

Safety Data Sheet (SDS)

Tough Stuff

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity Tough Stuff Degreaser **Alternate Names** 7101

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use Contact Northland Chemical representative. **Application Method** Contact Northland Chemical representative.

1.3. Details of the supplier of the safety data sheet

Company Name **Northland Chemical Corp**

9655 Newton Ave S

Bloomington, MN 55431

Emergency

CHEMTREC (USA) (800) 424-9300 **Customer Service: ChemStation Minneapolis** (800) 370-6490

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Skin Irrit. 2:H315 Causes skin irritation.

Eye Dam. 1;H318 Causes serious eye damage.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P302+352IF ON SKIN: Wash with plenty of soap and water.

P305+351+338IFINEYES: Rinse continuously with waterforseveral minutes. Remove contact lenses if present and easy to do-continue rinsing.

P310Immediately call a POISONCENTER or doctor/physician.

P321 Specific treatment (see information on this label).

P362 Take off contaminated clothing and wash before reuse.

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Sodium silicate CAS Number: 0001344-09-8	1.0-10	AcuteTox.4;H302 SkinIrrit.2;H315 EyeDam.1;H318	[1]
Tetrasodium EDTA CAS Number: 0000064-02-8	1.0-10	AcuteTox.4;H302 EyeDam.1;H318	[1]
Potassium hydroxide. CAS Number: 0001310-58-3	1.0-10	Acute Tox. 4;H302 Skin Corr. 1A;H314	[1][2]
D-Limonene CAS Number: 0005989-27-5	0.10-1.0	Flam. Liq. 3;H226 Skin Irrit. 2;H315 Skin Sens. 1;H317 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]

^[1] Substance classified with a health or environmental hazard.

4. First aid measures

4.1. Description of first aid measures

In all cases of doubt, or when symptoms persist, seek medical attention. General

Nevergive anything by mouth to an unconscious person.

^[2] Substance with a workplace exposure limit. [3] PBT-substance or vPvB-substance.

^{*}The full texts of the phrases are shown in Section 16.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give

artificial respiration. If unconscious place in the recovery position and obtain immediate

medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean waterfor at least 15 minutes, holding the eyelids apart and seek

medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

recognized skin cleanser.

Ingestion Ifswallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview No specific symptom data available.

See section 2 for further details.

Eyes Causes serious eye damage.

Skin Causes skin irritation.

5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.

Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run offwater and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. 128

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enterdrains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

7. Handling and storage

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

 $In compatible \, materials: Any \, acidic \, material, \, ammonia, \, urea, \, oxidizable \, materials \, and \, metals \, such \, as \, nickel, \, copper, \, tin, \, aluminum \, and \, iron.$

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000064-02-8	TetrasodiumEDTA	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0001310-58-3	Potassiumhydroxide.	OSHA	No Established Limit
		ACGIH	Ceiling: 2 mg/m3
		NIOSH	C2 mg/m3
		Supplier	No Established Limit
0001344-09-8	Sodiumsilicate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0005989-27-5	D-Limonene	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000064-02-8	TetrasodiumEDTA	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No

		IARC	Group1: No; Group2a: No; Group2b: No; Group3: No; Group4: No;
0001310-58-3	Potassiumhydroxide.	OSHA	Select Carcinogen: No
l .		NTP Known: No; Suspected: No	
		IARC	Group1: No; Group2a: No; Group2b: No; Group3: No; Group4: No;
0001344-09-8	Sodiumsilicate	OSHA	Select Carcinogen: No
l .		NTP Known: No; Suspected: No	
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0005989-27-5	D-Limonene	OSHA	Select Carcinogen: No
l .		NTP	Known: No; Suspected: No
		IARC	Group1: No; Group2a: No; Group2b: No; Group3: Yes; Group4: No;

8.2. Exposure controls

Respiratory Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when

concentrations exceed permissible exposure limits.

Eyes Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested

as a good workplace practice.

Skin Chemical resistant clothing such as coveralls/apron boots should be wom. Chemical

Impervious Gloves

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the

use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits

suitable respiratory protection must be worn.

Other Work Practices Usegood personal hygiene practices. Wash hands before eating, drinking, smoking or using

toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance Light Thinliquid

Odor Mild

Odor thresholdNot MeasuredpH12.6-14.0Melting point / freezing pointNot MeasuredInitial boiling point and boiling range>212degF

Flash Point 133 degrees F PMCC (combustible)

Evaporation rate (Ether=1) 0.33

Flammability (solid, gas)

Not Applicable

Upper/lower flammability or explosive limits Lower Explosive Limit: Not Measured

Upper Explosive Limit: Not Measured

Vapor pressure (Pa)Not DeterminedVapor DensityNot DeterminedSpecific Gravity1.032 - 1.052Solubility in WaterNot MeasuredPartition coefficient n-octanol/water (Log Kow)Not MeasuredAuto-ignition temperatureNot MeasuredDecomposition temperatureNot Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Any acidic material, ammonia, urea, oxidizable materials and metals such as nickel, copper, tin, aluminum and iron.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Sodiumsilicate - (1344-09-8)	>2,000.00,Rat- Category: 5	No data available	No data available	No data available	No data available
TetrasodiumEDTA - (64-02-8)	1,000.00,Rat- Category: 4	No data available	No data available	No data available	No data available
Potassiumhydroxide (1310-58-3)	365.00, Rat- Category: 4	No data available	No data available	No data available	No data available
D-Limonene - (5989-27-5)	4,400.00, Rat- Category: 5	5,000.00, Rabbit -Category:5	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable

Acute toxicity (dermal)		Not Applicable
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization		Not Applicable
Skin sensitization		Not Applicable
Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Not Applicable
STOT-single exposure		Not Applicable
STOT-repeated exposure		Not Applicable
Aspiration hazard		Not Applicable

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

Ingredient	96hrLC50fish, mg/l	48hrEC50crustacea, mg/l	ErC50 algae, mg/l
Sodiumsilicate - (1344-09-8)	301.00, Lepomis macrochirus	216.00, Daphnia magna	Not Available
TetrasodiumEDTA - (64-02-8)	486.00, Lepomis macrochirus	610.00, Daphnia magna	100.00 (72 hr), Scenedesmus subspicatus
Potassiumhydroxide (1310-58-3)	Not Available	Not Available	Not Available
D-Limonene - (5989-27-5)	0.702, Pimephales promelas	0.577, Daphnia magna	Not Available

12.2. Persistence and degradability

This product is fully biodegradable.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

14.1. UN number NA1993

14.2. UN proper shipping name Compound, cleaning, liquid, (d-Limonene)

14.3. Transport hazard class(es) 3 14.4. Packing group Ш

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations

are represented.

Toxic Substance

Control Act (TSCA)

WHMIS Classification D2B E

USEPATierII Hazards

Fire: No

All components of this material are either listed or exempt from listing on the TSCA Inventory.

Sudden Release of Pressure: No.

Reactive: No

Immediate (Acute): Yes Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs(lbs):

Potassium hydroxide. (1,000.00)

EPCRA 302 Extremely Hazardous:

(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:

(No Product Ingredients Listed)

Proposition 65 - Carcinogens (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):

(No Product Ingredients Listed)

N.J. RTK Substances (>1%):

Potassium hydroxide.

Penn RTK Substances (>1%):

Potassium hydroxide.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H314 Causes severeskin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

This is the first version in the GHSSDS format. Listings of changes from previous versions in other formats are not applicable.

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