

## MATERIAL SAFETY DATA SHEET

MSDS 0469

 =====  
 Section 1 -- PRODUCT AND COMPANY IDENTIFICATION  
 -----

PRODUCT NAME	Zipp II	HMIS CODES	
		Health	2
		Flammability	0
		Reactivity	0
PRODUCT CODES	82645	PPI	B
CHEMICAL FAMILY	Organic		
USE	Cleaner & Degreaser		
MANUFACTURER'S NAME	The RectorSeal Corporation	EMERGENCY TELEPHONE NO.	
	2601 Spenwick Drive	Chemtrec 24 Hours	
	Houston, Texas 77055 USA	(800)424-9300 USA	
		(703)527-3887 International	
DATE OF VALIDATION	October 5, 2012	TECHNICAL SERVICE TELEPHONE NO.	
DATE OF PREPARATION	October 5, 2012	(800)231-3345 or (713)263-8001	

 =====  
 Section 2 -- HAZARDS IDENTIFICATION  
 -----

GHS Classification

Skin irritation (Category 2)

Eye irritation (Category 2A)

Reproductive toxicity (Category 1B)

Specific target organ toxicity - single exposure (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Acute aquatic toxicity (Category 3)

Chronic aquatic toxicity (Category 3)

GHS Label elements, including precautionary

Pictogram: Target Organ Effect, Irritant

Signal Word: Warning

Hazard statement(s)

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 + H336 May cause respiratory irritation, and drowsiness or dizziness.

H360 - May damage fertility or the unborn child.

H371 - May cause damage to organs.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P201 - Obtain special instructions before use.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P273 - Avoid release to the environment.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

 -----  
 SUMMARY OF ACUTE HAZARDS

Repeated inhalation may cause dizziness, nausea and CNS effects. May cause severe eye and skin irritation.

## ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS

## INHALATION

Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

## EYE CONTACT

Contact with eyes may cause severe irritation.

## SKIN CONTACT

Irritation and drying.

## INGESTION

May cause irritation of the digestive tract. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

## SUMMARY OF CHRONIC HAZARDS

Skin irritation, contact dermatitis, and defatting.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver, or kidneys may have increased susceptibility to excessive exposure.

## Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Propyl bromide

PERCENTAGE BY WEIGHT: >94

CAS NUMBER: 106-94-5

EC# : 203-445-0

## Section 4 -- FIRST AID MEASURES

- If INHALED: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.
- If on SKIN: Immediately wash with soap and water. Remove and wash any contaminated clothing.
- If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.
- If SWALLOWED: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

## Section 5 -- FIRE FIGHTING MEASURES

## EXTINGUISHING MEDIA

Foam, dry chemical, CO<sub>2</sub>, or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained full face piece breathing apparatus and full body protective clothing. Hazardous decomposition products possible (see Section 10). Evacuate area. Dike area as run-off may create additional environmental contamination.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Aerosol cans are under pressure - exposure to temperatures above 120F can cause bursting or "rocketing" of cans.

## Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use absorbent materials to prevent footing hazard and to contain. Ventilate area with forced air ventilation. Avoid flushing into sewers, drains, waterways, and soil. Wear protective clothing and respiratory protection during cleanup.

## Section 7 -- HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Shake well before using. Keep away from heat and open flames. Prolonged exposure to direct sunshine or storage above 120 F may cause can to burst. Do not puncture or incinerate can. OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues; treat as if full and observe all products precautions.

## Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT	UNITS
Propyl bromide	

ACGIH TLV 10 ppm  
 OSHA PEL N/D

RESPIRATORY PROTECTION (SPECIFY TYPE): In confined, poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air respirator.  
 VENTILATION - LOCAL EXHAUST: Acceptable  
 SPECIAL: Explosion proof  
 MECHANICAL (GENERAL): Acceptable  
 OTHER: N/A  
 PROTECTIVE GLOVES: Wear rubber gloves.  
 EYE PROTECTION: Safety glasses (ANSI Z-87.1 or equivalent)  
 OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Chemical resistant coveralls recommended.  
 WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area.  
 Launder contaminated clothing before reuse.

#### Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 160 F (71 C) @ 760mm Hg  
 SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 1.33  
 VAPOR PRESSURE (mm Hg): 139 mm HG @ 20 C  
 MELTING POINT: N/A  
 VAPOR DENSITY (AIR = 1): >1  
 EVAPORATION RATE (ETHYL ACETATE = 1): >1  
 APPEARANCE/ODOR: Clear Liquid / Mild Odor  
 SOLUBILITY IN WATER: Moderately soluble in water  
 AEROSOL FLAME EXTENSION: Negative  
 NFPA AEROSOL LEVEL: 1  
 FLASH POINT: None  
 Flammable/Explosion limits  
 % by volume in air): 4.0 - 8.0  
 Auto ignition temperature: 490°C for n-propyl bromide  
 VOLATILE ORGANIC COMPOUNDS (VOC) Content  
 (Theoretical Percentage By Weight): <100% or <1000 g/L

#### Section 10 -- STABILITY AND REACTIVITY

STABILITY: Stable  
 CONDITIONS TO AVOID: Do not store in temperatures above 120 F.  
 INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizers, acids and bases.  
 HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO<sub>2</sub>, and fragmented hydrocarbons.  
 HAZARDOUS POLYMERIZATION: Will not occur.

#### Section 11 -- TOXICOLOGY INFORMATION

##### CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

##### TOXICOLOGY DATA

##### Ingredient Name

Propyl bromide

Oral-Rat LDLo: 4000 mg/kg

Inhalation-Rat LC50: 253,000 mg/m<sup>3</sup>/30M

#### Section 12 -- Ecological Information

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 67.3 mg/l - 96 h  
 Toxicity to daphnia and other aquatic invertebrates  
 EC50 - Daphnia magna (Water flea) - 208.9 mg/l - 48 h  
 Persistence and degradability  
 Biodegradability Result: 19.20 % - Not readily biodegradable.  
 Bioaccumulative potential: no data available  
 Mobility in soil: no data available  
 PBT and vPvB assessment: no data available

## Other adverse effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

=====  
Section 13 -- DISPOSAL CONSIDERATIONS  
=====

Waste Classification: Aerosols

Disposal Method: Empty containers can be disposed of in trash. Full containers should be depressurized to separate liquid phase. Dispose of all liquid waste in accordance with all local, state and federal regulations.

=====  
Section 14 -- TRANSPORTATION INFORMATION  
=====

DOT: UN1950, Aerosols, Class 2.2, ERG#126

OCEAN (IMDG): UN1950, Aerosols, Class 2, Limited Quantity or Ltd Qty

AIR (IATA): UN1950, Aerosols, Class 2.2, ERG#126

=====  
Section 15 -- REGULATORY INFORMATION  
=====

## REGULATORY DATA

Ingredient Name

Trade Secret

SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

=====  
CALIFORNIA PROPOSITION 65  
=====

This product contains a chemical known to the state of California to cause birth defects or reproductive harm.

=====  
Section 16 -- OTHER INFORMATION  
=====

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001