard
RCRA Status	It is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40CFR261. 20-24)

16. Other Information, including date of preparation or last revision

Revision Date	1st October 2016
Other information	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard communication standard 29 CFR 1910.1200
NFPA	HMIS
Fire – 1	Health - 0
Health – 0	Flammability – 1
Reactivity – 0	Reactivity – 0
Specific Hazard - None	Personal Protection Index - E

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