SAFETY DATA SHEET

Issuing date 26-Oct-2012 **Revision Date** 05-Jan-2015 **Version** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Hi-Valu Oven Cleaner Plus

Other means of identification

Product Code 958078
UN/ID No UN3266
Document 958078CGH1-4

Recommended use of the chemical and restrictions on use

Recommended use Oven & Grill Cleaner

Details of the supplier of the safety data sheet

Distributor
Hi-Valu, LLC
11434 Moog Dr.
Saint Louis, MO 63146

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)
1-703-527-3887 (INTERNATIONAL)
Company Phone Number 314-569-2800

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard Statements
Causes severe skin burns and eye damage

Appearance Translucent **Physical state** Liquid **Odor** Butyl Odor

Precautionary Statements - Prevention
• Do not breathe dust/fume/gas/mist/vapors/spray
• Wash face, hands and any exposed skin thoroughly after handling
• Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
• Immediately call a POISON CENTER or doctor/physician

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

• IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
• Wash contaminated clothing before reuse

• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Unknown Acute Toxicity 1.805% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight-%	Trade Secret
Sodium hydroxide	1310-73-2	10% - 12%	*
2-Butoxyethanol	111-76-2	1% - 3%	*
Potassium hydroxide	1310-58-3	1% - 3%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice Show this safety data sheet to the doctor in attendance.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.

Skin contact Wash skin for 15-30 miutes and remove contaminated clothing. Seek immediate medical attention.

Inhalation If qualified give oxygen or artificial respiration as needed.

Ingestion DO NOT induce vomiting. Give large amounts of water if victim is conscious. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of First-aiders Do not use mouth-to-mouth method if victim ingested or 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.

Most important symptoms/effects, acute and delayed

Main Symptoms The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental precautions

Environmental precautions Keep out of waterways. Neutralization is normally necessary before waste water is discharged into water treatment plants. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Contain spill. Neutralize with mild acid solution. Flush residue with large volumes of water.

Methods for cleaning up Mop up & flush neutralized material to sewer with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store away from strong acids, aluminum, and other reactive metals.

Incompatible products Strong oxidizing agents, acids, aluminum and other soft metals. Contact with metals (aluminum, zinc, tin) may release hydrogen gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	-	TWA: 2 mg/m^3	IDLH: 10 mg/m^3 Ceiling: 2 mg/m^3
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m^3 S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m^3
Potassium hydroxide 1310-58-3	2 mg/m³	2 mg/m³	Ceiling: 2 mg/m^3

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers or an equivalent method of decontamination are close to the work location.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Splash-proof chemical goggles or face shield.

Skin and body protection Impervious rubber, alkali-proof protective gloves. Impervious rubber boots & apron..

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Liquid		
Appearance	Translucent	**Odor**	Butyl Odor
Color	Amber , Orange	**Odor Threshold**	No information available

Property	Values	Remarks • Methods
pH	13.0	± 0.5
Melting/freezing point	No information available	
Boiling point/boiling range	> 100 °C / 212 °F	
Flash Point	No information available	
Evaporation rate	Similar to Water	Similar to water
Flammability (solid, gas)	No information available	

Flammability Limits in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.24 ± 0.005	Estimated
Water solubility	Completely soluble.	Completely soluble.
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Viscosity, dynamic	No information available	
Explosive properties	No information available	
Oxidizing Properties	No information available	

Other information

Softening point	N/A
Molecular Weight	N/A
VOC Content(%)	Negligible
Density VALUE	N/A
Bulk Density VALUE	N/A

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Strong oxidizing agents, acids, aluminum and other soft metals. Contact with metals (aluminum, zinc, tin) may release hydrogen gas.

Hazardous Decomposition Products
Carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Causes severe skin burns and eye damage

Inhalation Corrosive to respiratory system.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Skin contact Contact causes severe skin irritation and possible burns.

Ingestion Corrosive - causes severe burns to gastrointestinal tract.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Sodium hydroxide 1310-73-2	140 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h

Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2	A3	Group 3	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC: (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 1.805% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) 11509 mg/kg
ATEmix (dermal) 9847 mg/kg
ATEmix (inhalation-dust/mist) 83.3 mg/l
ATEmix (inhalation-vapor) 25000 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

1.805% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-
2-Butoxyethanol 111-76-2	-	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	1698 - 1940: 24 h Daphnia magna mg/L EC50 >1000: 48 h Daphnia magna mg/L EC50
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Chemical Name	Partition coefficient
2-Butoxyethanol 111-76-2	0.81
Potassium hydroxide 1310-58-3	0.65 0.83

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Sodium hydroxide 1310-73-2	Toxic Corrosive
Potassium hydroxide 1310-58-3	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT Regulated

UN/ID No	UN3266
Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s. (Sodium Hydroxide, Potassium Hydroxide)
Hazard class	8
Packing Group	II
Emergency Response Guide Number	154

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
2-Butoxyethanol - 111-76-2	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	Yes

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lb	-	-	X
Potassium hydroxide 1310-58-3	1000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hydroxide 1310-73-2	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
Potassium hydroxide 1310-58-3	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product contains substances regulated by state right-to-know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide 1310-73-2	X	X	X
2-Butoxyethanol 111-76-2	X	X	X
Potassium hydroxide 1310-58-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	**Health Hazards** 3	**Flammability** 0	**Instability** 0	**Physical and chemical hazards** COR
HMIS	**Health hazard** 3	**Flammability** 0	**Physical Hazards** 0	**Personal protection** X

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Revision Note
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Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet