MATERIAL SAFETY DATA SHEET

MSDS 0469

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
Zipp II

PRODUCT CODES
82645

CHEMICAL FAMILY
Organic

USE
Cleaner & Degreaser

HMIS CODES

Health	2
Flammability	0
Reactivity	0
PPI	B

MANUFACTURER'S NAME
The RectorSeal Corporation
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Houston, Texas 77055 USA

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Chemtrec 24 Hours
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(703)527-3887 International

DATE OF VALIDATION
October 5, 2012

TECHNICAL SERVICE TELEPHONE NO.
(800)231-3345 or (713)263-8001

DATE OF PREPARATION
October 5, 2012

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

EXTINGUSING MEDIA
Foam, dry chemical, CO2, 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 (H20 = 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, 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/m3/30M

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