

14th Chemical Regulatory Annual Conference Virtual Forum

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REACH24H

Implementation Status of MSDS System

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*'21.1.16 After all revisions to the Occupational Safety
and Health Act*

VALUE IN
COMPLIANCE

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REACH24H

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CHAPTER 1

01 MSDS System Overview

> '21 MSDS system amendments, etc.

CHAPTER 1 MSDS System Overview

'21 MSDS system amendments, etc.

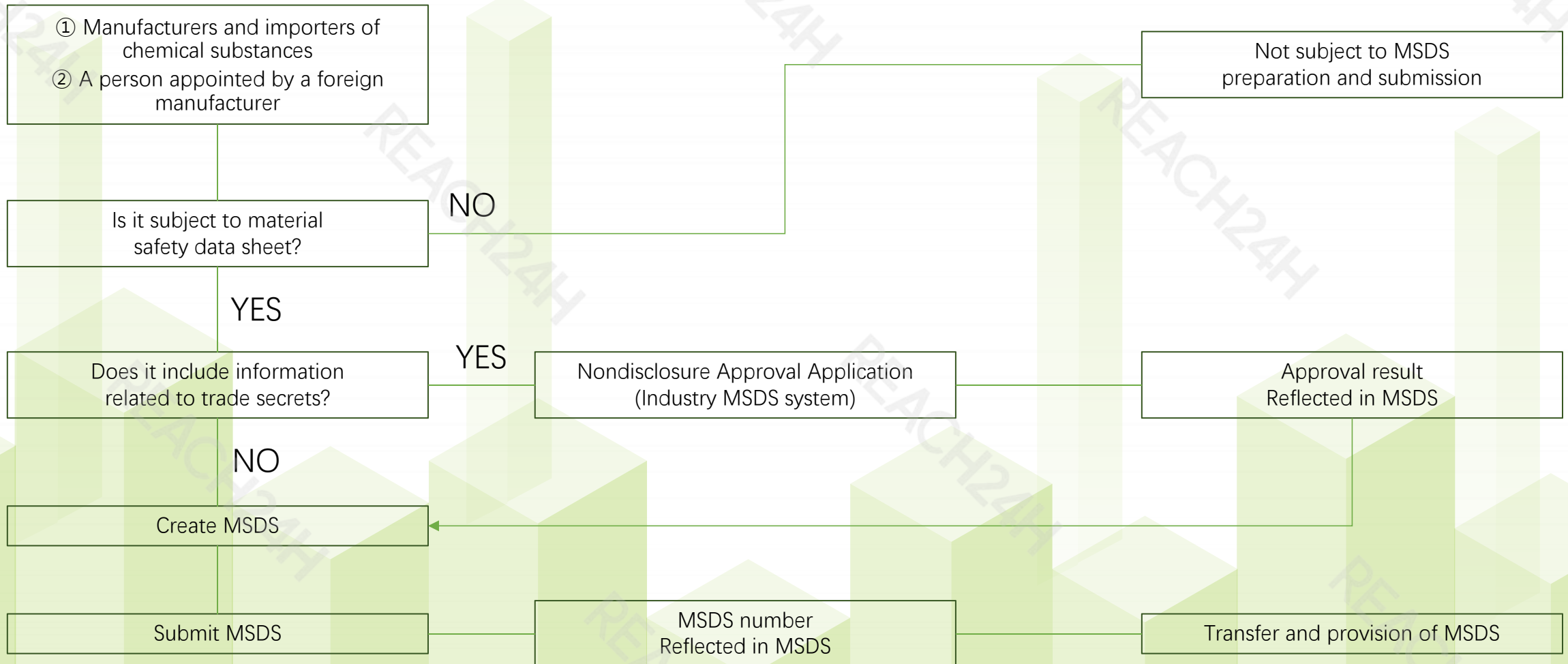
- Change of MSDS writer subject and entry items

MSDS writer subject	Transferor/provider of target chemical substances	<ul style="list-style-type: none"> ① Manufacturers and importers of substances subject to MSDS ② A person appointed by a foreign manufacturer
MSDS entry items	Name and content of all ingredients	<p>Name and content of harmful/hazardous ingredients</p> <p>※ Names and contents of non-harmful/hazardous ingredients can be voluntarily described</p>

- The prepared MSDS **must be submitted to the Korea Occupational Safety and Health Agency**
 - ☞ **If not submitted, a fine of up to 5 million won**
- If you want to describe trade secrets (names and contents of chemical substances) among MSDS ingredients as alternative data, **you must separately apply for approval to write alternative data.**
 - ☞ **If approval is not obtained or an approval application is made falsely, a fine of up to 5 million won**
- If a foreign manufacturer wants to submit MSDS and apply for approval of alternative data without going through a domestic importer, he or she can appoint an agent to carry out the work.

CHAPTER 1 MSDS System Overview

Revised MSDS submission and non-public review system processing procedure in 2022



※ However, in the case of materials for research and development, only submission of data is excluded. Therefore, MSDS preparation and alternative data entry approval must be applied.

CHAPTER 1 MSDS System Overview

Submission of MSDS

- A person who manufactures or imports substances subject to material safety data sheets **must prepare MSDS before manufacturing or importing and submit it to the Korea Occupational Safety and Health Agency.**(Excluding substances under Article 86 of the Enforcement Decree)
- **Submission method : MSDS system**(<https://msds.kosha.or.kr>) – **Submit through the MSDS submission menu**(registration required)

- **When to submit :**



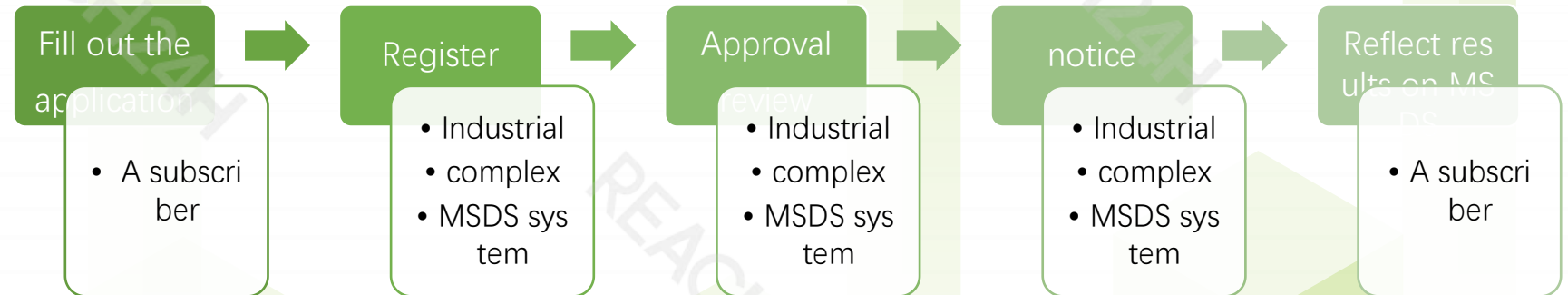
CHAPTER 1 MSDS System Overview

Application for nondisclosure approval review of trade secrets

- When entering trade secrets in MSDS, you must **apply** in advance to the Korea Occupational Safety and Health Agency **through the MSDS system, obtain approval** and **write appropriate alternative data**.
- **When to apply:** Before submitting and providing trade secrets, you must apply in advance and obtain approval for alternative data.

※ In the case of previously distributed substances subject to MSDS, the same grace period as the submission system is granted

➤ Application procedure :



- **Major reasons for disapproval :** ① In case of non-disclosure review for substances* that cannot be written as alternative data

* Substances prohibited from manufacturing according to the Sanan Act, substances subject to permission, hazardous substances subject to management, substances subject to investigation/special inspection, and toxic substances, restricted substances, and prohibited substances according to the K-REACH and CMR substances (Ministry of Environment Notice No. 2018-232)

- ② If it is not proved that it is a trade secret
- ③ In case alternative data and MSDS are inappropriate

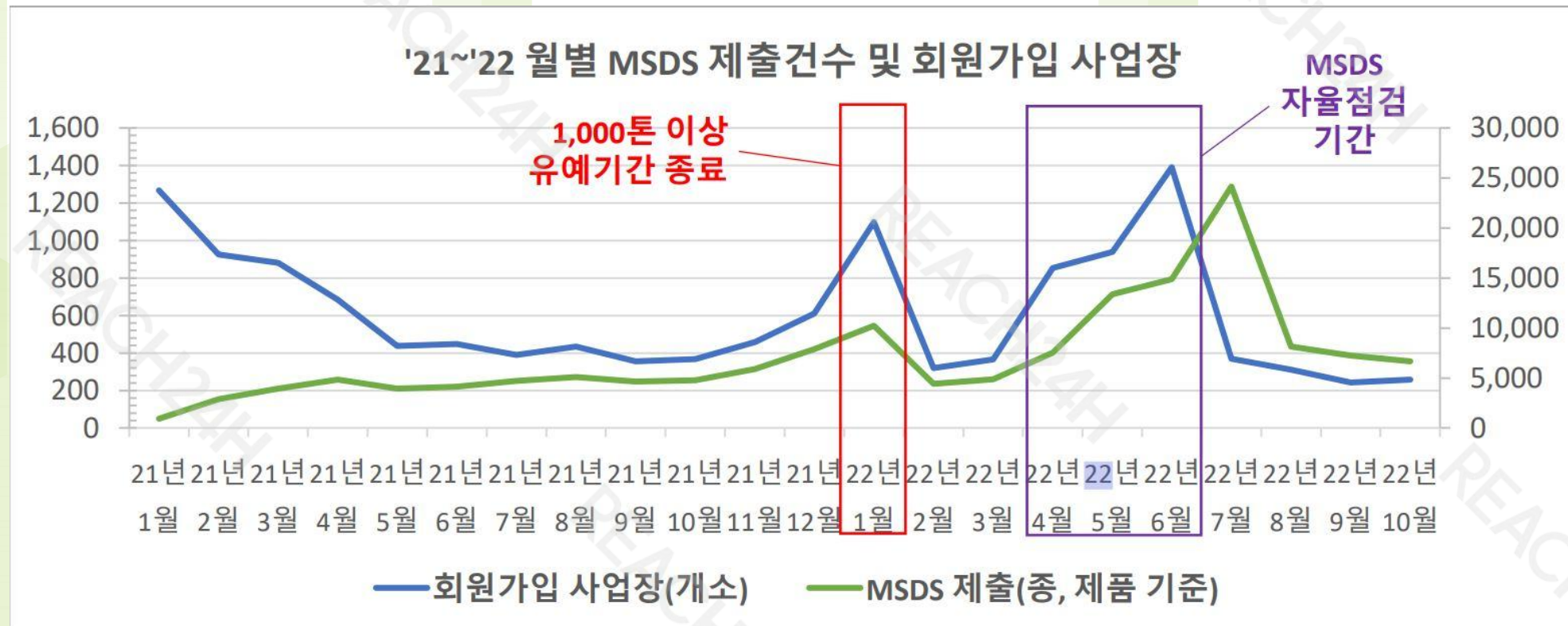
CHAPTER 2

02 Overview of self-inspection on MSDS
implementation in 2022, results and implications

CHAPTER 2 Overview of self-inspection on MSDS implementation in 2022, results and implications

'22 MSDS self-inspection results

- As of '22.10, a total of 13,406 workplaces subscribed to the MSDS system, 155,257 MSDS submissions
(During the self-inspection period, 2,329 new subscriptions and 28,266 submissions)



CHAPTER 2 Overview of self-inspection on MSDS implementation in 2022, results and implications

'22 MSDS self-inspection results

- As a result of the self-inspection guidance from April to June 2022, **2,329 new subscriptions** were made during the self-inspection period, with a monthly average of 1,165, a **92.5% increase** from the previous year's monthly average (605)
 - > **692 large enterprises, 475 medium enterprises, and 1,162 small enterprises newly joined**
- **During the self-inspection period, there were many submissions of existing products** (existing: 16,080 cases, new: 12,186 cases), **but the number of new product submissions** (18,833 cases in July 2022) **increased significantly just before the implementation of supervision.**
- It has been confirmed that the number of MSDS submissions **that have not exceeded the grace period after by tonnage**, **1,486 cases of '1,000 tons or more', 2,831 cases of '100~1,000 tons', 3,764 cases of '10~100 tons', 3,676 cases of '1~10 tons', and 4,341 cases of 'less than 1 ton'** were submitted has increased significantly.

CHAPTER 2 Overview of self-inspection on MSDS implementation in 2022, results and implications

Implications of MSDS self-inspection in 2022

- As a result of self-inspection guidance from April to June 2022, **MSDS system subscription** and **MSDS submission increased** significantly, while the number of nondisclosure examination applications remained at the previous year's level.
- During the self-inspection period, the number of **new subscriptions** by **small and medium-sized enterprises** in particular **increased** significantly, and it is believed that efforts to raise awareness of the system of small businesses are needed.
- '23.1.16. As the grace period expires for MSDS submission of products over 100 tons approaches, the industry **needs** to **promptly submit MSDS** and **apply for nondisclosure review**

CHAPTER 3

03 MSDS Supervisory Overview, Results and Implications in 2022

CHAPTER 3 MSDS Supervisory Overview, Results and Implications in 2022

'22 MSDS Supervision Implementation Overview

- **Subject to supervision:** 214 places including chemical substance manufacturing/importing workplaces
(169 manufacturing/importing workplaces in large quantities over 1,000 tons, 45 places with less than 1,000 tons)
- **Supervisory institution:** 7.25.(Mon) ~ 9.2.(Fri) 6 weeks
- **Supervision contents:** **Whether to submit and provide MSDS, compliance with nondisclosure approval, implementation of warning signs and worker training, inspection/special inspection and implementation of health measures, etc.**
- **MSDS Reliability Assessment:** **Confirmation of ingredients and contents of MSDS through sample analysis, and confirmation of appropriateness of MSDS descriptions** such as hazard and risk classification (Occupational Safety and Health Research Institute)

CHAPTER 3 MSDS Supervisory Overview, Results and Implications in 2022

'22 Results of MSDS supervision

- **Overall: 121 violations (57%) out of 214 supervisory workplaces, 241 violation cases** (MSDS 192, other 49 cases) **confirmed**
- **Result:** Judicial processing in 6 places (8 cases), fines in 120 places, 229 cases (249.69 million won), corrective orders in 78 places (101 cases), correction orders in 21 places (38 cases)

-	Violating work place	Judicial treatment		Fine			Corrective order		Corrective indication		note
		Number of busines places	Number of cases	Number of busines places	Number of cases	Amount (Ten thousand won)	Number of busines places	Number of cases	Number of busines places	Number of cases	
Sum	121	6	8	120	229	24,969	78	101	21	38	-

- **Major violations:** 37 places where warning signs were not attached (30.6%), MSDS not submitted at 35 places (28.9%), MSDS education not conducted at 26 places (21.5%) MSDS unpublished 21 places (17.4%), etc.

CHAPTER 3 MSDS Supervisory Overview, Results and Implications in 2022

Implications of MSDS supervision in 2022

- Regarding MSDS, **it was revealed** that the workplace mainly **lacked management of warning labels** on chemical storage containers and **MSDS training for workers handling chemicals**.
 - It is necessary to recognize that one of **the main purposes of the MSDS and warning labeling system** is to enable **workers to recognize the hazards and risks of chemicals** and to **prevent** industrial accidents caused by chemicals on their own.
- 35 out of 169 workplaces with products that have passed the grace period (more than 1,000 tons) have not submitted MSDS, and there is a **concern** that **the number of workplaces that violate MSDS submission** will increase as **the grace period by tonnage approaches**.
 - Each company is required to actively submit MSDS and make efforts to implement the nondisclosure approval system.

CHAPTER 4

04 System improvement contents and future plans

CHAPTER 4 System improvement contents and future plans

Progress of institutional improvement

- **Extension of grace period** for manufacturers of intermediate products (revision of supplementary provisions)
Extend the grace period for manufacturers of intermediate products (products manufactured by simply mixing raw materials) among existing products in circulation until **January 16, 2026** regardless of the annual production volume (Enacted on November 19, 2021)
 - ※ If the raw material supplier provides the revised MSDS of the raw material according to the new law, the intermediate product manufacturer must **submit the revised MSDS** of the intermediate product **within 2 months from the date of receipt of the revised raw material MSDS.**
- **LOC is allowed** when applying **for nondisclosure review of imported products**
If **importers** of chemical substances subject to MSDS wish **to apply for trade secrets, submission of LOC issued by foreign manufacturers is permitted** in lieu of the composition of unclassified substances ('22.8.18 implementation)

CHAPTER 4 System improvement contents and future plans

Future system improvement promotion direction

- Allow **OEM manufacturers to submit MSDS** and **apply for nondisclosure review** (scheduled to be implemented in the first half of 2023)

Promoting revision of notice so that **consignor (orderer)** can also **submit MSDS** and **apply for nondisclosure review**

- **Allow linkage of alternative data** for foreign manufacturers (scheduled to be implemented in the first half of 2023)

Promotion of amending enforcement regulations to allow the use of MSDS trade secrets not only for intermediate products manufactured in Korea but also for intermediate products manufactured overseas and imported into Korea.

- Improvement of trade secret system for research and development substance (under review prospectively)

CHAPTER 5

05 Recommendations in industry

CHAPTER 5 Recommendations in industry

Encourage warning signs, training, nondisclosure review application

➤ MSDS target substance warning label management and thorough worker training

As a result of supervision of MSDS compliance, many cases of **omission of container warning signs** and **non-execution of worker training** were found. Considering that workers often acquire product information through labels and training contents rather than reading the entire MSDS in normal times, pay more attention to **labeling and training management**

➤ '23.1.16. Expected grace period for phase-in chemical products manufactured/imported over 100 tons per year

Considering that the MSDS nondisclosure review may take **more than one month**, including the supplementary period, **chemical products manufactured/imported at the business site should be checked for trade secrets in advance and applied for nondisclosure review as soon as possible**

(※ '23 scheduled to conduct an unexpected inspection of the implementation status)

CHAPTER 5 Recommendations in industry

Notes on MSDS Submission

👉 ▲ Check consistency of information in MSDS! ▲ When submitting MSDS through the MSDS system, input request ① file attachment, ② recommended use, ③ composition and hazard/risk information as faithfully as possible

➤ Inconsistency between MSDS hazard/risk classification and corresponding warning label items

- ✓ As a result of reviewing the submitted MSDS, it was confirmed that there were many cases in which the MSDS standard form (2-A. Hazard/hazard classification) and (2-B. Warning label items including precautionary statements) did not match each other.

※ Refer to the Korean translation of GHS, 「Guidelines for Preparing Material Safety Data Sheets」 (W-15-2020) and 「Guidelines for Application of Precautionary Statements in Material Safety Data Sheets」 (T-15-2020).

➤ Insufficient input of product-related information

- ✓ In many cases, the product recommended use is written as 'Other' -> Please indicate the actual use

※ Refer to the use classification system of the 「Criteria for Classification and Labeling of Chemical Substances and Material Safety Data Sheets」 announced by the Ministry of Employment and Labor

- ✓ Optional information such as 'components' and 'hazards/risks' of the product should also be entered if possible.

➤ Error attaching file

- ✓ There are many cases where the attached MSDS or LoC file is written in a foreign language or the file does not open normally.

CHAPTER 5 Recommendations in industry

Matters to note when applying for nondisclosure approval review of trade secrets

➤ Main reasons for disapproval

✓ Application for Substances Excluded from Listing Substitute Data

1. Prohibited substances such as manufacturing Harmful factors subject to work environment monitoring
2. Substances subject to permission Chemical substances specified in the proviso of Article 35 (2) of the Enforcement Rules of the K-REACH
3. Harmful substances subject to management
4. Harmful factors subject to special health examination
- 6.

* If a metal compound is subject to the above regulation, it falls under the material excluded from listing alternative data regardless of whether it is exposed or not.

👉 Before applying, be sure to **check whether alternative materials are excluded**

➤ Main reasons for review supplementation

✓ Improper assignment of alternative names

✓ Non-submission of supporting data for hazardous classification of applied substances

✓ Non-submission of self-diagnosis item checklist to prove trade secret validity

* Products for research and development can be omitted

👉 **Check the guide** for nondisclosure approval application (refer to posts 11 and 12 in the MSDS system archive)

CHAPTER 5 Recommendations in industry

Request for fulfillment of responsibilities and obligations to create a chemical safety society

➤ 'Lessons from the acute poisoning accident in 2022

Acute poisoning* occurred among workers at the handling workplace because the industrial cleaning agent contained trichloromethane (chloroform), a toxic substance, but the component was omitted from the MSDS.

* OO Industry (Changwon, 16 people), OOO & T (Gimhae, 13 people), OOO NP (Incheon, 1 person)

In case the MSDS information is incorrectly written or provided by mistake

-> Causes serious obstacles to the health of workers handling chemicals

Business owners (manufacturers and importers) must abide by the MSDS system with a sense of social responsibility.

Thank You