



Safety Data Sheet (SDS)

SDS Revision Date: 05/20/2015

THE BOSS

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

1.1. Product identifier

Product Identity The Boss Cleaner/Degreaser
Alternate Names 7219

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

Acute Tox. 4;H332	Harmful if inhaled.
Skin Irrit. 2;H315	Causes skin irritation.
Eye Dam. 1;H318	Causes serious eye damage.
Skin Sens. 1;H317	May cause an allergic skin reaction.
Repr. 1B;H360D	May damage the unborn child.
Aquatic Chronic 1;H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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



Danger

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H360D May damage the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

[Prevention]:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.

[Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.
P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.
P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P308+313 IF exposed or concerned: Get medical advice / attention.
P310 Immediately call a POISON CENTER or doctor / physician.
P321 Specific treatment (see information on this label).
P333+313 If skin irritation or a rash occurs: Get medical advice / attention.
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

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
D-Limonene CAS Number: 0005989-27-5	25 - 50	Flam. Liq. 3;H226 Skin Irrit. 2;H315 Skin Sens. 1;H317 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]
Ethylene glycol monobutyl ether CAS Number: 0000111-76-2	10 - 25	Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1][2]
C9-C11 Synthetic Alcohol, Ethoxylated CAS Number: 0068439-46-3	10 - 25	Skin Irrit. 2;H315 Eye Dam. 1;H318	[1]
1-methyl-2-pyrrolidone CAS Number: 0000872-50-4	1.0 - 10	Repr. 1B;H360D Eye Irrit. 2;H319 STOT SE3;H335 Skin Irrit. 2;H315	[1]

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

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

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

4. First aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

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 water for 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

If swallowed 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.

Inhalation

Harmful if inhaled.

Eyes

Causes serious eye damage.

Skin

May cause an allergic skin reaction. 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.

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water 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 enter drains 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 water courses.

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

The requirements of the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations apply if the flashpoint is between 21°C and 32°C.

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

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

Incompatible materials: Strong acids, alkalis, oxidizers, amines, and aluminum in base forming metals.

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
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	TWA50ppm(240mg/m3)[skin]
		ACGIH	TWA: 20 ppmRevised 2003,
		NIOSH	TWA5ppm(24mg/m3)[skin]
		Supplier	No Established Limit
0000872-50-4	1-methyl-2-pyrrolidone	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
0068439-46-3	C9-C11 Cynthetic Alcohol, Ethoxylated	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0000872-50-4	1-methyl-2-pyrrolidone	OSHA	Select Carcinogen: No
		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
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0068439-46-3	C9-C11 Cynthetic Alcohol, Ethoxylated	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes

Protective safety glasses recommended.

Skin

Wear overalls to keep skin contact to a minimum.

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 Use good 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	CLEAR THIN LIQUID
Odor	CITRUS
Odor threshold	Not Measured
pH	7.3 -8.1
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	>212 deg F
Flash Point	115 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 Determined
Vapor Density	Not Determined
Specific Gravity	0.914 - 0.932
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Foaming	MODERATE

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

Strong acids, alkalis, oxidizers, amines, and aluminum in base forming metals.

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
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
Ethylene glycol monobutyl ether - (111-76-2)	1,414.00, Guinea Pig- Category: 4	1,200.00, Guinea Pig- Category: 4	173.00, Guinea Pig- Category: NA	No data available	No data available
C9-C11 Synthetic Alcohol, Ethoxylated - (68439-46-3)	5,100.00, Rat- Category: NA	No data available	No data available	No data available	No data available
1-methyl-2-pyrrolidone - (872-50-4)	3,914.00, Rat- Category: 5	8,000.00, Rabbit - Category: NA	No data available	No data available	5,100.00, Rat- Category: 4

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)	4	Harmful if inhaled.
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	1B	May damage the unborn child.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Very toxic to aquatic life with long lasting effects.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
D-Limonene - (5989-27-5)	0.702, Pimephales promelas	0.577, Daphnia magna	Not Available
Ethylene glycol monobutyl ether - (111-76-2)	220.00, Fish (Piscis)	1,000.00, Daphnia magna	Not Available
C9-C11 Synthetic Alcohol, Ethoxylated - (68439-46-3)	8.50, Pimephales promelas	2.686, Daphnia magna	Not Available
1-methyl-2-pyrrolidone - (872-50-4)	500.00, Leuciscus idus	1.23, Daphnia magna	500.00 (72 hr), Scenedesmus subspicatus

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

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

WHMIS Classification D2A E

USEPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
 (No Product Ingredients Listed)

EPCRA 302 Extremely Hazardous :
 (No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:

1-methyl-2-pyrrolidone

Ethylene glycol monobutyl ether

Proposition 65 - Carcinogens (>0.0%):
 (No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):
 1-methyl-2-pyrrolidone

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%):

1-methyl-2-pyrrolidone

Ethylene glycol monobutyl ether

Penn RTK Substances (>1%):

1-methyl-2-pyrrolidone

Ethylene glycol monobutyl ether

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.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H360D May damage the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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

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