

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : THE CLASS IRON REMOVER
company : THE CLASS
Address : 562, 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 : Skin corrosion/irritation CATEGORY 2
Serious eye damage/irritation CATEGORY 2
Skin sensitization CATEGORY 1
Environment hazard : Chronic aquatic hazard CATEGORY 3

Label elements including precautionary statements



Symbol :

Signal word : WARNING

Hazard statement :

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H319: Causes serious eye irritation

H412: Harmful to aquatic life with long-lasting effects

Precautionary statements :

P201: Obtain special instructions before use

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. [As modified by IV ATP[5]]

P233: Keep container tightly closed.

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. [As modified by IV ATP]

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. [As modified by IV ATP]

P308+313: If exposed: Call a POISON CENTER or doctor/physician.

P370+378: In case of fire: Use ... to extinguish. [As modified by IV ATP]

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No.	Concentration
water	7732-18-5	≤70
ALFONIC 1412-40	68439-50-9	≤10
ACETIC ACID, MERCAPTO-, MONOAMMONIUM	5421-46-5	≤20

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 DETERMINED
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	US ACGIH

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 : 6-7

Flash point : NOT DETERMINED

Autoignition temperature : NOT DETERMINED

Water solubility : NOT DETERMINED

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	
AMMONIUM THIOGLYCOLATE	LD50 3500 mg/kg Rat	LD50 7900 mg/kg Rabbit (24 hr)	skin irritation (single exposure)
ALFONIC 1412-40			skin irritation

	Serious eye damage / eye irritation	Respiratory or skin sensitization
AMMONIUM THIOGLYCOLATE		
ALFONIC 1412-40		

	Germ cell mutagenicity	Carcino-geni city	Reproductive toxicity
AMMONIUM THIOGLYCOLATE			
ALFONIC 1412-40			

	Specific target organ toxicity		Aspiration hazard
	single exposure	repeated exposure	
AMMONIUM THIOGLYCOLATE			
ALFONIC 1412-40	irritation (airway)		

12. ECOLOGICAL INFORMATION

	Toxicity		
	Fish	Crustacean	Birds
AMMONIUM THIOGLYCOLATE			
ALFONIC 1412-40	LC50 3.3 mg/l 48 hr	LC50 0.130 mg/l 48 hr	

	Persistence and degradability	Bioaccumulative potential		Mobility in soil
		Bio accumul ation	Bio degradable	
AMMONIUM THIOGLYCOLATE	log Kow -2.85 (approximately)	BCF 3.162		
ALFONIC 1412-40		BCF 775.1		

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 : KOSHA
- Transport information : KOSHA
- Toxic information : KOSHA
- Ecological information : KOSHA