SAFETY DATA SHEET



1. Identification

Product identifier	TOP CLEAN	
Other means of identification		
SDS number	565N-191A	
Product code	HIL00810	
Recommended use	General Cleaner	
Recommended restrictions	For Labeled Use Only	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	HILLYARD INDUSTRIES	
Address	302 North Fourth St.	
	St. Joseph, MO 64501	

Contact person	Regulatory Affairs
Telephone number	(816) 233-1321 (Ext. 8285)
Fax	(816) 383-8485
E-mail	regulatoryaffairs@hillyard.com
Emergency telephone #	(800) 424-9300
	(Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals)

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
	\bigwedge	

Signal word Hazard statement Precautionary statement Prevention

Causes skin irritation. Causes serious eye damage.

Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves. Caution: Do not get in eyes, on skin, or clothing. Use only with adequate ventilation. Do not breathe spray mist. (Inhalation of fine fog mist can cause irritation of mucous membranes.) Keep container closed when not in use. Wash thoroughly after handling. Use splash goggles. If prolonged or repeated contact is possible, wear rubber or other impervious gloves. Use only as directed: Improper dilution can lead to adverse health effects.

Danger

Response	If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If skin irritation persists get medical attention. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.
Storage	Store away from incompatible materials.
Disposal	Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law. Waste from normal use may be sewered to a public-owned treatment works in compliance with applicable federal, state and local requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	2.56% of the mixture consists of component(s) of unknown acute oral toxicity. 16.56% of the mixture consists of component(s) of unknown acute inhalation toxicity. 16.56% of the mixture consists of component(s) of unknown acute dermal toxicity.

3. Composition/information on ingredients

Chemical name	Common name and synonyms	CAS number	%
Alcohols, C9-11, ethoxylate	d	68439-46-3	10 - < 20
Sodium xylene sulfonate		1300-72-7	1 - < 3
Citral		5392-40-5	0.004
Other components below re	portable levels		80 - < 90

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Get medical attention if symptoms occur. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	This product is miscible in water. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits			
US. ACGIH Threshold Limit Components	Values Type	Value	Form
Citral (CAS 5392-40-5)	TWA	5 ppm	Inhalable fraction and vapor.
Biological limit values	No biological exposure limits noted for	r the ingredient(s).	
Exposure guidelines			
US ACGIH Threshold Limit	/alues: Skin designation		
Citral (CAS 5392-40-5)	Can b	e absorbed through the skin	
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.		
Individual protection measures, Eye/face protection	such as personal protective equipm. Wear safety glasses with side shields when working with concentrate.		eld. Chemical safety goggles
Skin protection Hand protection	Wear appropriate chemical resistant	gloves.	
Other	Wear appropriate chemical resistant of	clothing.	
Respiratory protection	In case of insufficient ventilation, wea	r suitable respiratory equipm	ent.
Thermal hazards	None known. Wear appropriate therm	al protective clothing, when	necessary.
General hygiene considerations	Always observe good personal hygien and before eating, drinking, and/or sn equipment to remove contaminants.		
9. Physical and chemical (properties		
Appearance	- Clear, blue liquid		
Physical state	Liquid.		

Liquid. Blue

Fresh & Clean odor

Form

Color

Odor

Odor threshold	Not available
рH	6.5 - 8.5 (1:256 Dilution)
	6.5 - 7.5 (Concentrate)
Melting point/freezing point	Not available
Initial boiling point and boiling range	207 °F (97.22 °C)
Flash point	> 210.0 °F (> 98.9 °C) Tag Closed Cup
Evaporation rate	< 1 (ethyl ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or expl	losive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	17.59 mm Hg
Vapor density	0.6272 Air =1
Relative density	1.016 at 77°F
Solubility(ies)	
Solubility (water)	100 % Complete
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	8.46 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	81 - 83 %
VOC	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye damage.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.
Information on toxicological effects	

Acute toxicity Not known.

Components	Species	Test Results	
Citral (CAS 5392-40-5)			
<u>Acute</u>			
Oral			
LD50	Rat	4950 mg/kg	
		onal component data not shown.	
kin corrosion/irritation	Causes skin irrit		
Serious eye damage/eye rritation	Causes serious	eye damage.	
Respiratory or skin sensitizatio	n		
ACGIH sensitization			
CITRAL, INHALABLE FF 5392-40-5)	RACTION AND VA	POR (CAS Dermal sensitization	
Respiratory sensitization	Not a respirator	y sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	This product is r	not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall	Evaluation of Car	rcinogenicity	
Not listed. US. National Toxicology Pr	ogram (NTP) Rep	ort on Carcinogens	
Not listed.			
US. OSHA Specifically Reg Not regulated.	ulated Substance	s (29 CFR 1910.1001-1050)	
Reproductive toxicity	This product is r	not expected to cause reproductive or developmental effects.	
pecific target organ toxicity - ingle exposure	Not classified.		
Specific target organ toxicity - epeated exposure	Not classified.		
Aspiration hazard	Not an aspiratio	n hazard.	
Chronic effects	Prolonged inhal	ation may be harmful.	
12. Ecological information	า		
Ecotoxicity		not classified as environmentally hazardous. However, this does not exclude the arge or frequent spills can have a harmful or damaging effect on the environment	
Product	:	Species Test Results	
TOP CLEAN			
Aquatic			
Crustacea	EC50	Daphnia > 100 mg/l, 48 hours	
Fish	LC50	Fish > 100 mg/l, 96 hours	
* Estimates for product may b	be based on addition	onal component data not shown.	
Persistence and degradability	No data is avail	able on the degradability of this product.	
Bioaccumulative potential			
lobility in soil	No data availab	le.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		
13. Disposal consideratio	ns		
Disposal instructions	contents/contair assumes all risk	aim or dispose in sealed containers at licensed waste disposal site. Dispose of ner in accordance with local/regional/national/international regulations. Buyer and liability associated with disposal of this product (original concentration or tion of applicable law.	
_ocal disposal regulations		rdance with all applicable regulations.	
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Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.	
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Waste from normal product use may be sewered to a public owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment requirements.	
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning	
14. Transport information		
DOT		
Not regulated as dangerous g	joods.	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.	
15. Regulatory informatio	n	
US federal regulations	All components are on the U.S. EPA TSCA Inventory List. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
TSCA Section 12(b) Export	Notification (40 CFR 707, Subpt. D)	
Not regulated. CERCLA Hazardous Substa	unce List (40 CFR 302.4)	
Not listed. SARA 304 Emergency relea	se notification	
	ulated Substances (29 CFR 1910.1001-1050)	
Not regulated.	nutherization Act of 10% (CADA)	
Hazard categories	eauthorization Act of 1986 (SARA) Immediate Hazard - Yes	
Ū	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazar	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazar Not listed.	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance	
SARA 302 Extremely hazar	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance	
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting)	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance	
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated.	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance	
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance No	
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act (SDWA)	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance No)*
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act (SDWA) International Inventories	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance No	-
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act (SDWA) International Inventories Country(s) or region	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance No No Not regulated. Inventory name Domestic Substances List (DSL) Non-Domestic Substances List (NDSL)	es
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act (SDWA) International Inventories Country(s) or region Canada Canada United States & Puerto Rico	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance No No No Not regulated. Inventory name Domestic Substances List (DSL) Non-Domestic Substances List (NDSL) Toxic Substances Control Act (TSCA) Inventory	es es
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act (SDWA) International Inventories Country(s) or region Canada Canada United States & Puerto Rico *A "Yes" indicates that all compo	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance No No Not regulated. Inventory name Domestic Substances List (DSL) Non-Domestic Substances List (NDSL)	es es es
SARA 302 Extremely hazar Not listed. SARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Safe Drinking Water Act (SDWA) International Inventories Country(s) or region Canada Canada United States & Puerto Rico *A "Yes" indicates that all compo A "No" indicates that one or more country(s).	Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No dous substance No No No Inventory name On inventory (yes/no Domestic Substances List (DSL) Ye Non-Domestic Substances List (NDSL) Ye Toxic Substances Control Act (TSCA) Inventory Ye nents of this product comply with the inventory requirements administered by the governing country(s) Ye	es es es

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HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0
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Revision information	This document has undergone significant changes and should be reviewed in its entirety.