Material Safety Data Sheet

Synvert II

1. Product and Company Identification

Material name	**Synvert II**
Patent Number	Not available
Revision date	June-23-2010
Version No.	1
CAS #	Mixture
Manufacturer information	INTEGRITY INDUSTRIES INC.
Supplier information	INTEGRITY INDUSTRIES INC. P O BOX 5342 Kingsville, TX 78363
Supplier emergency telephone number(s)	CHEMTREC 1-800-424-9300/361-595-5561

2. Hazards Identification

Emergency overview	WARNING Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans. Prolonged exposure may cause chronic effects. Components of the product may be absorbed into the body by inhalation, ingestion and through the skin. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Inhalation. Skin contact. Eye contact. Ingestion.
Eyes	Do not get this material in contact with eyes. Irritating to eyes.
Skin	Do not get this material in contact with skin. Harmful if absorbed through the skin. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans. May cause sensitization by skin contact.
Inhalation	Do not breathe vapor. Irritating to respiratory system. Prolonged inhalation may be harmful.
Ingestion	Do not ingest. Harmful if swallowed.

Target organs	Kidney. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans. Blood. Central nervous system. Eyes. Liver. Lungs. Respiratory system. Skin.
Chronic effects	This product may be harmful if it is absorbed through the skin. Unconsciousness. Shortness of breath. Edema. Jaundice. Cyanosis. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.
Signs and symptoms	Unconsciousness. Discomfort in the chest. Shortness of breath. Narcosis. Cyanosis. Decrease in motor functions. Behavioral changes. Cough. Edema. Liver enlargement. Jaundice. Proteinuria.
Potential environmental effects	Components of this product are hazardous to aquatic life. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Biobase 300	8012-95-1	40 - 70
2-Butoxyethanol	111-76-2	5 - 10

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eye(s) with plenty of water. Get medical attention immediately.
Skin contact	Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.
Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately.
Ingestion	Get medical attention immediately. Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.
General advice	In case of shortness of breath, give oxygen. Keep victim warm. Call a physician if symptoms develop or persist. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	Containers may explode when heated. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media	Water. Water fog. Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Personal precautions	Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away. Stay upwind. Keep out of low areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Should not be released into the environment. Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. After removal flush contaminated area thoroughly with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. Never return spills in original containers for re-use.

7. Handling and Storage

Handling	Use only with adequate ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from sources of ignition - No smoking. Wash thoroughly after handling. Avoid prolonged exposure. Avoid release to the environment.
Storage	The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Keep in a well-ventilated place. Keep this material away from food, drink and animal feed. Keep out of the reach of children. Use care in handling/storage. Keep away from heat and flame.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Biobase 300	8012-95-1	5 mg/m3	10 mg/m3	Not established
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Biobase 300	8012-95-1	5 mg/m3	Not established	Not established
2-Butoxyethanol	111-76-2	50 ppm	Not established	Not established

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection Do not get this material in contact with eyes. Wear chemical goggles. Face-shield.

Skin protection Do not get this material in contact with skin. Do not get this material on clothing. Protective gloves.Impervious gloves. Wear appropriate chemical resistant gloves. Wear suitable protective clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. A NIOSH- approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

General hygeine considerations Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. When using do not eat or drink. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance Liquid.

Color Brown

Odor Amine-like.

Odor threshold Not available

Physical state Liquid.

Form Liquid.

pH Not available

Melting point < 32 °F (< 0 °C)

Freezing point Not available

Boiling point 518 °F (270 °C)

Flash point 160 °F (71.1 °C)

Evaporation rate Not available

Flammability Not available.

Flammability limits in air, upper, % by volume Not available

Flammability limits in air, lower, % by volume	Not available
Vapor pressure	< 1
Vapor density	Not available
Specific gravity	0.96
Relative density	0.9599 g/cm3 estimated
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
VOC	4.03 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks. Avoid high temperatures.
Incompatible materials	This product is incompatible with nitrates. Strong acids.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx).
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects

Acute LD50: 7111 mg/kg estimated, Rat, Oral
Acute LD50: 3727 mg/kg estimated, Rat, Dermal
Acute LC50: 809 mg/l/4h estimated, Rat, Inhalation

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

2-Butoxyethanol	111-76-2	Inhalation LC50 Rat: 2.21 mg/L/4H; Inhalation LC50 Rat:450 ppm/4H; Oral LD50 Rat:470 mg/kg; Dermal LD50 Rat:2270 mg/kg; Dermal LD50 Rabbit:220 mg/kg
Biobase 300	8012-95-1	Oral LD50 Mouse: 22 g/kg

Local effects

Liver toxicity. Blood disorder may occur after ingestion. Irritating to respiratory system.

Chronic effects

Hazardous by OSHA criteria. This product may be harmful if it is absorbed through the skin. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Subchronic effects

Kidney injury may occur. Blood disorder may occur after ingestion. Blood disorder may occur after prolonged inhalation. Blood disorder may occur after prolonged skin contact.

Carcinogenicity

May cause cancer.

ACGIH - Threshold Limit Values - Carcinogens

2-Butoxyethanol	111-76-2	A3 - Confirmed animal carcinogen with unknown relevance to humans

Neurological effects

Hazardous by OSHA criteria.

Further information

Symptoms may be delayed.

12. Ecological Information

Ecotoxicity LC50 36976 mg/L estimated, Fish, 96.00 Hours,
EC50 14.61 mg/L estimated, Daphnia, 48.00 Hours,
IC50 7193 mg/L estimated, Algae, 72.00 Hours,

Ecotoxicity - Freshwater Fish Species Data

2-Butoxyethanol	111-76-2	96 Hr LC50 Lepomis macrochirus: 1490 mg/L [static]

Ecotoxicity - Water Flea Data

2-Butoxyethanol	111-76-2	24 Hr EC50 water flea: 1720 mg/L; 24 Hr LC50 Daphnia magna: 1698-1940 mg/L

Environmental effects Harmful to aquatic life.

Ecotoxicity - Freshwater Fish Species Data

2-Butoxyethanol	111-76-2	96 Hr LC50 Lepomis macrochirus: 1490 mg/L [static]

Ecotoxicity - Water Flea Data

2-Butoxyethanol	111-76-2	24 Hr EC50 water flea: 1720 mg/L; 24 Hr LC50 Daphnia magna: 1698-1940 mg/L

13. Disposal Considerations

Disposal instructions Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Bulk

Basic shipping requirements:

Proper shipping name	Combustible liquid, n.o.s. (BIOBASE 300, 2-BUTOXYETHANOL)
Hazard class	Comb liq
Subsidiary hazard class	None
UN number	NA1993
Packing group	III
Additional information:	
Special provisions	IB3, T1, T4, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	241

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as hazardous goods.

IMDG

Not regulated as hazardous goods.

IATA

Not regulated as hazardous goods.

15. Regulatory Information

Labelling

Contains 2-Butoxyethanol, Biobase 300

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

2-Butoxyethanol	111-76-2	1.0 % de minimis concentration (applies to R-(OCH2CH2)n-OR', where n = 1,2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)

U.S. - FDA - Direct Food Additives

2-Butoxyethanol	111-76-2	21 CFR 173.315
Biobase 300	8012-95-1	21 CFR 172.878, 21 CFR 173.340

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

International regulations

Canada - WHMIS - Ingredient Disclosure List

2-Butoxyethanol	111-76-2	1 %
Biobase 300	8012-95-1	1 %

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - Massachusetts - Right To Know List

2-Butoxyethanol	111-76-2	Present
Biobase 300	8012-95-1	Present (mist)

U.S. - Minnesota - Hazardous Substance List

2-Butoxyethanol	111-76-2	Skin
Biobase 300	8012-95-1	Carcinogen

U.S. - New Jersey - Right to Know Hazardous Substance List

2-Butoxyethanol	111-76-2	sn 0275
Biobase 300	8012-95-1	sn 1437

U.S. - Pennsylvania - RTK (Right to Know) List

2-Butoxyethanol	111-76-2	Present
Biobase 300	8012-95-1	Present

U.S. - Rhode Island - Hazardous Substance List

2-Butoxyethanol	111-76-2	Toxic (skin)
Biobase 300	8012-95-1	Flammable; Toxic

U.S. - Texas - Effects Screening Levels - Long Term

2-Butoxyethanol	111-76-2	5 ppb ESL; 24 µg/m3 ESL
Biobase 300	8012-95-1	5 µg/m3 ESL (mist)

U.S. - Texas - Effects Screening Levels - Short Term

2-Butoxyethanol	111-76-2	50 ppb ESL; 240 µg/m3 ESL
Biobase 300	8012-95-1	50 µg/m3 ESL (mist)

16. Other Information

HMIS® ratings

Health: 2*
Flammability: 2
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 2
Instability: 0

Prepared by

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Disclaimer

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Issue date

June-23-2010