



SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Brodex Book Cover Cleaner
PRODUCT SYNONYM (S):	N/A
CAS NUMBER:	Mixture
MANUFACTURER'S NAME:	Schafco Packaging Company
ADDRESS:	730 Georgetown Rd, Strasburg, PA 17579
EMERGENCY PHONE:	717-687-7017
SUPPLIER NAME:	Brodart Co
ADDRESS:	500 Arch Street, Williamsport, PA, 17701
WEBSITE:	www.brodart.com
DATE OF PREPARATION:	June 19, 2018
DATE OF LAST REVISION:	New

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the mixture

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 and WHMIS 2015.

Component(s) Contributing to Classification(s)

All components listed in Section 3

GHS Label elements, including precautionary statements

Pictogram(s):



Signal Word:

Warning!

GHS Hazard Classification(s):

Flammable Liquid Category 3

Skin Irritation Category 2

Eye Irritation Category 2A

Skin Sensitization Category 1

Specific Target Organ Toxicity – Single Exposure Category 3 (Drowsiness / Dizziness)

Aquatic Acute Category 1

Aquatic Chronic Category 1

Hazard Statement(s):

H226: Flammable liquid and vapour

H315: Causes skin irritation

H319: Causes serious eye irritation

H317: May cause an allergic skin reaction

H336: May cause drowsiness or dizziness

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

Prevention Statement(s):

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof equipment.

P242: Use non-sparking tools.

P243: Take action to prevent static discharge.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands 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.



SAFETY DATA SHEET

Response Statement(s):

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P370+P378: In case of fire: Use media defined in Section 5 to extinguish.

P321: Specific treatment (See Section 4 of this SDS).

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312: Call a POISON CENTER/doctor if you feel unwell.

P391: Collect spillage.

Storage Statement(s):

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P235: Keep cool.

P405: Store locked up.

Disposal Statement(s):

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards

None applicable.

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	WT %	GHS CLASSIFICATION
D-Limonene	5989-27-5	27-33%	FLAMMABLE LIQ CAT 3, SKIN IRRIT CAT 2, SKIN SENS CAT 1, AQUATIC ACUTE/CHRONIC CAT 1
Dipropylene Glycol Monomethyl Ether	34590-94-8	13-18%	FLAMMABLE LIQ CAT 4, EYE IRRIT CAT 2
2-propanol	67-63-0	8-12%	FLAMMABLE LIQ CAT 2, EYE IRRIT CAT 2, STOT SE CAT 3 (DROWSINESS)

Actual concentrations are withheld as trade secret.

SECTION 4 - FIRST-AID MEASURES

Description of first aid measures

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual.

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

Most important symptoms and effects, both acute and delayed

This product may cause skin and eye irritation, skin sensitization, and drowsiness/dizziness.

Medical conditions aggravated by exposure:

This material or its emissions may aggravate pre-existing disorders involving any target organs mentioned in this Safety Data Sheet as being at risk.

Indication of immediate medical attention and special treatment needed

Treat symptoms and reduce over-exposure.



SAFETY DATA SHEET

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media

Water fog, alcohol-resistant foam, dry chemical or CO2.

Specific hazards arising from the chemical

None known.

Explosion Sensitivity to Mechanical Impact:

Not Sensitive.

Explosion Sensitivity to Static Discharge:

Not Sensitive.

Minimum Ignition Energy (M.I.E.):

No Data at this time

Special firefighting Procedure

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Use appropriate respirator when ventilation is inadequate and use personal protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards.

Environmental precautions:

Do not let product enter drains, do not allow to sewers/surface or ground water. See Section 12, Ecological information.

Methods and material for containment and cleaning up:

SMALL SPILL: Absorb material with rags, floor absorbent, vermiculite, or other absorbent material and transfer to an appropriate container. LARGE SPILL: Dike the area of the spill to prevent spreading. The material may then be taken up with vacuum or absorbent material and transferred to appropriate containers.

Notify proper authorities if required by local, state, or federal regulations.

Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING and STORAGE

Precautions for safe handling:

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

Conditions for safe storage, including any incompatibilities:

Store in a cool place in original container. Keep away from ignition sources.

Specific end uses

Book cover cleaner.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

Control parameters

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH	OSHA
D-Limonene	5989-27-5	20 ppm	Not Listed
Dipropylene Glycol Monomethyl Ether	34590-94-8	100 ppm	100 ppm 600 mg/m ³
2-propanol	67-63-0	200 ppm	400 ppm 980 mg/m ³

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Ensure eyewash/safety shower stations are available near areas where this product is used.



SAFETY DATA SHEET

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable.

If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses are required. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use protective gloves as appropriate to minimize skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Information on basic physical and chemical properties

PHYSICAL STATE:	Liquid
ODOR:	Orange fragrance
ODOR THRESHOLD (PPM):	Not Available
APPEARANCE / COLOR:	Clear
pH:	Not Available
MELTING / FREEZING POINT (F°):	Not Applicable
BOILING POINT (F°):	400F (204C)
FLASH POINT (F°):	~120F (48.8C)
EVAPORATION RATE (nBuAc = 1):	>1
FLAMMABILITY (solid, gas):	Not Applicable
FLAMMABLE LIMITS (in air by volume, %):	Not Applicable
VAPOR PRESSURE (mmHg):	.2 MM Hg
VAPOR DENSITY (AIR=1):	>1
RELATIVE DENSITY	Not Available
SOLUBILITY IN WATER (%)	Soluble
PARTITION COEFFICIENT: N-OCTANOL/WATER:	Not Applicable
AUTOIGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Applicable
VISCOSITY:	Not Applicable
EXPLOSIVE PROPERTIES:	Not Applicable
OXIDISING PROPERTIES:	Not Applicable
Other Information	
SPECIFIC GRAVITY 4°C: (Water = 1)	0.92
PERCENT VOLATILE BY VOLUME:	55%
WEIGHT PER GALLON:	Not Applicable

SECTION 10 - STABILITY and REACTIVITY

Reactivity: No data is available.

Chemical Stability: Product is stable under recommended storage conditions.

Possibility of Hazardous Reactions: No data available.

Conditions to avoid: Contact with incompatible materials, heat, sources of ignition.

Incompatible materials: Avoid contact with strong oxidizing agents, strong bases, strong acids.

Hazardous Decomposition Products: Decomposition products formed under fire conditions – Carbon oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

TOXICITY DATA: There is no specific data available for the product.

POTENTIAL HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE:

EYE CONTACT: May cause irritation.



SAFETY DATA SHEET

SKIN CONTACT: May cause irritation.

INHALATION HAZARDS: May cause drowsiness / dizziness.

INGESTION HAZARDS: May cause gastrointestinal irritation if swallowed with diarrhea, nausea, and pain.

CHRONIC: No data available.

TARGET ORGANS: ACUTE: Eye, Respiratory System, Skin CHRONIC: No data available

CARCINOGENICITY: Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: Exposure with this product can cause irritation to skin and eyes.

SENSITIZATION OF PRODUCT: This product is considered a skin sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: This product does not contain components which are documented as reproductive hazards.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

Toxicity

There is no available data for the product, only for the components:

D-Limonene CAS# 5989-27-5:

LC50 - Pimephales promelas (fathead minnow) – 0.72 mg/l - 96 h

LC50 - Daphnia magna (Water flea) – 0.36 mg/l - 48 h

Persistence and degradability

No specific data available on this product.

Bioaccumulative potential

No specific data available on this product.

Mobility in soil

No specific data available on this product.

Results of PBT and vPvB assessment

No specific data available on this product.

Other adverse effects

No specific data available on this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT:

PROPER SHIPPING NAME: Combustible liquid, n.o.s (Contains 2-propanol, D-Limonene)

HAZARD CLASS NUMBER and DESCRIPTION: Class 3 Combustible Liquid

UN IDENTIFICATION NUMBER: NA1993

PACKING GROUP: III

DOT LABEL(S) REQUIRED: Flammable Liquid

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2016): 128

MARINE POLLUTANT: Ingredients are not classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.



SAFETY DATA SHEET

SARA 311/312:

Acute Health: Yes Chronic Health: No Fire: Yes Reactivity: No

U.S. CERCLA REPORTABLE QUANTITY (RQ):

CERCLA Reportable Quantity RQ: None

CLEAN WATER ACT:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

STATE REGULATIONS: None.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): None of the ingredients are on the California Proposition 65 lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

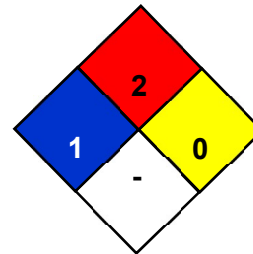
CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as per WHMIS 2015 Controlled Product Regulations.

SECTION 16 - OTHER INFORMATION

HMIS RATING

HEALTH	1
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

NFPA RATING



Caution: HMIS and NFPA ratings are based on a 0-4 rating scale

0= Minimal Hazard, 1= Slight, 2= Moderate, 3= High, 4= Extreme

DATA SOURCES: Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

ADDITIONAL SDS INFORMATION: The conditions or methods of handling, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility for loss, damage or expense arising out of, or in any way connected with the handling, storage, use, or disposal of the product.

GENERAL STATEMENTS:

Key or Legend to abbreviations and acronyms

NTP Carcinogenicity Status: 1 - Known to be Human Carcinogens; 2 - Reasonably anticipated to be a human carcinogen

- AIHA - American Industrial Hygiene Association
- ACGIH - American Conference of Governmental Industrial Hygienists
- CASRN - Chemical Abstract Services Registry Number
- CFR - Code of Federal Regulations
- D.O.T. - United States Department of Transportation
- IARC - International Agency for Research on Cancer
- OSHA - Occupational Safety and Health Administration
- NIOSH - National Institute for Occupational Safety and Health
- NTP - National Toxicology Program
- PPM - Parts per million
- mg/m3 - milligram per cubic meter
- kg - kilogram
- L or l - Liter
- n.o.s. - not otherwise specified
- Lbs. - Pounds
- mm2/s - millimeters squared per second
- PMCC - Pensky-Martens Closed Cup
- LC50 - Lethal Concentration 50 (concentration in water having a 50% chance of causing death to aquatic life)
- EC50 - Effective Concentration that causes 50% inhibition in growth or mobilization
- OECD - Organization for Economic Cooperation and Development



SAFETY DATA SHEET

SOCMI - Synthetic Organic Chemical Manufacturing Industry
VOC - Volatile Organic Compound

PREPARED BY: Chris Eigbrett

MSDS to GHS Compliance (www.msdstoghs.com)

Disclaimer: Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for her/his particular purpose(s).

Revision History:
June 19, 2018

- Document creation

END OF SDS