SAFETY DATA SHEET

This Safety Data Sheet complies with the Canadian Hazardous Products Regulations, the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910 (OSHA HCS)

1. Product and Supplier Identification

1.1 Product: **Surface Bonder Xi, Composite Bonder RTP-01, Trim Bonder TR30 Rodding Bonder RD50, Sink Bonder SK11, Part A**

1.2 Product Use: Bonding agent for acrylic composite, polyester composite, quartz composite, natural stone, FRP/GRP and steel reinforcing rods.

1.3 Producer:

Integra Adhesives
Unit 4 - 33759 Morey Avenue
Abbotsford, BC V2S 2W5
Canada, V2S 2W5

Telephone: +1 (604) 850-1321

Supplier: **As above**

1.4 Emergencies (24-hour number): +1 (352) 323-3500 (Infotrac) - Contract # 103390

2. Hazards Identification

2.1 Classification of product or mixture

Note to reader: This product in an untested mixture and GHS classification is based on the classification of the ingredients and their concentrations. Proprietary ingredients , if any, do NOT exhibit any health effects not listed in this SDS.

GHS Classification:
Flammable Liquid: Category 2
Skin irritation: Category 2
Skin Sensitization: Category 1
Specific Target Organ Toxicity, Single Exposure, Respiratory System: Category 3

2.2 GHS Label Elements, including precautionary statements

Pictogram:

Signal Word: Danger

GHS Hazard Statements:

H225: Highly flammable liquid and vapour.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H335: May cause respiratory irritation.

GHS Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/…/equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing mist, vapours or spray
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P321: Specific treatment (see supplemental first aid instruction on this label).
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353: IF ON SKIN: (or hair): Take off immediately all contaminated clothing. Rinse skin with water. [or shower].
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P370+P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P403+P235: Store in a well-ventilated place. Keep cool.
P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: Lachrymator

2.4 Additional Information

Primary Routes of Entry:

Skin Contact:	Yes
Skin Absorption:	Yes
Eye Contact:	Yes
Ingestion:	Yes
Inhalation:	Yes

Emergency Overview: DANGER. Flammable liquid - may release vapors that form flammable mixtures at or above the flash point. Vapours will be easily ignited by heat, spark or flames. Heat may cause the containers to explode. Irritating to eyes and skin.

Effects of Short-Term (Acute) Exposure:

Inhalation: May cause irritation of respiratory tract. Prolonged inhalation may be harmful. Avoid breathing dust/fume/gas/mist/vapors/spray.

Skin Contact: May cause skin irritation. Avoid contact with the skin.

Eye Contact: Contact with eyes may cause irritation. Avoid contact with eyes.

Ingestion: Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting. Do not ingest.

Effects of Long-Term (Chronic) Exposure: This product contains ingredients which have been known to cause skin sensitization in some people. Sensitization may occur after prolonged or repeated exposures to this product. Prolonged contact with skin may defat tissue causing dermititis or aggravate existing skin problems.

Medical Conditions Aggravated By Exposure: Persons susceptable to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

3. Composition

3.1 Mixture composition

Component	% (w/w)	Exposure Limits (ACGIH)*	LD_{50}	LC_{50}
Methyl Methacrylate (CAS No. 80-62-6) (EINECS No. 201-297-1)	35 - 50	TLV-TWA: 50 ppm TLV-STEL: 100 ppm	7872 mg/kg (oral/rat) >5,000 mg/kg (dermal/rabbit)	78,000 mg/m^3 (rat inhalation/ 4 hour)
Non-hazardous ingredients and ingredients below disclosure requirements.	50 - 65	N/ap	N/ap	N/ap
GHS CLASSIFICATION: FLAM LIQ. CAT 2; SKIN IRR., Cat 2; SKIN SENS, Cat 1; STOT SE, Respiratory System, Cat 3				

* ACGIH: American Conference of Governmental Industrial Hygienists. Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area.

ABBREVIATION KEY: N/p: not published, N/d: not determined, N/ap: not applicable, N/av: not available

4. First Aid Measures

4.1 Description of First Aid Measures

General advice: In case of shortness of breath, give oxygen. Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep victim under observation. Keep victim warm.

In case of eye contact: Flush eyes with water, as a precaution.

In case of skin contact: Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin.

If 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, if needed.

If ingestion: Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. 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. If ingestion of a large amount does occur, call a poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Effects of Short-Term (Acute) Exposure:

Inhalation: May cause irritation of respiratory tract. Prolonged inhalation may be harmful. Avoid breathing dust/fume/gas/mist/vapors/spray.

Skin Contact: May cause skin irritation. Avoid contact with the skin.

Eye Contact: Contact with eyes may cause irritation. Avoid contact with eyes.

Ingestion: Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting. Do not ingest.

Effects of Long-Term (Chronic) Exposure: This product contains ingredients which have been known to cause skin sensitization in some people. Sensitization may occur after prolonged or repeated exposures to this product. Prolonged contact with skin may defat tissue causing dermititis or aggravate existing skin problems.

Medical Conditions Aggravated By Exposure: Persons susceptable to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

4.3 Indication of any immediate medical attention and special treatment needed
None

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Water spray, dry sand, alcohol-resistant foam, dry chemical, or carbon dioxide. Do not use water jet, which may spread a fire.

5.2 Special hazards arising from mixture: Vapors may travel to source of ignition and flash back. Avoid ignition sources or excessive temperatures. Container may explode under fire conditions. Spontaneous polymerization may occur with prolonged aging or exposure to light.

Advice for firefighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. 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. In the event of fire, cool tanks with water spray. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

5.3 Further Information:

Sensitivity to Impact: No
Sensitivity to Static Discharge: Yes

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD INDEX:
HEALTH: 2
FLAMMABILITY: 3
REACTIVITY: 0

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment listed below. Avoid breathing vapours, mist or spray. Ensure adequate ventilation. Remove all sources of ignition and heat. Evacuate area. Beware of vapours accumulating to form explosive mixtures with air. Vapours may travel long distances and collect in low-lying areas. Flash backs may occur.

Respiratory Protection: Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. At minimum, use a NIOSH approved organic vapour respirator. When cartridge type respirators are used, ensure that the cartridges are changed frequently according to the manufacturer's recommendations. Respirator selection must be done by a qualified person and be based upon a risk assessment of the work activities and exposure levels. Respirators must be fit tested and users must be clean shaven where the respirator seals to face. Exposure must be kept at or below the applicable exposure limits and the maximum use concentration of the respirator must not be exceeded.

Skin protection: Handle with gloves. Gloves must be inspected before use. Use proper gloove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good industrial practices. Wash and dry hands after use. Wear appropriate chemical resistant clothing.

Gloves and protective clothing may be made from butyl rubber, minimum thickness, 0.3 mm. Breakthrough time is approximately 66 minutes.

Eye and Face Protection: Wear safety glasses with side shields (or goggles).

Footwear: No specific recommendation.

Other: Emergency eyes wash fountains should be available in vicinity of use. At minimum, an eye lavage kit should be kept on hand.

6.2 Environmental precautions

Ensure that any release of this material is contained to prevent leakage into waterways and sanitary sewers.

6.3 Methods and materials for containment and cleanup

Extinguish all flames in the vicinity. Should not be released into the environment. The product is only slightly soluble in water and will spread on the water surface.

Remedial Measures: Wash spill area with strong detergent and water solution, rinse with minimal water, if possible.

Large Spills: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal in accordance with local regulations.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

6.4 Reference to other sections

For disposal, see section 13

7. Handling and Storage

7.1 Precautions for safe handling

Handling Procedures: Avoid contact with skin and eyes. Avoid inhalation of vapour, mist or spray. Flashback is possible over long distances. Containers may explode under fire conditions. Use explosion-proof equipment. Take measures to prevent buildup of static charges.

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke when handling. All equipment used when handling the product must be grounded. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Do not use in areas without adequate ventilation. Wear personal protective equipment. When using do not eat or drink. Wash thoroughly after handling. Avoid release to the environment.

7.2 Conditions for safe storage, including incompatibilities

Storage: Do not handle or store near an open flame, heat or other sources of ignition. Keep at temperature not exceeding 49 °C. 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 a closed container away from incompatible materials. Store in a well-ventilated place. Store away from incompatible materials (see **Section 10** of the SDS). Keep in an area equipped with sprinklers. Use care in handling/storage.

7.3 Specific end use(s)

No other uses except those mentioned in Section 1.2

8. Exposure Controls, Personal Protection

8.1 Control parameters

Components with workplace control parameters

Methyl Methacrylate: ACGIH TLV-TWA: 50 ppm, STEL: 100 ppm

8.2 Exposure Controls

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas.
Respiratory Protection: Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. At minimum, use a NIOSH approved organic vapour respirator. When cartridge type respirators are used, ensure that the cartridges are changed frequently according to the manufacturer's recommendations. Respirator selection must be done by a qualified person and be based upon a risk assessment of the work activities and exposure levels. Respirators must be fit tested and users must be clean shaven where the respirator seals to face. Exposure must be kept at or below the applicable exposure limits and the maximum use concentration of the respirator must not be exceeded.

Skin protection: Handle with gloves. Gloves must be inspected before use. Use proper gloove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good industrial practices. Wash and dry hands after use. Wear appropriate chemical resistant clothing.

Gloves and protective clothing may be made from butyl rubber, minimum thickness, 0.3 mm. Breakthrough time is approximately 66 minutes.

Eye and Face Protection: Wear safety glasses with side shields (or goggles).

Footwear: No specific recommendation.

Other: Emergency eyes wash fountains should be available in vicinity of use. At minimum, an eye lavage kit should be kept on hand.

Control of environmental exposure

Prevent further leakage or spillage, if safe to do so. Do not let product enter drains.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Clear, transparent liquid, may be tinted
Odour:	Typical resin
Odour Threshold:	Not available
pH:	Not applicable
Melting Point/Freezing Point:	Not available
Initial Boiling Point:	101°C
Flash Point:	9°C (TCC), (Methyl Methacrylate)
Evaporation Rate:	Not available
Flammability:	Flammable
Upper Explosion Limit:	12.5%, (Volume/Methyl Methacrylate)
Lower Explosion Limit:	2.12%, (Volume/Methyl Methacrylate)
Vapour Pressure:	51 hPa @ 25^{o}C (Methyl Methacrylate)
Vapour Density:	Heavier than air
Relative Density:	1.06 @ 25^{o}C (water =1)
Solubility:	Slightly soluble in water
Partition Coefficient:	Log pow: 1.38 (Methyl Methacrylate)
Autoignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not available
Explosive Properties:	Not available
Oxidizing Properties:	Not available
Percent Volatiles:	Not available

9.2 Other safety information: None

10. Stability and Reactivity

10.1 Reactivity

No information available.

10.2 Chemical Stability

Polymerizes with evolution of heat. Avoid contact with incompatible materials as listed in Part 10.5. Stable under normal storage conditions.

10.3 Possibility of hazardous reactions

High temperatures, inhibitor depletion, accidental impurities or oxidizers may initiate spontaneous polymerization, generating heat and pressure. Closed containers may rupture during hazardous polymerization. Vapours may form explosive mixtures in air.

10.4 Conditions to avoid

May polymerize on exposure to direct sunlight. Avoid heat, flames and ignition sources.

10.5 Incompatible materials

Oxidizing agents. Peroxides, amines, bases, halogens or reducing agents.

10.6 Hazardous decomposition products

No data

11.Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
LD_{50} 7,872mg/kg (oral/rat)
LC_{50} 78,000 mg/kg (inhalation/rat)
LD50 >5,000mg/kg (dermal/rabbit)

Skin corrosion/irritation
Components of this mixture may cause skin irritation, H315, Category 2, Warning

Serious eye damage/eye irritation
Not classifiable.

Respiratory or skin sensitization
Components of this mixture may cause skin sensitization, H317, Category 1, Warning

Germ Cell Mutagenicity
Not classifiable.

Carcinogenicity
Not classifiable.

Reproductive toxicity
Not classifiable.

Specific Target Organ Toxicity – Single exposure
Components of this mixture may cause respiratory irritation, H335, Category 3, Warning

Specific Target Organ Toxicity – Repeated exposure
Not classifiable.

Aspiration Hazard
Not classifiable.

Aquatic Toxicity
Not classifiable.

Additional information
No information available

12. Ecological Information

12.1 Toxicity

Toxicity to fish	LC_{50} Pimephales promelas (fathead minnow), 125.5 – 275.0 mg/l (96 hour)
Toxicity to daphnia and other aquatic invertebrates	EC_{50} Daphnia Magna (Water Flea), 720 mg/l
Toxicity to algae	EC_{50} Pseudokirchneriella subcapitata (green algae), 170 mg/l (96 hour)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
Not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal Considerations

13.1 Waste treatment methods

Product:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations. Residual vapors may explode on ignition; do not cut, drill, or weld on or near the container. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Contaminated Packaging:

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Transport of Dangerous Goods (TDG and CLR): UN 1133, Adhesives, Class 3, PG II

United States Department of Transport (49CFR): UN 1133, Adhesives, Class 3, PG II

International Air Transport Association (IATA): UN 1133, Adhesives, Class 3, PG II

International Maritime Organization (IMO): UN 1133, Adhesives, Class 3, PG II
Flash Point = 9°C, EmS F-E, S-D, Stowage Category A

15. Regulatory Information

CANADIAN FEDERAL REGULATIONS:

CEPA, DOMESTIC SUBSTANCES LIST: Listed

UNITED STATES – FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are listed in the inventory.
CALIFORNIA Proposition 65, Safe Drinking Water and Toxicity Enforcement Act, 1986: None listed
OSHA, 29 CFR 1910, Subpart Z: Meets criteria for a hazardous substance.
CERCLA, 40 CFR 302: No ingredients are listed.
SARA 302, 40 CFR 355: No ingredients are listed.
SARA 313, 40 CFR 372: Methyl Methacrylate, Revision Date 2007-07-01
SARA 311/312, 40 CFR 370: Immediate (Acute), Delayed(Chronic) Health

16. Other Information

Original Preparation Date: March 17, 2015

Prepared by: Upward Packaging Inc, Unit 180 – 3771 Jacombs Road, Richmond, B.C., V6V 2L9

Disclaimer: This Safety Data Sheet (SDS) was prepared using information provided by CCINFO, ingredient supplier SDS and other relevant sources. This product has been classified using weight of evidence, expert judgment and previous testing as per Part 1.3 of the Fifth Edition of The Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The information in this SDS is offered for your consideration and guidance when exposed to this product. Integra Adhesives expressly disclaims all

expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of Integra Adhesives.

Revisions: March 23, 2016

SAFETY DATA SHEET

This Safety Data Sheet complies with the Canadian Hazardous Products Regulations, the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910 (OSHA HCS)

1. Product and Supplier Identification

1.1 Product: **Surface Bonder Xi, Composite Bonder RTP-01, Trim Bonder TR30 Rodding Compound RD50, Sink Bonder SK11, Part B**

1.2 Product Use: Bonding agent for acrylic composite, polyester composite, quartz composite, natural stone, FRp/GRP and steel reinforcing rods.

1.3 Producer:

Integra Adhesives
Unit 4 - 33759 Morey Avenue
Abbotsford, BC V2S 2W5
Canada, V2S 2W5

Telephone: +1(604) 850-1321

Supplier: **As above**

1.4 Emergencies (24-hour number): +1 (352) 323-3500 (Infotrac) - Contract # 103390

2. Hazards Identification

2.1 Classification of product or mixture

Note to reader: This product in an untested mixture and GHS classification is based on the classification of the ingredients and their concentrations. Proprietary ingredients , if any, do NOT exhibit any health effects not listed in this SDS.

GHS Classification:
Organic Peroxides: Type D
Eye Irritation: Category 2A
Skin Irritation, Category 2
Skin Sensitization, Category 1
Specific Target Organ Toxicity, Single Exposure, Lungs, Category 3

2.2 GHS Label Elements, including precautionary statements

Pictogram:

Signal Word: Danger

GHS Hazard Statements:

H242: Heating may cause a fire.
H315: Causes skin irritation
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation

GHS Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220: Keep/store away from clothing/ combustible materials
P234: Keep only in original container.
P261: Avoid breathing mist, vapours or spray
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P321: Specific treatment (see supplemental first aid instruction on this label).
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362: Take off contaminated clothing
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P410: Protect from sunlight.
P411+P235: Store at temperatures not exceeding 30°C/86°F. Keep cool.
P420: Store separately.
P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: None

2.4 Additional Information

Primary Routes of Entry:

Skin Contact:	Yes
Skin Absorption:	Yes
Eye Contact:	Yes
Ingestion:	Yes
Inhalation:	Yes

Emergency Overview: Oxidizing material. Irritating to eyes and skin. May cause sensitization by skin contact. Target organs; skin, eyes. Symptoms of exposure include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Effects of Short-Term (Acute) Exposure:

Inhalation: Inhalation of dusts may cause respiratory irritation. Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

Skin Contact: May cause sensitization by skin contact. May cause skin irritation. Avoid contact with the skin.

Eye Contact: Contact with eyes may cause irritation. Avoid contact with eyes.

Ingestion: Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting. Do not ingest.

Effects of Long-Term (Chronic) Exposure: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Medical Conditions Aggravated By Exposure: Persons susceptable to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

3. Composition

3.1 Mixture composition

Component	% (w/w)	Exposure Limits (ACGIH)*	LD_{50}	LC_{50}
Dibenzoyl Peroxide (CAS No. 94-36-0) (EINECS No. 202-327-6)	3 - 7	TLV-TWA: 5 mg/m^3	N/d	N/d
Non-hazardous ingredients and ingredients below disclosure requirements.	60 - 100	N/ap	N/ap	N/ap
GHS CLASSIFICATION: ORGANIC PEROXIDE, TYPE D; EYE IRR., Cat 2A; SKIN IRR., Cat 2; SKIN SENS., Cat 1; STOT SE, Lungs, Cat 3				

* ACGIH: American Conference of Governmental Industrial Hygienists. Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area.

ABBREVIATION KEY: N/p: not published, N/d: not determined, N/ap: not applicable, N/av: not available

4. First Aid Measures

4.1 Description of First Aid Measures

General advice: Take off contaminated clothing and shoes immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

In case of eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Get medical attention immediately.

In case of skin contact: Before washing use a dry brush to remove dust from skin. Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

If inhalation: Move to fresh air. Get medical attention, if needed.

If ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. 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.

4.2 Most important symptoms and effects, both acute and delayed

Effects of Short-Term (Acute) Exposure:

Inhalation: Inhalation of dusts may cause respiratory irritation. Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

Skin Contact: May cause sensitization by skin contact. May cause skin irritation. Avoid contact with the skin.

Eye Contact: Contact with eyes may cause irritation. Avoid contact with eyes.

Ingestion: Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting. Do not ingest.

Effects of Long-Term (Chronic) Exposure: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Medical Conditions Aggravated By Exposure: Persons susceptable to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

4.3 Indication of any immediate medical attention and special treatment needed
None

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2 Special hazards arising from mixture: Contact with combustible material may cause fire. May explode from heat or contamination. These substances will accelerate burning when involved in a fire. Some will react explosively with hydrocarbons (fuels). Some may decompose explosively when heated or involved in a fire. Runoff may create fire or explosion hazard.

Advice for firefighters: Firefighters should wear full protective clothing including self contained breathing apparatus. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. 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. In the event of fire, cool tanks with water spray. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

5.3 Further Information:

Sensitivity to Impact: Not available
Sensitivity to Static Discharge: Not available

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD INDEX:
HEALTH: 3
FLAMMABILITY: 1
REACTIVITY: 1
SPECIAL HAZARD: OX

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. 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 them.

Respiratory Protection: Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. Where risk assessment shows air-purifying respirators are appropriate, use a full face particulate respirator type N100 (US) or Type P3 (EN 143) respirator cartridges as a backup to engineering controls.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of gloves after use in accordance with applicable laws and good hygeine practices.Wear appropriate chemical resistant clothing.

Eye and Face Protection: Face shield and safety glasses.

Footwear: No specific recommendation.

Other: Emergency eyes wash fountains should be available in vicinity of use. At minimum, an eye lavage kit should be kept on hand.

6.2 Environmental precautions

Prevent further leakage or spillage, if safe to do so. Do not let product enter drains and discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleanup

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewer, basements or confined areas.

Remedial Measures: Wash spill area with strong detergent and water solution, rinse with minimal water, if possible.

Large Spills: Do not get water inside container. Use clean non-sparking tools to collect absorbed material. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination. Clean up in accordance with all applicable regulations.

6.4 Reference to other sections

For disposal, see Section 13

7. Handling and Storage

7.1 Precautions for safe handling

Handling Procedures: Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Minimize dust generation and accumulation. Do not breathe dust. 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. Do not use in areas without adequate ventilation. When using do not eat or drink. Wash thoroughly after handling. Avoid release to the environment.

7.2 Conditions for safe storage, including incompatibilities

Storage: Keep away from heat and sources of ignition. Store in a closed container away from incompatible materials. Store away from incompatible materials (see Section 10 of the MSDS). Use care in handling/storage.

7.3 Specific end use(s)

No other uses except those mentioned in Section 1.2

8. Exposure Controls, Personal Protection

8.1 Control parameters

Components with workplace control parameters

Dibenzoyl Peroxide: ACGIH TLV-TWA: 5 mg/m^3

8.2 Exposure Controls

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas.

Respiratory Protection: Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. Where risk assessment shows air-purifying respirators are appropriate, use a full face particulate respirator type N100 (US) or Type P3 (EN 143) respirator cartridges as a backup to engineering controls.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of gloves after use in accordance with applicable laws and good hygeine practices.Wear appropriate chemical resistant clothing. Wear protective gloves.

Eye and Face Protection: Face shield and safety glasses.

Footwear: No specific recommendation.

Other: Emergency eyes wash fountains should be available in vicinity of use. At minimum, an eye lavage kit should be kept on hand.

Control of environmental exposure

Prevent further leakage or spillage, if safe to do so. Do not let product enter drains.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Paste
Odour:	Faint odour
Odour Threshold:	Not available

pH:	Not available
Melting Point/Freezing Point:	0°C
Initial Boiling Point:	Not available
Flash Point:	Not available
Evaporation Rate:	Not available
Flammability:	Flammable
Upper Explosion Limit:	Not available
Lower Explosion Limit:	Not available
Vapour Pressure:	Not available
Vapour Density:	Not available
Relative Density:	1.11 @ 25^{o}C (water =1)
Solubility:	Partially soluble in water
Partition Coefficient:	3.46 (Dibenzoyl Peroxide)
Autoignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not available
Explosive Properties:	Not available
Oxidizing Properties:	Not available
Percent Volatiles:	Not available

9.2 Other safety information: None

10. Stability and Reactivity

10.1 Reactivity
No data.

10.2 Chemical Stability
Decomposes on heating. Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
Contact with incompatible materials. Exposure to heat, sparks or flames.

10.5 Incompatible materials
Strong acids. Strong bases, oxidizing agents, amines, alcohols, polymerizing initiators and reducing agents.

10.6 Hazardous decomposition products
Oxides of carbon.

11.Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
LD_{50} oral, not determined
LD_{50}, dermal, not determined
LC_{50}, inhalation, not determined

Skin corrosion/irritation
Components of this mixture may cause skin irritation, Category 2, H315, Warning

Serious eye damage/eye irritation
Components of this mixture may cause eye irritation, Category 2A, H319, Warning

Respiratory or skin sensitization
Components in this mixture may cause an allergic skin reaction, Category 1, H317, Warning

Germ Cell Mutagenicity
Not classifiable.

Carcinogenicity
Not classifiable.

Reproductive toxicity
Not classifiable.

Specific Target Organ Toxicity – Single exposure
Components of this mixture may cause respiratory irritation, H335, Category 1, Warning

Specific Target Organ Toxicity – Repeated exposure
Not classifiable.

Aspiration Hazard
Not classifiable.

Aquatic Toxicity
Not classifiable.

Additional information
No information available.

12. Ecological Information

12.1 Toxicity

Aquatic, Acute	Algae EC_{50} Green algae (Selenastrum capricornutum) 0.07 mg/l, 72 hours
(Dibenzoyl Peroxide)	Crustacea EC_{50} Water flea (Daphnia magna) 0.07 mg/l, 48 hours
	Fish LC_{50} Japanese rice fish (Oryzias latipes) 0.24 mg/l, 96 hours

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
Not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal Considerations

13.1 Waste treatment methods

Product:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations. Residual vapors may explode on ignition; do not cut, drill, or weld on or near the container. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an

approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Contaminated Packaging:

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Transport of Dangerous Goods (TDG and CLR): Not regulated

United States Department of Transport (49CFR): Not regulated

International Air Transport Association (IATA): Not regulated

International Maritime Organization (IMO): Not regulated

Note: This mixture contains dibenzoyl peroxide, CAS 94-36-0. It is exempt from being regulated for transport because it contains less than 35% peroxide and has greater than 65% inert material in the mixture.

15. Regulatory Information

CANADIAN FEDERAL REGULATIONS:

CEPA, DOMESTIC SUBSTANCES LIST: Listed

UNITED STATES – FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are listed in the inventory.
CALIFORNIA Proposition 65, Safe Drinking Water and Toxicity Enforcement Act, 1986: None listed
OSHA, 29 CFR 1910, Subpart Z: Meets criteria for a hazardous substance.
CERCLA, 40 CFR 302: No ingredients listed.
SARA 302, 40 CFR 355: No ingredients are listed.
SARA 313, 40 CFR 372: Dibenzoyl Peroxide, Revision Date 2007-07-01
SARA 311/312, 40 CFR 370: Immediate (Acute), Delayed(Chronic) Health

16. Other Information

Original Preparation Date: March 17, 2015

Prepared by: Upward Packaging Inc, Unit 180 – 3771 Jacombs Road, Richmond, B.C., V6V 2L9

Disclaimer: This Safety Data Sheet (SDS) was prepared using information provided by CCINFO, ingredient supplier SDS and other relevant sources. This product has been classified using weight of evidence, expert judgment and previous testing as per Part 1.3 of the Fifth Edition of The Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The information in this SDS is offered for your consideration and guidance when exposed to this product. Integra Adhesives expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

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