ALCAN COMPOSITES

P25

Material Safety Data Sheet
Sintra 12.700 Standard Density

Section I — Product Identification

Manufacturer:	Alcan Composites USA, Inc. 208 W. 5th Street, P.O. Box 507 Benton, KY 42025 (270) 527-4200
Emergency Phone Number:	1-800-424-9300 Chemtrec To be used only in the event of chemical emergencies involving a spill, leak, fire, and exposure accidents involving chemicals.
Trade Name:	Sintra
Synonym:	Expanded PVC Sheet, Polyvinyl Chloride Sheet, Sintra 12.700 Standard Density

Section II — Material Identification and Information

Ingredients	Percent (%) (By wt.)	Occupational Exp. Limits (TWA) ACGIH	(PEL) OSHA
Polyvinyl Chloride	75-85	10.0 mg/m^3	15.0 mg/m^3 Total [2] 5.0 mg/m^3 Resp. [2]
Antimony Trioxide [1]	<3.0	0.5 mg/m^3	0.5 mg/m^3
Cadmium Compounds [1]	<1.0	0.05 mg/m^3	5.0 µg/m^3
Lead Compounds [1]	<2.0	0.15 mg/m^3	0.05 mg/m^3
Calcium Carbonate	<5.0	10.0 mg/m^3	15.0 mg/m^3 Total [2] 5.0 mg/m^3 Resp. [2]
Titanium Dioxide	<5.0	10.0 mg/m^3	10.0 mg/m^3 Total [2] 5.0 mg/m^3 Resp. [2]
Other	5-10		

Section III — Physical Data

Appearance and odor:	Odorless, plastic sheet
Melting point:	>350 °F
Sp. Gravity:	0.7 – 0.9 g/ccm range
Solubility:	Insoluble in water

(1) Chemicals subject to the reporting requirements of section 313 of title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

(2) Regulated as a nuisance dust or particulate, N.O.S.

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Section IV — Fire and Explosion Data

Auto Ignition:	N/A
Flash point:	(ASTM D-1929) >700 °F
Extinguishing media:	CO_2, dry chemical, water spray as a cooling method.
Special fire fighting procedure:	self-contained breathing apparatus should be worn.
Unusual fire and explosion hazards:	PVC will burn in the presence of supported combustion, and will emit hydrogen chloride gas, benzene, water, carbon monoxide, carbon dioxide, and smoke.

Section V — Reactivity Data

Stability:	Stable
Incompatibility:	None known
Decomposition products:	Reference: "Unusual fire and explosion hazards", Section IV

Section VI — Health Hazard Data

These products are not considered to be a health hazard in the form in which they are sold (sheet, panel). However, if these products are abraded, melted, welded, cut or processed in any manner that causes release of fumes or dusts, hazardous levels of fumes or dusts may be generated from this product.

Effects of overexposure:

Acute:

Physical irritation of the eyes may result from overexposure to high concentrations of dust from certain fabricating operations.

Repeated skin overexposure to antimony trioxide can result in skin irritations.

Chronic:

Repeated long term inhalation of antimony trioxide may cause inflammation of the upper and lower respiratory tract and/or fibrosis. Antimony has been determined by IARC as a Group IIB carcinogen.

Studies have shown that workers exposed for long periods to high concentrations of respirable PVC dust may retain the dust in their lungs. There is no evidence of a toxic response associated with such PVC dust retention.

Repeated long-term inhalation/ingestion of lead may lead to weariness, headache, severe constipation and colic. It has been determined that lead is a reproductive toxin.

Cadmium overexposure may effect the central nervous system and cause muscle contractions. Cadmium has been determined by IARC as a Group IIA carcinogen.

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Special Precautions:	Avoid prolonged inhalation of high dust concentrations and ingestion of material. Wash hands before eating, drinking or smoking. Wear proper eye and respiratory protection when working in areas of high dust concentrations. Care should be taken during thermoforming operations. When temperatures exceed 350 °F, decomposition of the material may occur.
Emergency and first aid procedures:	If contact with eyes, wash immediately under water for at least 15 minutes. For inhalation exposure, remove to fresh air. Contact a physician.

Section VII — Storage, Handling, and Disposal Data

Waste disposal:	Care must be taken when using or disposing of material debris to prevent environmental contamination. Dispose of the debris in accordance with the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act and all state or local laws / regulations regarding disposal.
Storage and handling precautions:	Store in a flat dry area Exercise caution in all thermal forming procedures.

Section VIII — Personal Protection Data

Primary routes of entry are:	Inhalation and ingestion
Respiratory protection:	An approved NIOSH/MSHA respirator must be used when engineering controls cannot be implemented to control dust concentrations. Reference OSHA 1910.134 for specific requirements.
Ventilation:	Local exhaust. Reference OSHA 1910.94 for specific requirements.
Eye:	Eye protection must be worn when working in dust concentrations and during sawing or other operations which might cause flying debris. Reference OSHA 1910.133 for specific requirements.
Protective glove:	Gloves should be used to prevent cuts or abrasions.

MATERIAL SAFETY DATA SHEET

REVISED 7/2/2002

SECTION I — PRODUCT IDENTIFICATION

MANUFACTURER'S NAME: ADDRESS: CITY/STATE: CONTACT:	ALCAN COMPOSITES U.S.A. P.O. BOX 507, 208 W. 5TH ST. BENTON, KY 42025 270-527-4200
EMERGENCY PHONE NUMBER:	1-800-424-9300 CHEMTREC TO BE USED ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, AND EXPOSURE ACCIDENTS INVOLVING CHEMICALS.
TRADE NAME:	**SINTRA**
SYNONYM:	EXPANDED PVC SHEET, POLYVINYL CHLORIDE SHEET, SINTRA 12.500 LOW DENSITY

SECTION II — MATERIAL IDENTIFICATION AND INFORMATION

INGREDIENTS	PERCENT (%) (BY WT.)	OCCUPATIONAL EXPOSURE LIMITS TWA (ACGIH) (mg/m^3)	(PEL) OSHA (mg/m^3)
POLYVINYL CHLORIDE	70-80	10.0	15.0 Total[1] 5.0 Resp.[1]
LEAD COMPOUNDS**	<2.0	0.15	.05
CALCIUM CARBONATE	<5.0	10.0	15.0 Total[1] 5.0 Resp.[1]
TITANIUM DIOXIDE	<5.0	10.0	10.0 Total[1] 5.0 Resp.[1]
OTHER	15-25		

[1]REGULATED AS A NUISANCE DUST OR PARTICULATE, N.O.S.

**CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

SECTION III — PHYSICAL DATA

APPEARANCE AND ODOR:	ODORLESS, PLASTIC SHEET
SPECIFIC GRAVITY (H2O-1):	0.5
SOLUBILITY IN WATER:	INSOLUBLE
MELTING POINT:	>350°F

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >700 DEGREES FAHRENHEIT (ASTM D 1929)

AUTO IGNITION TEMPERATURE: N/A

EXTINGUISHING METHOD: CO_2, DRY CHEMICAL, WATER SPRAY AS A COOLING METHOD.

UNUSUAL FIRE AND EXPLOSION HAZARDS: PVC WILL BURN IN THE PRESENCE OF SUPPORTED COMBUSTION, AND WILL EMIT HYDROGEN CHLORIDE GAS, BENZENE, WATER, CARBON MONOXIDE, CARBON DIOXIDE, AND SMOKE.

SPECIAL FIRE FIGHTING PROCEDURES: SELF-CONTAINED BREATHING APPARATUS SHOULD BE WORN.

SECTION V — REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS DECOMPOSITION PRODUCTS: REFERENCE: "UNUSUAL FIRE AND EXPLOSION HAZARDS", SECTION IV.

INCOMPATIBILITY: NONE KNOWN

SECTION VI — HEALTH HAZARD DATA

THESE PRODUCTS ARE NOT CONSIDERED TO BE A HEALTH HAZARD IN THE FORM IN WHICH THEY ARE SOLD (SHEET, PANEL). HOWEVER, IF THESE PRODUCTS ARE ABRADED, MELTED, WELDED, CUT OR PROCESSED IN ANY MANNER THAT CAUSES RELEASE OF FUMES OR DUSTS, HAZARDOUS LEVELS OF FUMES OR DUSTS, MAY BE GENERATED FROM THIS PRODUCT.

EFFECTS OF OVEREXPOSURE:

ACUTE: PHYSICAL IRRITATION OF THE EYES MAY RESULT FROM EXPOSURE TO HIGH CONCENTRATION OF DUST DURING CERTAIN FABRICATION OPERATIONS.

CHRONIC: STUDIES HAVE SHOWN THAT WORKERS EXPOSED FOR LONG PERIODS TO HIGH CONCENTRATIONS OF RESPIRABLE PVC DUST MAY RETAIN THE DUST IN THEIR LUNGS. THERE IS NO EVIDENCE OF FIBROTIC CHANGE OR TOXIC RESPONSE ASSOCIATED WITH SUCH PVC DUST RETENTION.

REPEATED LONG-TERM INHALATION/INGESTION OF LEAD MAY LEAD TO WEARINESS, HEADACHE, SEVERE CONSTIPATION AND COLIC. IT HAS BEEN DETERMINED THAT LEAD IS A REPRODUCTIVE TOXIN.

SPECIAL PRECAUTIONS:

- AVOID PROLONGED INHALATION OF HIGH DUST CONCENTRATIONS AND INGESTION OF THE MATERIAL.
- WASH HANDS BEFORE EATING, DRINKING OR SMOKING.
- WEAR PROPER EYE AND RESPIRATORY PROTECTION WHEN WORKING IN AREAS OF HIGH DUST CONCENTRATIONS.
- CARE SHOULD BE TAKEN DURING THERMOFORMING OPERATIONS. WHEN TEMPERATURE EXCEEDS 350 DEGREES FAHRENHEIT, DECOMPOSITION OF THE MATERIAL MAY OCCUR.

EMERGENCY AND FIRST AID PROCEDURES:

- IF CONTACT IS MADE WITH EYES, WASH IMMEDIATELY UNDER WATER FOR AT LEAST 15 MINUTES.
- FOR INHALATION EXPOSURE, REMOVE TO FRESH AIR.
- CONTACT PHYSICIAN

SECTION VII — STORAGE, HANDLING AND DISPOSAL DATA

WASTE DISPOSAL: CARE MUST BE TAKEN WHEN USING OR DISPOSING OF MATERIAL DEBRIS TO PREVENT ENVIRONMENTAL CONTAMINATION. DISPOSE OF THE DEBRIS IN ACCORDANCE WITH THE CLEAN AIR ACT, THE CLEAN WATER ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT AND ALL STATE OR LOCAL LAWS/REGULATIONS REGARDING DISPOSAL.

HANDLING AND STORAGE PRECAUTIONS: STORE IN A FLAT DRY AREA

EXERCISE CAUTION IN ALL THERMAL FORMING PROCEDURES

SECTION VIII — PERSONAL PROTECTION DATA

PRIMARY ROUTES OF ENTRY ARE: INHALATION AND INGESTION

RESPIRATORY: AN APPROVED NIOSH/MSHA RESPIRATOR MUST BE USED WHEN ENGINEERING CONTROLS CANNOT BE IMPLEMENTED TO CONTROL DUST CONCENTRATIONS. REFERENCE OSHA 1910.134 FOR SPECIFIC REQUIREMENTS.

VENTILATION: LOCAL EXHAUST. REFERENCE OSHA 1910.94 FOR SPECIFIC REQUIREMENTS.

EYE: EYE PROTECTION MUST BE WORN WHEN WORKING IN DUST CONCENTRATIONS AND DURING SAWING OR OTHER OPERATIONS WHICH MIGHT CAUSE FLYING DEBRIS. REFERENCE OSHA 1910.133 FOR SPECIFIC REQUIREMENTS.

PROTECTIVE GLOVES: GLOVES SHOULD BE WORN TO PREVENT CUTS OR SCRAPES.