

SAFETY DATA SHEET



SHIELD PRO

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Section 1. Identif	fication
GHS product identifier	: SHIELD PRO
Product code	: 53-H 252 (400 mL)
SDS no.	: L-152E
Product type	: Aerosol
Identified uses	
Long term corrosion inhibito)Г.
Manufacturer	: Walter Surface Technologies Inc. Bio-Circle – A Division of Walter Surface Technologies Inc. 5977 Trans Canada Highway Pointe-Claire, QC H9R 1C1 Canada info@walter.com www.walter.com General Information: 1-888-592-5837
Emergency telephone number (with hours of operation)	: CANUTEC: +1-613-996-6666 or *666 (cellular) (24/7)
Section 2. Hazar	ds identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE AEROSOLS - Category 1 GASES UNDER PRESSURE - Compressed gas SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
GHS label elements Hazard pictograms	
Signal word	: Danger
Hazard statements	 H222 - Extremely flammable aerosol. H280 - Contains gas under pressure; may explode if heated. H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P251 - Pressurized container: Do not pierce or burn, even after use. P211 - Do not spray on an open flame or other ignition source. P260 - Do not breathe dust or mist. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
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Section 2. Hazards identification

Response	: P314 - Get medical attention if you feel unwell.
Storage	 P410 - Protect from sunlight. P412 - Do not expose to temperatures exceeding 50°C/122°F. P403 - Store in a well-ventilated place.
Disposal	 P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<u>Hazards not otherwise cla</u>	ssified (HNOC)
Physical hazards not otherwise classified (PHNOC)	: None known.
Health hazards not otherwise classified (HHNOC)	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	1	Mixture
Product code	1	53-H 252 (400 mL)

CAS number/other identifiers

CAS number	: Not applicable.		
Ingredient name		%	CAS number
Naphtha (petroleum), hydrodesulfurized Sulfonic acids, petroleum, calcium salts		60 - 100 10 - 30	64742-82-1 68783-96-0

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. Get medical attention if irritation occurs.
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 following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately.
Skin contact	: Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. 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. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

Most important symptoms/effects, acute and delayed



Section 4. First aid measures

Potential acute health effe	<u>cts</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/sym</u>	<u>ptoms</u>
Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
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 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: In case of fire, use foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	: Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
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, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for co	onta	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
Advice on general occupational hygiene	 Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.



Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities
 Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

Ingredient name	Exposure limits
Naphtha (petroleum), hydrodesulfurized heavy	ACGIH TLV (United States). TWA: 100 ppm

Canada

Occupational exposure limits		TWA	TWA (8 hours)			STEL (15 mins)			g		
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
Naphtha (petroleum), hydrodesulfurized heavy Carbon dioxide	US ACGIH US ACGIH 6/2013 AB 4/2009	100 5000 5000	- 9000 9000	-		- 54000 54000		- -	- -	-	[1]
	BC 7/2013 ON 1/2013 QC 12/2012	5000 5000 5000	- 9000 9000	- -		- 54000 54000		- - -	- - -	- - -	

[1]Oxygen Depletion [Asphyxiant]

Appropriate engineering controls	:	No personal respiratory protective equipment normally required. Avoid breathing dust/ fume/gas/mist/vapors/spray. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
Individual protection measur	<u>'es</u>	
Hygiene 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.
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. Recommended: Nitrile gloves. (Permeation time > 8 hours)



Section 8. Exposure controls/personal protection

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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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 NIOSH/MSHA approved respirator if there is a risk of exposure at levels exceeding the exposure limits. Advice should be sought from respiratory protection specialists.

Section 9. Physical and chemical properties

Appearance		
Physical state	:	Liquid. [Aerosol.]
Color	:	Beige.
Odor	:	Characteristic.
Odor threshold	1	Not available.
рН	:	Not applicable.
Melting point	1	Not available.
Boiling point	1	Not applicable.
Flash point	:	Closed cup: 30°C (86°F)
Evaporation rate	1	Not applicable.
Flammability (solid, gas)	1	Not applicable.
Lower and upper explosive	4	Lower: 0.7%
(flammable) limits		Upper: 6.5%
Vapor pressure	÷	480 kPa (3600.3 mm Hg) [@ 20°C (68°F)]
Vapor density	÷	Not available.
Relative density	1	0.99 g/ml @ 20°C (68°F)
Solubility	1	Immiscible with water.
Partition coefficient: n- octanol/water	1	Not available.
Auto-ignition temperature	:	324°C (615.2°F)
Decomposition temperature	:	Not available.
Viscosity	:	Not available.
VOC content	;	41.25%
Aerosol product		
Type of aerosol	:	Spray





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	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
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	tov	CITV
Acute	UN	CILY

Product/ingredient name	Result	Species	Dose	Exposure
Sulfonic acids, petroleum, calcium salts, overbased	LD50 Oral	Rat	>5 g/kg	-

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Carcinogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 1	Not determined	central nervous system (CNS)

Aspiration hazard

Name	Result	
Naphtha (petroleum), hydrodesulfurized heavy	ASPIRATION HAZARD - Category 1	

Information on the likely

: Dermal contact. Eye contact. Inhalation. Ingestion.

routes of exposure

Potential acute health effects		
Eye contact	1	No known significant effects or critical hazards.
Inhalation	÷	No known significant effects or critical hazards.

ition : No known significant effects or critical hazards.



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Section 11. Toxicological information

Ingestion

: No known significant effects or critical hazards.

Symptoms related to the	physical, chemical a	and toxicological characteristics
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Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	 Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

-	
<u>Short term exposure</u>	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Long term exposure	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Potential chronic health effe	<u>cts</u>
General	: Causes damage to organs through prolonged or repeated exposure.
Carcinogenicity	: No known significant effects or critical hazards.
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

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Naphtha (petroleum), hydrodesulfurized heavy	-	10 to 2500	high





Section 12. Ecological information

Mobility in soil

Soil/water	partition
coefficient	(Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT	TDG	IMDG	IATA
UN number	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	Aerosols, flammable (each not exceeding 1 L capacity)	Aerosols, flammable (each not exceeding 1 L capacity)	Aerosols, flammable (each not exceeding 1 L capacity). Marine pollutant (Naphtha (petroleum), hydrodesulfurized heavy)	Aerosols, flammable (each not exceeding 1 L capacity)
Transport hazard class(es)	2.1	2.1	2.1	2.1
Packing group	-	-	-	-
Environmental hazards	No.	No.	Yes.	No.
Additional information	The marine pollutant mark is not required when transported on inland waterways in sizes of $\leq 5 L$ or $\leq 5 kg$ or by road, rail, or inland air in non-bulk sizes.	-	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

AERG : 126

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. Protect from freezing. Freezing will damage product and render it unusable.





Section 14. Transport information

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 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
SARA 302/304	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.
<u>SARA 311/312</u>	
Classification	: Fire hazard

Fire nazard Sudden release of pressure Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	hazard	Sudden release of pressure		(acute) health	Delayed (chronic) health hazard
Naphtha (petroleum), hydrodesulfurized heavy	60 - 100	Yes.	No.	No.	No.	Yes.

SARA 313

No products were found.

State regulations

- Massachusetts
- New York
- New Jersey
- Pennsylvania
- : The following components are listed: Carbon dioxide
- : None of the components are listed.
- : The following components are listed: Carbon dioxide
- : The following components are listed: Carbon dioxide
- California Prop. 65

No products were found.

<u>Canada</u>

Canadian lists

Canadian NPRI

: None of the components are listed.

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Section 15. Regulatory information

CEPA Toxic substances	: The following components are listed: Carbon dioxide
Canada inventory	: All components are listed or exempted.
International lists	
National inventory	
Australia	All components are listed or exempted.
China	All components are listed or exempted.
Europe	All components are listed or exempted.
New Zealand	All components are listed or exempted.
Philippines	All components are listed or exempted.
Republic of Korea	All components are listed or exempted.

Section 16. Other information

History

Date of issue mm/dd/yyyy	: 12/30/2015
Date of previous issue	: 08/01/2015
Version	: 1.2
Revised Section(s)	: 2, 8, 16.
Prepared by	: KMK Regulatory Services Inc.

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