



Material Safety Data Sheet

Hazardous Materials Information System (HMIS) Ratings

Health = 2

Flammability = 3

Reactivity = 0

Protective Equipment = B

Revision Date 04/16/2012

Version 1 . 6

Section 1. Chemical product and company identification

Material Number: 1291218

Material Description : BONDAID I

Manufacturer Name : INX Digital International Co.

Manufacturer Address : 2125 Williams Street, San Leandro, California 94577, United States

24 Hour Emergency Phone : 800.424.9300 CHEMTREC 24 Hour Spill and Emergency (+1 703 527 3887 Worldwide)

Product Safety (EHS) Phone : 630.382.1800 x1450

MSDS Email Information : MSDS@inxintl.com

Section 2. Hazards Identification

Physical state : liquid

OHSA/HCS Classification : Flammable liquid, Irritating material, Sensitizing material, Target organ effects

Emergency overview : WARNING! FLAMMABLE LIQUID AND VAPOR. CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. Flammable liquid. Severely irritating to the eyes and skin.

Defatting to the skin. May cause sensitization by skin contact. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not get in eyes or on skin or clothing. Contains material that can cause target organ damage. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Skin contact : Severely irritating to the skin. May cause sensitization by skin contact.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Potential chronic health effects

Chronic effects : Contains material that can cause target organ damage. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye/face : Adverse symptoms may include the following: pain or irritation watering redness

Skin : Adverse symptoms may include the following: irritation redness dryness cracking

Inhalation : No specific data.

Ingestion : No specific data.

Medical conditions aggravated by over-exposure: Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

Section 3. Composition / Information on Hazardous Ingredients

Chemical name	CAS #	Weight %
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Ethanol	64-17-5	60.0000 - 100.0000
Propyl Acetate, n-	109-60-4	3.0000 - 7.0000
Isopropanol	67-63-0	3.0000 - 7.0000
Silane component		1.0000 - 5.0000

Section 4. First aid measures

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Notes to physician: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5. Fire-fighting measures

Flash point: 12.8 °C

Fire hazard: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Extinguishing media (Suitable) : Use dry chemical, CO₂, water spray (fog) or foam.

Extinguishing media (Not suitable) : Do not use water jet.

Fire fighting instructions : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous combustion products : Decomposition products may include the following materials: carbon dioxide carbon monoxide

Section 6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Monitoring methods and references : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Ethanol

ACGIHTLV-STEL: Threshold Limit Value - Short Time Exposure Level	1,000 ppm
OSHAPEL: Permissible Exposure Level	1,000 ppm 1,900 mg/m3
NIOSH Time Weighted Average (TWA)	1,000 ppm 1,900 mg/m3

Propyl Acetate, n-

ACGIHTLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level	200 ppm 835 mg/m3
ACGIHTLV-STEL: Threshold Limit Value - Short Time Exposure Level	250 ppm 1,040 mg/m3
OSHAPEL: Permissible Exposure Level	200 ppm 840 mg/m3
NIOSH Time Weighted Average (TWA)	200 ppm 840 mg/m3
NIOSH Short Term Exposure Limit (STEL)	250 ppm 1,050 mg/m3

Isopropanol

ACGIHTLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level	200 ppm
ACGIHTLV-STEL: Threshold Limit Value - Short Time Exposure Level	400 ppm
OSHAPEL: Permissible Exposure Level	400 ppm 980 mg/m3
NIOSH Time Weighted Average (TWA)	400 ppm 980 mg/m3
NIOSH Short Term Exposure Limit (STEL)	500 ppm 1,225 mg/m3

Protective Equipment

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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Eyes. : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9. Physical and chemical properties

State of Matter	liquid		
Color	Colorless.		
Density	0.822 g/cm ³	6.85 lb/gal	822 g/l
Flash point	12.8 °C		
Boiling point	78.5 °C	173.30 °F	
Volatile.	98 %(m) Weight %	99.81 %(V) Volume %	
VOC %	90.01 %(m) Weight %	93.24 %(V) Volume %	
Coating VOC	6.6 lb/gal	792 g/l	

Section 10. Stability and reactivity

Stability : The product is stable.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Materials to avoid : Reactive or incompatible with the following materials: oxidizing materials

Decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Chemical name	Test	Species	Dose	Exposure
Propyl Acetate, n-	Oral Toxicity data	Rat	LD50 9,370 mg/kg	

Section 12. Ecological information

Environmental effects : No known significant effects or critical hazards.

Fate and pathway : No known significant effects or critical hazards.

Aquatic ecotoxicity				
Chemical name	Test	Result	Species	Exposure
Ethanol	Marine water	17,921 mg/l	Green algae	4 d
Ethanol	Fresh water	> 10,000 - < 20,000 mg/l	Green algae	4 d
Ethanol	Fresh water	2 mg/l	Water flea	2 d
Ethanol	Fresh water	9,300 mg/l	Water flea	2 d
Ethanol	Fresh water	10,600 mg/l	Water flea	2 d
Isopropanol		> 1,400 mg/l	Bluegill	4 d
Isopropanol	Fresh water	11,130 mg/l	Fathead minnow	4 d
Isopropanol	Fresh water	10,400 mg/l	Fathead minnow	4 d
Isopropanol	Fresh water	6,550 mg/l	Fathead minnow	4 d
Isopropanol	Fresh water	9,640 mg/l	Fathead minnow	4 d

Section 13. Disposal considerations

Disposal considerations : The generation of waste should be avoided or minimized wherever possible.

Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority

requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste code : This product may meet the RCRA criteria of potential D001 classification.

Section 14. Transport information

Regulatory information	Proper shipping name	UN - Number	Hazard classification	Packing group	Additional information
DOT Classification	Flammable liquid, n.o.s. (n-propyl alcohol, n-propyl acetate)	UN1993	3	II	
IMDG	Flammable liquid, n.o.s. (n-propyl alcohol, n-propyl acetate)	UN1993	3	II	
IATA	Flammable liquid, n.o.s. (n-propyl alcohol, n-propyl acetate)	UN1993	3	II	
ADR	Flammable liquid, n.o.s. (n-propyl alcohol, n-propyl acetate)	UN1993	3	II	
ADN/ADNR	Flammable liquid, n.o.s. (n-propyl alcohol, n-propyl acetate)	UN1993	3	II	

Section 15. Regulatory information

International regulations

Australia inventory (AICS) : Not determined.

Canada. Canadian Environmental Protection Act, 1999 Part 5 Sec. 66 (1) : Not determined.

China inventory (IECSC) : All components are listed or exempted.

US. Toxic Substances Control Act as amended 15 U.S.C. 2606 Sec. 8 (b) : All components are listed or exempted.

Japan inventory : Not determined.

Korea inventory : All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC) : Not determined.

Philippines inventory (PICCS) : All components are listed or exempted.

United States Regulation

SARA 302/304/311/312 extremely hazardous substances

No products were found.

SARA 302/304 emergency planning and notification

No products were found.

SARA 302/304/311/312 hazardous chemicals

No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification

Ethanol : 64-17-5 Propyl Acetate, n- : 109-60-4 Isopropanol : 67-63-0

SARA 313 - Form R - Reporting requirements

SARA 313 - Supplier Notification

California Prop. 65

No components present that are known to the State of California to cause cancer or reproductive harm.

HAP (if present above 0.1% by weight)	CASRN	Weight %	Density (lb/gal)
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Section 16. Other information

Disclaimer: The information provided herein is presented in good faith and complies with the OSHA Hazard Communication Standard, 29 CFR 1910.1200 (g). Nothing contained herein constitutes a specification nor does it guarantee warranty for said product.