

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : THE CLASS DEEP CLEANER
company : THE CLASS
Address : 5F, Navi plaza, 228, Bunseong-ro, Gimhae-shi,
Gyeongsangnam-do, KOREA
Telephone : +82 (0)70-7715-9922~3
Fax :
Web site : www.theclasskorea.co.kr
Recommended use of the chemical and restrictions on use
Recommended use : car care

2. HAZARDS IDENTIFICATION

Globally Harmonized System of Classification and Labelling of Chemicals(GHS)

Physical hazard : N/A
Health hazard : N/A
Environment hazard : N/A

Label elements including precautionary statements

Symbol : N/A

Signal word : N/A

Hazard statement : N/A

Precautionary statements :

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P234: Keep only in original container.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P370+378: In case of fire: Use water to extinguish.

P403+235: Store in a well ventilated place. Keep cool.

P406: Store in a corrosive resistant/... container with a resistant inner liner.

P501: Dispose of contents/container to ... [... in accordance with

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No.	Concentration
water	7732-18-5	≤85
1-BUTANOL,3-METHOXY- 3-METHYL-	56539-66-3	≤10
Lauramidopropylamine Oxide	61792-31-2	≤10
D-LIMONENE	5989-27-5	≤0.001
Sodium hydroxide	1310-73-2	≤0.3
Alcohols, (C=11-14)-iso-, (C=13)-rich, ethoxylated	78330-21-9	≤10

4. FIRST AID MEASURES**In case of eye contact**

Immediately flush eyes with plenty of water.
Get medical attention, if irritation persists.

In case of skin contact

Get medical attention, if irritation persists.
Wash with soap and water.

If inhaled

Remove to fresh air.
Get medical attention.

If swallowed

Get medical attention.

5. FIRE-FIGHTING MEASURES**Flammable properties**

Flash point : **NOT MEASURABLE (ABOVE 100°C)**

Autoignition Temperature : NOT DETERMINED

Burning Rate : NOT DETERMINED

Suitable extinguishing media

- Alcohol resistant foam, CO₂, Water spray, dry sand

Specific hazards arising from the chemical

- It may cause metal corrosion.
- When fire, it may cause irritative and corrosiveness toxic gas.

Special protective equipment for fire-fighters

- Use proper protective equipments
- Get out of the place, and extinguish the fire with keeping a distance

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

- Eliminate all of the ignition source

Environmental precautions

- Do not allow to be flown into waterway, drain and basement.

Methods and materials for containment and cleaning up

- Absorb liquid and flush contaminated area with detergent and water.

7. HANDLING AND STORAGE

Precautions for safe handling

- Be aware of substances to avoid and conditions.

Conditions for safe storage

- Keep only in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameter

KOSHA : Sodium hydroxide - Sodium hydroxide

US ACGIH : Sodium hydroxide - TWA
Sodium hydroxide - STEL C 2 mg/m³
Sodium hydroxide - ETC

Personal protective equipment

Respiratory protection :

Wear respiratory protection suitable for the characteristics of the exposed material.

Hand protection :

Wear respiratory protection suitable for the characteristics of the exposed material.

Eye protection : not available

Wear respiratory protection suitable for the characteristics of the exposed material.

Skin and body protection : not available

Wear respiratory protection suitable for the characteristics of the exposed material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : LIQUID

pH : 10-11.5

Flash point : NOT MEASURABLE (ABOVE 100°C) - **Non hazardous materials**

Autoignition temperature : NOT DETERMINED

Water solubility : WATER-SOLUBLE

Density : N/A

Melting range : N/A

Lower explosion limit : N/A

Upper explosion limit : N/A

10. STABILITY AND REACTIVITY

Chemical stability

- It may cause metal corrosion.
- When fire, it may cause irritative and corrosiveness toxic gas.

Conditions to avoid:

- Heat, spark, ignition sources

Materials to avoid :

- Combustible material

Hazardous decomposition products :

- When fire, it may cause irritative and corrosiveness toxic gas.

11. TOXICOLOGICAL INFORMATION

	Acute toxicity		Skin corrosion/irritation
	oral toxicity	dermal toxicity	
water	LD50 90000 mg/kg Rat (LD50 > 90 ml/kg (Rat))		
1-BUTANOL,3-METHOXY-3-METHYL-	LD50 4300 mg/kg Rat	LD50 > 2000 mg/kg Rabbit	slight irritaion (rabbit)
Lauramidopropylamine Oxide			
D-LIMONENE	LD50 5000 mg/kg Rat	LD50 > 5000 mg/kg Rabbit	burn, itchy, pain, rash
SODIUM HYDROXIDE	LD50 325 mg/kg Rabbit		alkali-skin corrosion
Alcohols, (C=11-14)-iso-, (C=13)-rich, ethoxylated			

	Serious eye damage / eye irritation	Respiratory or skin sensitization
water		
1-BUTANOL,3-METHOXY-3-METHYL-		
Lauramidopropylamine Oxide		
D-LIMONENE		skin sensitization (guinea pig)
SODIUM HYDROXIDE	conjunctiva irritation (rabbit)	
Alcohols, (C=11-14)-iso-, (C=13)-rich, ethoxylated		

	Germ cell mutagenicity	Carcino-geni city	Reproductive toxicity
water			
1-BUTANOL,3-METHOXY-3-METHYL-			
Lauramidopropylamine Oxide			
D-LIMONENE			
SODIUM HYDROXIDE			
Alcohols, (C=11-14)-iso-, (C=13)-rich, ethoxylated			

	Specific target organ toxicity		Aspiration hazard
	single exposure	repeated exposure	
water			
1-BUTANOL,3-METHOXY-3-MET HYL-			
Lauramidopropylamine Oxide			
D-LIMONENE			skin sensitization (guinea pig)
SODIUM HYDROXIDE	conjunctiva irritation (rabbit)		
Alcohols, (C=11-14)-iso-, (C=13)-rich, ethoxylated			

12. ECOLOGICAL INFORMATION

	Toxicity		
	Fish	Crustacean	Birds
water			
1-BUTANOL,3-METHOXY-3-MET HYL-	LC50 > 100 mg/l 96 hr Oryzias latipes	EC50 > 1,000 mg/l 48 hr Daphnia magna	EC50 > 1,000 mg/l 72 hr Selenastrum capricornutum
Lauramidopropylamine Oxide			
D-LIMONENE	LC50 0.7 mg/l 96 hr Pimephales promelas	EC50 0.307 mg/l 48 hr	EC50 0.214 mg/l
SODIUM HYDROXIDE	LC50 125 mg/l 96 hr	EC50 40.4 mg/l 48 hr	
Alcohols, (C=11-14)-iso-, (C=13)-rich, ethoxylated			

	Persistence and degradability	Bioaccumulative potential		Mobility in soil
		Bio accumul ation	Bio degradable	
water	log Kow -1.38			
1-BUTANOL,3-METHOXY-3-MET HYL-		BCF 3.162	((28days) 21-100%)	
Lauramidopropylamine Oxide				
D-LIMONENE	log Kow 4.38	BCF 1118.1	80 (%) 28 day	
SODIUM HYDROXIDE	log Kow -3.88			
Alcohols, (C=11-14)-iso-, (C=13)-rich, ethoxylated	log Kow 6.3	BCF 283.3		

13. DISPOSAL CONSIDERATIONS

Disposal consideration

Refer to local regulations

Disposal precaution

Refer to local regulations

14. TRANSPORT INFORMATION

UN TDG : N/A

IMDG : N/A

IATA : N/A

15. REGULATORY INFORMATION

Korea Industrial Safety and Health Act : N/A

Korea Hazardous Materials Safety Control Act : N/A

Korea Toxic Chemicals Control Act : N/A

16. OTHER INFORMATION

Issued Date : 2021.07.15

Revision No. :

Revision Date :

Reference

- GHS Classification : KOSHA
- Physical and chemical properties : Korea Fire Institute
- Transport information : KOSHA
- Toxic information : KOSHA
- Ecological information : KOSHA