SAFETY DATA SHEET

#52 Peroxide Concentrate

Section 1. Identifie	ation			
GHS product identifier	: #52 Peroxide Concentrate			
Other means of identification	: 519SC			
Product type	Liquid			
Relevant identified uses of t	e substance or mixture and uses advised against			
Not applicable				
Supplier's details	: Essential Industries, Inc. P.O. Box 12 Merton, WI 53056-0012 Phone: 262-538-1122			
Emergency telephone number (with hours of operation)	: 800-843-6174 (24 Hours)			
Section 2. Hazard	identification			
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).	ł		
Classification of the substance or mixture	: SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A			
GHS label elements				
Hazard pictograms				
Signal word	: Warning			
Hazard statements	: Causes serious eye irritation. Causes skin irritation.			
Precautionary statements				
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.			
Prevention	: Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling.			
Response	: IF ON SKIN (or hair): Wash with plenty of soap and water. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.			
Storage	: Not applicable			
Disposal	: Not applicable			
Hazards not otherwise classified	: None known.			

: 2/20/2015

1/11

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

: Mixture

: Not available

CAS number/other identifiers

CAS number	: Not applicable
Product code	: 519SC

Ingredient name	%	CAS number
hydrogen peroxide	5 - 10	7722-84-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Potential acute health effectsEye contact: Causes serious eye irritation.Inhalation: No known significant effects or critical hazards.Skin contact: Causes skin irritation.Ingestion: Irritating to mouth, throat and stomach.

Most important symptoms/effects, acute and delayed

Over-exposure signs/symptoms

	Date of issue/Date of revision	: 1/10/2018	Date of previous issue	: 2/20/2015	Version	:0.04	2/11
--	--------------------------------	-------------	------------------------	-------------	---------	-------	------

Section 4. First aid measures

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	 No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (section 8)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: No specific data.
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	tive	<u>equipment</u>	and emergency pr	<u>ocedures</u>				
For non-emergency personnel		Evacuate su entering. Do Provide ade	all be taken involvin irrounding areas. Ke o not touch or walk th quate ventilation. W Put on appropriate	eep unnecessa nrough spilled i ear appropriat	ry and unprotecte material. Do not e respirator wher	ed persc breathe	onnel from vapor or mis	st.
For emergency responders	:		d clothing is required a suitable and unsuita personnel".					
Environmental precautions	:	and sewers.	sal of spilled materia Inform the relevant wers, waterways, so	authorities if the				
Date of issue/Date of revision		: 1/10/2018	Date of previous issue	: 2/20/20	015	Version	:0.04	3/11

Section 6. Accidental release measures

Methods and materials for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling **Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. : Eating, drinking and smoking should be prohibited in areas where this material is Advice on general handled, stored and processed. Workers should wash hands and face before eating, occupational hygiene drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. **Conditions for safe storage**, : Store in accordance with local regulations. Store in original container protected from including any direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials incompatibilities and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate

containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
hydrogen peroxide	ACGIH TLV (United States, 6/2013).
	TWA: 1 ppm 8 hours.
	TWA: 1.4 mg/m ³ 8 hours.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 1 ppm 8 hours.
	TWA: 1.4 mg/m ³ 8 hours.
	NIOSH REL (United States, 10/2013).
	TWA: 1 ppm 10 hours.
	TWA: 1.4 mg/m ³ 10 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 1 ppm 8 hours.
	TWA: 1.4 mg/m ³ 8 hours.

Date of issue/Date of revision	: 1/10/2018	Date of previous issue	: 2/20/2015	Version : 0.04	4/11

Section 8. Exposure controls/personal protection

Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures	
	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection :	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemical-resistant gloves.
Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection :	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection :	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance				
Physical state	: Liquid			
Color	: Colorless (No dye added)			
Odor	: Lemon (Fragrance added)			
Odor threshold	: Not available			
рН	: 4.7 to 5.7 [5.5 use dilution]			
Melting point	: 0°C (32°F)			
Boiling point	: 100°C (212°F)			
Flash point	: Closed cup: >93.334°C (>200°F)			
Evaporation rate	: Not available			
Flammability (solid, gas)	: Not available			
Lower and upper explosive (flammable) limits	: Not available			
Date of issue/Date of revision	: 1/10/2018 Date of previous issue	: 2/20/2015	Version : 0.04	5/11

Section 9. Physical and chemical properties

Vapor pressure	: <4 kPa (<30 mm Hg) [room temperature]
Vapor density	: <1 [Air = 1]
Specific gravity	: 1.02 g/cm ³
Solubility	: Not available
Partition coefficient: n- octanol/water	: Not available
Auto-ignition temperature	: Not available
Viscosity	: Not available
VOC content	: <1%

VOCs are calculated following the requirements under 40 CFR, Part 59, Subpart C for Consumer Products and Subpart D for Architectural Coatings

Aerosol product

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity	A	4	A 14- 4
	Acute	τοχ	

Product/ingredient name	Result	Species	Dose	Exposure
hydrogen peroxide	LD50 Oral	Rat	376 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
hydrogen peroxide	Eyes - Severe irritant	Rabbit	-	1 milligrams	-

Sensitization

Not available

Mutagenicity

Not available

Carcinogenicity

Not available

Classification

Date o	of issue/	Date of	revision

Section 11. Toxicological information

	•		
Product/ingredient name	OSHA	IARC	NTP
hydrogen peroxide	-	3	-

Reproductive toxicity

Not available

Teratogenicity

Not available

Specific target organ toxicity (single exposure)

Not available

Specific target organ toxicity (repeated exposure)

Not available

Aspiration hazard

Not available

Information on the likely : Not available routes of exposure

Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation.

Ingestion : Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure **Potential immediate** : Not available effects : Not available Potential delayed effects Long term exposure **Potential immediate** : Not available effects **Potential delayed effects** : Not available Potential chronic health effects Not available : No known significant effects or critical hazards. General Carcinogenicity : No known significant effects or critical hazards. Date of issue/Date of revision : 1/10/2018 Date of previous issue : 2/20/2015 Version : 0.04

7/11

Section 11. Toxicological information

Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

4	Acute toxicity estimates			
Ĩ	Route	ATE value		
Ĩ	Oral	4857.9 mg/kg		

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
hydrogen peroxide	Acute EC50 1.2 mg/l Marine water	Algae - Dunaliella tertiolecta - Exponential growth phase	72 hours
	Acute EC50 5.38 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2320 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 30 mg/l Fresh water	Fish - Siluriformes - Fingerling	96 hours
	Chronic NOEC 989.7 ppm Fresh water	Fish - Oncorhynchus tshawytscha - Egg	43 days

Persistence and degradability

Not available

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
hydrogen peroxide	-1.36	-	low

Mobility in soil

Soil/water partition	: Not available
coefficient (Koc)	

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	of this produ requiremen regional loc via a license the sewer u Waste pack when recyc	tion of waste should be a uct, solutions and any by ts of environmental prote al authority requirements ed waste disposal contra inless fully compliant with kaging should be recycle ling is not feasible. This Care should be taken wh	-products should at a ection and waste disp c. Dispose of surplus ctor. Waste should in the requirements of d. Incineration or lar material and its cont	all times comply bosal legislation s and non-recyc not be disposed f all authorities adfill should only ainer must be c	y with the and any clable proo d of untrea with jurisd y be consi disposed o	ducts ated to liction. dered of in a
Date of issue/Date of revision	: 1/10/2018	Date of previous issue	: 2/20/2015	Version	:0.04	8/11

Section 13. Disposal considerations

cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	•		
	DOT Classification	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 : Not listed (b) Hazardous Air

Pollutants (HAPs)

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	hazard	Sudden release of pressure		(acute) health	Delayed (chronic) health hazard
hydrogen peroxide	5 - 10	No.	No.	No.	Yes.	No.

State regulations

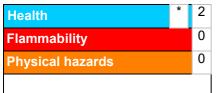
International regulations

Canada inventory

: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

<u>History</u>	
Date of printing	: 1/10/2018
Date of issue/Date of revision	: 1/10/2018
Date of previous issue	: 2/20/2015
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	: Not available

✓ Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.